



**City of Wheatland  
California**

**Department of Public Works**

**NOTICE TO BIDDERS**

**BID PROPOSAL AND CONTRACT AND SPECIAL PROVISIONS**

**FOR**

**ADVANCED METERING INFRASTRUCTURE (AMI) WATER METER INSTALLATION  
PROJECT**

**IN  
WHEATLAND, CA**

**FOR USE IN CONNECTION WITH SPECIFIED  
STANDARD SPECIFICATIONS AND STANDARD PLANS DATED 2018  
OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION**

**AND**

**CURRENT GENERAL PREVAILING WAGE RATES AND  
LABOR SURCHARGE AND EQUIPMENT RENTAL RATES  
OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION**

**BID OPENING DATE:  
Tuesday, December 1, 2020, 2:00 PM**

# PUBLIC WORKS BID AND CONTRACT DOCUMENTS

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## **1 BIDDING REQUIREMENTS**

### **1.1 INVITATION TO BID**

Sealed proposals will be received at the office of the City of Wheatland, located at City of Wheatland, 111 C Street, Wheatland, CA 95692, until 2:00 PM local time on Tuesday, December 1, 2020, or such later date as may be set by addendum, and then will be publicly opened and read for the construction of the following public works project:

#### **CITY OF WHEATLAND ADVANCED METERING INFRASTRUCTURE (AMI) PROJECT PHASE 2**

The City of Wheatland provides water to approximately 1,151 service connections composed of approximately 1,109 residential water meters and 42 commercial/industrial/landscape. The City also has six (6) supply well meters which are included for replacement in this project. In addition to replacing existing meters, this project includes the installation of two (2) new meters on the supply system which will be installed at the City Corporation Yard to provide the City with the ability to monitor flows into and out of the City's ground level storage tank. The City's existing water services are metered, but most of the meters are more than 15 years old with manual or touch-read systems. In General, this project involves the replacement of all existing water meters serving City connections and the conversion to new Advanced Meter Infrastructure (AMI) endpoints on all connections served by the City.

Meters are generally located within front yards of residential connections, and behind walks in front of commercial connections. The City estimates that about 100 meters are located in driveways, approximately 25 of which will require plumbing modifications, new meter boxes, and related driveway repairs.

Meter body replacements will be performed in accordance with Section 10-4. The Contractor will perform a meter box audit on all 1,151 existing water services and six (6) City supply meters to collect all relevant data needed for completion of the work as well as other data for the City's operations and maintenance records in accordance with Section 10-3. Contractor will be required to use a Work Order Management application (software program) (Section 10-3.05) to collect data on the existing and newly installed meters and document services requiring additional work using logic and information provided by the City. Contractor will provide all data collected in the audit to the City in digital database format to facilitate the conversion process in the City's tracking and billing software.

The contract documents for the Project, including the public works construction contract, instructions to bidders, bid forms, and plans and specifications, may be obtained from the CIPLIST.com internet-based plan house at the following internet website address:

<http://ciplist.com/plans/?Wheatland/city/13912>

Any cost of obtaining these documents is non-refundable. Bidders must comply with the Instructions to Bidders.

The City will hold a mandatory pre-bid conference at City Hall, 111 C St, Wheatland, CA 95692, on Tuesday, November 10<sup>th</sup> at 10:00 am. It is suggested that each prospective bidder review the bid documents prior to the pre-bid conference. Each prospective bidder shall be required to attend the pre-bid conference. Bids from any bidder not attending this conference will be rejected as non-responsive.

Each Bid must be submitted on the prescribed forms and accompanied by cash, a cashier's check, certified check or bid bond executed on the prescribed form payable to the City in an amount not less than 10 percent of the amount bid.

The successful bidder will be required to furnish a payment bond and faithful performance bond each in the full amount of the Contract price, and insurance with certificates and endorsements of insurance, as provided in the Contract Documents. The required bonds must be provided only by a surety insurer who is admitted to do business by and in good standing with the California Department of Insurance.

Bidders are hereby notified that in accordance with Public Contract Code section 22300, securities may be substituted for any monies that the City may withhold pursuant to the terms of this Contract to ensure performance.

The successful bidder must possess the following classification or type of contractor's license issued by the Contractors State License Board: Class [license class], California.

To be qualified to bid on this Project, bidders must be registered and qualified to perform public work with the Department of Industrial Relations pursuant section 1725.5 of the Labor Code. All subcontractors listed in a qualified bidder's bid as performing any portion of the work also must be registered and qualified with the Department of Industrial Relations.

Bids that equal or exceed \$1,000,000 must be accompanied by an Iran Contracting Act certification in the form provided in section 1.9.

The attention of bidders is directed to the requirements and conditions of employment to be observed and prevailing wage rates to be paid to all workers employed under the Contract in accordance with Labor Code sections 1770 and following. Copies of the prevailing rate of per diem wages are on file at the City's office, and will be made available to any interested party on request. In accordance with Labor Code section 1771.4(a)(1), this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The City reserves the right to reject all bids. Any bid not conforming to the intent and purpose of the Contract Documents may be rejected. The City may extend the time to award the Contract.

Dated: \_\_\_\_\_

City of Wheatland

By: \_\_\_\_\_

Lisa Thomason  
City Clerk

**1.2 BID**

TO: City of Wheatland, 111 C Street, Wheatland, CA 95692

The undersigned states and declares as follows:

That the Bidder has carefully examined the location of the proposed work; that the Bidder has examined the Contract Documents entitled: [title of the project]; the Addenda Numbers \_\_\_ to \_\_\_, if any; that the Bidder has read the accompanying Instructions to Bidders; that the Bidder hereby proposes to begin work and complete the project in accordance with the schedule and deadlines in the Contract Documents; that the Bidder hereby proposes to furnish all labor, materials, tools, and equipment, and to perform all work required, complete in place, in compliance with all terms and condition and requirements of the Contract Documents; and that the Bidder will take in full payment for the work the prices set forth in the accompanying bid schedule.

The Bidder acknowledges that the following quantities are approximate only, being given as a basis for the comparison of proposals, that the City does not expressly or by implication agree that the actual amount of the work will correspond therewith, and that the City reserves the right to increase or decrease the amount of any class or portion of the work, as may be deemed necessary or advisable by the Engineer.

The following surety or sureties have agreed to furnish payment and faithful performance bonds to the Bidder if it is awarded the contract:

Name of Performance Bond Surety: \_\_\_\_\_

Name of Payment Bond Surety: \_\_\_\_\_

**BIDDER INFORMATION**

Bidder Name: \_\_\_\_\_

Type of Business Entity and State of Incorporation (e.g., corporation, limited liability company, partnership):

\_\_\_\_\_

Contractor's License No.: \_\_\_\_\_

DIR Public Works Contractor Registration No.: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Type of license: \_\_\_\_\_

Name under which license is held: \_\_\_\_\_



Status of license: \_\_\_\_\_

The Bidder's authorized officer identified below hereby declares that the representations in this Bid are true and correct and of my own personal knowledge, and that these representations are made under penalty of perjury under the laws of the State of California.

Authorized Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

### 1.3 BID SCHEDULE

BID ITEMS					
Item	Description	Quantity	Units	Unit price	Total price
1	Mobilization/Demobilization	1	LS	\$	\$
2	Meter Box Audit, Pre and Post-Construction Photos, and Service Data Collection	1,158	EA	\$	\$
3a	Water Meter Replacement – 1" and smaller	1,103	EA	\$	\$
3b	Water Meter Replacement – 1.5" and 2"	37	EA	\$	\$
3c	Water Meter Replacement – 3", 4", and 6"	5	EA	\$	\$
4	Supply Well Meter Installation with Test Port - 6" and 8" Meters	6	EA	\$	\$
5	New 6" Supply Meter Installation	1	EA	\$	\$
6	New 12" Supply Meter Installation	1	EA	\$	\$
7	Meter Plumbing Modification (5/8" thru 2" size)	56	EA	\$	\$
8	Minor Plumbing Modification (existing 5/8" meters)	100	EA	\$	\$
9	Meter Pit Cleanout	200	EA	\$	\$
10	Water Meter Box Lid Replacement	100	EA	\$	\$
11	Water Meter Box Replacement	100	EA	\$	\$
12	Driveway Repair	25	EA	\$	\$
13a	Furnish 3/4" Water Meters*	614	EA	\$	\$
13b	Furnish 1" Water Meters*	495	EA	\$	\$
13c	Furnish 1-1/2" Water Meters*	22	EA	\$	\$
13d	Furnish 2" Water Meters*	15	EA	\$	\$
13e	Furnish 3" Water Meters*	1	EA	\$	\$
13f	Furnish 4" Water Meters*	1	EA	\$	\$
13g	Furnish 6" Water Meters* (demand)	3	EA	\$	\$
13h	Furnish 6" Water Meters* (supply)	6	EA	\$	\$
13i	Furnish 8" Water Meter* (supply)	1	EA	\$	\$
13j	Furnish 12" Water Meter* (supply)	1	EA	\$	\$
14	Furnish AMI Endpoint*	1,151	EA	\$	\$
15	Install AMI Endpoint (demand meters)	1,151	EA	\$	\$
16	Construction Funding Signage	1	LS	\$	\$
Total Bid Amount					\$

\*Pre-negotiated pricing with Mueller Systems for this project is included in Appendix C.

**Dollars**

Base Bid Written Amount

**Contractor Company Name:** \_\_\_\_\_

Complete the following Addenda acknowledgements if there are any addenda to the bid documents.

**Acknowledge Addenda**

Addendum #: \_\_\_\_\_ Signed: \_\_\_\_\_

Addendum #: \_\_\_\_\_ Signed: \_\_\_\_\_

Addendum #: \_\_\_\_\_ Signed: \_\_\_\_\_

Addendum #: \_\_\_\_\_ Signed: \_\_\_\_\_

**1.4 DESIGNATION OF SUBCONTRACTORS**

In compliance with Public Contract Code section 4100 et seq. each bidder shall set forth below the: (a) name, location of the mill, shop, or office, and California contractor's license number of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement to be performed under these specifications in excess of one-half of 1% of the Contractor's total bid, (b) description of the type of work to be performed by each such subcontractor, and (c) portion of the work (expressed in dollar amount) that will be performed by each such subcontractor.

If the Contractor fails to specify a subcontractor for any portion of the work to be performed under the Contract, it shall be deemed to have agreed to perform such portion itself, and it shall not be permitted to subcontract that portion of the work except under the conditions hereinafter set forth.

Subletting or subcontracting of any portion of the work in excess of one-half of 1% of the Contractor's total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a making a written finding as a public record of the City setting forth the facts constituting the emergency or necessity.

Subcontractor (name, address, Subcontractor's CSLB License Number, Subcontractor's DIR Public Works Contractor Registration Number)	Description of Subcontractor Work	Portion of Work (\$)

Additional pages attached: \_\_\_\_\_

**1.5 BID BOND**

KNOW ALL MEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED \_\_\_\_\_, Contractor as Principal; and \_\_\_\_\_, as Surety, are hereby held and bound unto City of Wheatland, hereinafter called the City, in the sum of \$ \_\_\_\_\_, which sum is equal to at least ten percent of the total amount of the Bid, payment of which sum, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the City a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing, for the construction of the following public works project:

**CITY OF WHEATLAND  
ADVANCED METERING INFRASTRUCTURE (AMI) PROJECT PHASE 2**

The City of Wheatland provides water to approximately 1,151 service connections composed of approximately 1,109 residential water meters and 42 commercial/industrial/landscape. The City also has six (6) supply well meters which are included for replacement in this project. In addition to replacing existing meters, this project includes the installation of two (2) new meters on the supply system which will be installed at the City Corporation Yard to provide the City with the ability to monitor flows into and out of the City's ground level storage tank. The City's existing water services are metered, but most of the meters are more than 15 years old with manual or touch-read systems. In General, this project involves the replacement of all existing water meters serving City connections and the conversion to new Advanced Meter Infrastructure (AMI) endpoints on all connections served by the City.

Meters are generally located within front yards of residential connections, and behind walks in front of commercial connections. The City estimates that about 100 meters are located in driveways, approximately 25 of which will require plumbing modifications, new meter boxes, and related driveway repairs.

Meter body replacements will be performed in accordance with Section 10-4. The Contractor will perform a meter box audit on all 1,151 existing water services and six (6) City supply meters to collect all relevant data needed for completion of the work as well as other data for the City's operations and maintenance records in accordance with Section 10-3. Contractor will be required to use a Work Order Management application (software program) (Section 10-3.05) to collect data on the existing and newly installed meters and document services requiring additional work using logic and information provided by the City. Contractor will provide all data collected in the audit to the City in digital database format to facilitate the conversion process in the City's tracking and billing software.

NOW, THEREFORE,

- (a) If the Bid is rejected, or in the alternate,

(b) If the Bid is accepted and the Principal shall sign and deliver a Contract, in the form of the Contract attached hereto and shall execute and deliver Performance and Payment Bonds in the forms attached hereto and shall deliver proof of insurance (all completed in accordance with the Contract Documents), and shall in all other respects perform the agreement created by the acceptance of the Bid;

Then, this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the City may accept such Bid, and said Surety does hereby waive notice of any such extension.

IN WITNESS THEREOF, the above bounded parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

For Contractor as Principal:

\_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

For Surety:

\_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Seal)

**1.6 EXPERIENCE QUALIFICATIONS**

The Bidder has been engaged in the contracting business, under the present business name for \_\_\_ years. Experience in work of a nature similar to that covered in the Bid extends over a period of \_\_\_ years.

The Bidder, as a contractor, has never failed to satisfactorily complete a contract awarded to it, except as follows:

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The following contracts have been satisfactorily completed in the last three years for the persons, firm or entity indicated:

Year	Owner	Type of Work	Contract Amount

The following is a list of plant and equipment owned by the Bidder, which is definitely available for use on the proposed work as required.

Quantity	Name, Type, and Capacity	Condition	Location

Executed on \_\_\_\_\_, at \_\_\_\_\_,

**BIDDER**

Company Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_



**1.7 NONCOLLUSION DECLARATION TO BE EXECUTED BY  
BIDDER AND SUBMITTED WITH BID (PUBLIC CONTRACT CODE SECTION 7106)**

The undersigned declares:

I am the \_\_\_\_\_ (Title)  
of \_\_\_\_\_ (Bidder), the  
party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_, at \_\_\_\_\_, \_\_\_\_\_.

Authorized Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

**1.8 ACKNOWLEDGMENT OF INSURANCE REQUIREMENTS**

By signing below Bidder acknowledges the insurance requirements as listed in the General Conditions, section 5.52 "Insurance". By this acknowledgment, the Bidder and its insurance provider(s) and surety(ies) certify that they have read and understand the insurance and bonding requirements in their entirety, including limits of coverage, additional insureds and endorsements, and bonding requirements, and that the Bidder can provide the insurance coverage and bonds as required in the Contract documents without exception.

Bidder understands that if the insurance coverage provided in section 5.52 of the General Conditions and the Contract Bonds cannot be provided, its bid is subject to rejection by the City as non-responsive.

BIDDER

Company Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

INSURANCE PROVIDER/SURETY REPRESENTATIVE

Insurer/Surety Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Bidder Must Provide This Acknowledgment for Each Insurer or Surety Providing Insurance Coverage or a Bond under this Contract**

**1.9 IRAN CONTRACTING ACT CERTIFICATION**

Pursuant to Public Contract Code (PCC) section 2204, the following Iran Contracting Act certification is required if your bid totals \$1,000,000 or more.

If your bid totals \$1,000,000 or more, you must complete only one of the following two paragraphs. To complete paragraph 1, check the corresponding box and complete the certification. To complete paragraph 2, simply check the corresponding box.

1. We are not on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (DGS) pursuant to PCC 2203(b), and we are not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on

\_\_\_\_\_ (date),

at \_\_\_\_\_ (city), \_\_\_\_\_ (state).

\_\_\_\_\_ (signature)

\_\_\_\_\_ (printed name)

OR

2. We have received written permission from the City to submit a bid pursuant to PCC 2203(c) or (d). A copy of the written permission from the City is included with our bid.

## **2 CONTRACT FORMS**

### **2.1 CONTRACT**

THIS CONTRACT is made as of [date], in Wheatland, California, by and between City of Wheatland, a public agency, ("City") and B&M Builders, Inc., a California corporation, ("Contractor"), who agree as follows:

2.1.1 The Contractor agrees to furnish all labor, materials, supplies, tools and equipment and to perform all the work required to construct and complete in a good and workmanlike manner, and in strict accordance with the Contract Documents, those certain improvements entitled:

#### **CITY OF WHEATLAND ADVANCED METERING INFRASTRUCTURE (AMI) PROJECT PHASE 2**

The City of Wheatland provides water to approximately 1,151 service connections composed of approximately 1,109 residential water meters and 42 commercial/industrial/landscape. The City also has six (6) supply well meters which are included for replacement in this project. In addition to replacing existing meters, this project includes the installation of two (2) new meters on the supply system which will be installed at the City Corporation Yard to provide the City with the ability to monitor flows into and out of the City's ground level storage tank. The City's existing water services are metered, but most of the meters are more than 15 years old with manual or touch-read systems. In General, this project involves the replacement of all existing water meters serving City connections and the conversion to new Advanced Meter Infrastructure (AMI) endpoints on all connections served by the City.

Meters are generally located within front yards of residential connections, and behind walks in front of commercial connections. The City estimates that about 100 meters are located in driveways, approximately 25 of which will require plumbing modifications, new meter boxes, and related driveway repairs.

Meter body replacements will be performed in accordance with Section 10-4. The Contractor will perform a meter box audit on all 1,151 existing water services and six (6) City supply meters to collect all relevant data needed for completion of the work as well as other data for the City's operations and maintenance records in accordance with Section 10-3. Contractor will be required to use a Work Order Management application (software program) (Section 10-3.05) to collect data on the existing and newly installed meters and document services requiring additional work using logic and information provided by the City. Contractor will provide all data collected in the audit to the City in digital database format to facilitate the conversion process in the City's tracking and billing software.

2.1.2 Contract Documents for this project have been prepared by the City's Engineer, [Engineer's name], hereinafter called the Engineer. All Contract Documents, and each and every provision thereof, relating to this Contract are hereby made a part of and incorporated by reference into this Contract. The following are the applicable Contract Documents: Invitation to Bid, Bid, Bid Bond, Designation of Subcontractors, Experience

Qualifications, Noncollusion Declaration, Acknowledgment of Insurance Requirements, Instructions to Bidders, Contract, Faithful Performance Bond, Payment Bond, Contractor's Certificate Regarding Workers' Compensation, the Insurance Certificates and Endorsements, Abbreviations and Definitions, General Conditions, Technical Specifications and Plans (Drawings), and [any additional documents], applicable to this work, and all Addenda and Change Orders, as well as all written modifications of the Contract Documents agreed to by the parties. Any work called for in one Contract Document and not mentioned in others is to be performed and executed as if mentioned in all Contract Documents.

2.1.3 The City agrees to pay the Contractor for the performance of the Contract, subject to additions and deductions provided therein, the following prices, and the Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials, labor, supplies, tools and equipment, and for doing all the work contemplated and embraced in this Contract, and for all risks of every description connected with the work and for all expenses incurred by or in consequence of the suspension or discontinuance of the work, and for well and faithfully completing the work and the whole thereof in the manner and according to the Contract Documents and the requirements of the Engineer under them, namely:

**Base Bid**

BID ITEMS					
Item	Description	Quantity	Units	Unit price	Total price
1	Mobilization/Demobilization	1	LS	\$	\$
2	Meter Box Audit, Pre and Post-Construction Photos, and Service Data Collection	1,158	EA	\$	\$
3a	Water Meter Replacement – 1" and smaller	1,103	EA	\$	\$
3b	Water Meter Replacement – 1.5" and 2"	37	EA	\$	\$
3c	Water Meter Replacement – 3", 4", and 6"	5	EA	\$	\$
4	Supply Well Meter Installation with Test Port - 6" and 8" Meters	6	EA	\$	\$
5	New 6" Supply Meter Installation	1	EA	\$	\$
6	New 12" Supply Meter Installation	1	EA	\$	\$
7	Meter Plumbing Modification (5/8" thru 2" size)	56	EA	\$	\$
8	Minor Plumbing Modification (existing 5/8" meters)	100	EA	\$	\$
9	Meter Pit Cleanout	200	EA	\$	\$
10	Water Meter Box Lid Replacement	100	EA	\$	\$
11	Water Meter Box Replacement	100	EA	\$	\$
12	Driveway Repair	25	EA	\$	\$
13a	Furnish 3/4" Water Meters*	614	EA	\$	\$
13b	Furnish 1" Water Meters*	495	EA	\$	\$
13c	Furnish 1-1/2" Water Meters*	22	EA	\$	\$

13d	Furnish 2" Water Meters*	15	EA	\$	\$
13e	Furnish 3" Water Meters*	1	EA	\$	\$
13f	Furnish 4" Water Meters*	1	EA	\$	\$
13g	Furnish 6" Water Meters* (demand)	3	EA	\$	\$
13h	Furnish 6" Water Meters* (supply)	6	EA	\$	\$
13i	Furnish 8" Water Meter* (supply)	1	EA	\$	\$
13j	Furnish 12" Water Meter* (supply)	1	EA	\$	\$
14	Furnish AMI Endpoint*	1,151	EA	\$	\$
15	Install AMI Endpoint (demand meters)	1,151	EA	\$	\$
16	Construction Funding Signage	1	LS	\$	\$
Total Bid Amount					\$

\*Pre-negotiated pricing with Mueller Systems for this project is included in Appendix C.

2.1.4 The City shall make payments on the account of the Contract as specified in the General Conditions of the Contract.

2.1.5 The Contractor shall diligently prosecute the work to completion within **eighty-eight ( 88 ) working days**, from the date of issuance, by the Public Works Department, of instructions to proceed with the work.

2.1.6 The Contractor acknowledges that it has examined the prevailing rate of per diem wages as established and published by the California Director of Industrial Relations, copies of which are available for inspection at the office of the City. The Contractor agrees to pay all workers employed on the work not less than the applicable prevailing rate of per diem wages, as the same may be amended from time to time. The Contractor shall post at each job site a copy of the determination of the Director of Industrial Relations of the prevailing rate of per diem wages. The Contractor also shall ensure that all subcontractors on the work are notified of and comply with their obligations in regard to the payment of prevailing wages to all of their workers employed on the Project.

IN WITNESS WHEREOF, the parties execute this Contract as follows:

For City:

\_\_\_\_\_  
Name: \_\_\_\_\_

Title: President, Board of Directors

Attest:

\_\_\_\_\_

Name: \_\_\_\_\_

Title: Secretary, Board of Directors

For Contractor:

\_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**2.2 FAITHFUL PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS,

THAT, WHEREAS, City of Wheatland, hereinafter designated as the "City," entered into a Contract with B&M Builders, Inc., hereinafter designated as the "Contractor" for the work described as follows:

**CITY OF WHEATLAND  
ADVANCED METERING INFRASTRUCTURE (AMI) PROJECT PHASE 2**

The City of Wheatland provides water to approximately 1,151 service connections composed of approximately 1,109 residential water meters and 42 commercial/industrial/landscape. The City also has six (6) supply well meters which are included for replacement in this project. In addition to replacing existing meters, this project includes the installation of two (2) new meters on the supply system which will be installed at the City Corporation Yard to provide the City with the ability to monitor flows into and out of the City's ground level storage tank. The City's existing water services are metered, but most of the meters are more than 15 years old with manual or touch-read systems. In General, this project involves the replacement of all existing water meters serving City connections and the conversion to new Advanced Meter Infrastructure (AMI) endpoints on all connections served by the City.

Meters are generally located within front yards of residential connections, and behind walks in front of commercial connections. The City estimates that about 100 meters are located in driveways, approximately 25 of which will require plumbing modifications, new meter boxes, and related driveway repairs.

Meter body replacements will be performed in accordance with Section 10-4. The Contractor will perform a meter box audit on all 1,151 existing water services and six (6) City supply meters to collect all relevant data needed for completion of the work as well as other data for the City's operations and maintenance records in accordance with Section 10-3. Contractor will be required to use a Work Order Management application (software program) (Section 10-3.05) to collect data on the existing and newly installed meters and document services requiring additional work using logic and information provided by the City. Contractor will provide all data collected in the audit to the City in digital database format to facilitate the conversion process in the City's tracking and billing software.

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

WHEREAS, the Contract is by reference made a part hereof;

NOW, THEREFORE, we, the undersigned Contractor, as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, and duly authorized and in good standing to transact business under the laws of the State of California, as an admitted Surety, are held and firmly bound unto the City in the penal sum of \$ \_\_\_\_\_, the



sum being not less than one hundred percent (100%) of the total Contract amount, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT, if the above bounden Contractor, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the City, its directors, officers, employees and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the said Contract, the above obligation in above-stated amount shall hold good for a period of one (1) year after the recording of the notice of completion, during which time if the Contractor, its heirs, executors, administrators, successors or assigns shall fail to make full, complete, and satisfactory repair and replacements or totally protect the City from loss or damage made evident during the period of one (1) year from the date of recording of the notice of completion, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done, the above obligation in the above-stated amount shall remain in full force and effect. However, anything in this paragraph to the contrary notwithstanding, the obligation of the Surety hereunder shall continue so long as any obligation of the Contractor remains.

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 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 of time, alteration, or addition to the terms of the Contract or to the work or to the specifications. The Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

In the event suit is brought upon this bond by the City and judgment is recovered, the Surety shall pay all costs incurred by the City in such suit, including, but not limited to, administrative and consultant costs, and reasonable attorneys' fees to be fixed by the Court.

The address or addresses at which the principal and surety(ies) may be served with notices, papers and other documents under the California Bond and Undertaking Law (Code of Civil Procedure section 995.010 et seq.) is the following:

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IN WITNESS THEREOF, the above bounded parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, the name and corporate seal

of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

For Contractor as Principal:

\_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

For Surety:

\_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Seal)

(NOTE: The date of this bond must not be prior to date of Contract. If Contractor is a partnership, all partners should execute bond.)

## 2.3 PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS,

THAT, WHEREAS, the City of Wheatland, hereinafter designated as the "City," has awarded to B&M Builders, Inc., hereinafter designated as the "Contractor" a Contract for the work described as follows:

### CITY OF WHEATLAND ADVANCED METERING INFRASTRUCTURE (AMI) PROJECT PHASE 2

The City of Wheatland provides water to approximately 1,151 service connections composed of approximately 1,109 residential water meters and 42 commercial/industrial/landscape. The City also has six (6) supply well meters which are included for replacement in this project. In addition to replacing existing meters, this project includes the installation of two (2) new meters on the supply system which will be installed at the City Corporation Yard to provide the City with the ability to monitor flows into and out of the City's ground level storage tank. The City's existing water services are metered, but most of the meters are more than 15 years old with manual or touch-read systems. In General, this project involves the replacement of all existing water meters serving City connections and the conversion to new Advanced Meter Infrastructure (AMI) endpoints on all connections served by the City.

Meters are generally located within front yards of residential connections, and behind walks in front of commercial connections. The City estimates that about 100 meters are located in driveways, approximately 25 of which will require plumbing modifications, new meter boxes, and related driveway repairs.

Meter body replacements will be performed in accordance with Section 10-4. The Contractor will perform a meter box audit on all 1,151 existing water services and six (6) City supply meters to collect all relevant data needed for completion of the work as well as other data for the City's operations and maintenance records in accordance with Section 10-3. Contractor will be required to use a Work Order Management application (software program) (Section 10-3.05) to collect data on the existing and newly installed meters and document services requiring additional work using logic and information provided by the City. Contractor will provide all data collected in the audit to the City in digital database format to facilitate the conversion process in the City's tracking and billing software.

WHEREAS, the Contractor is required by the Contract and by the provisions of Division 4, Part 6 of the Civil Code to furnish a bond in connection with the Contract, as hereinafter set forth.

WHEREAS, the Contract by this reference is made a part hereof;

NOW, THEREFORE, we, the undersigned Contractor, as Principal, and \_\_\_\_\_, as Surety, a corporation organized and existing under the laws of the State of \_\_\_\_\_, duly authorized and in good standing to transact business under the laws of the State of California, as an admitted Surety, are held and firmly bound unto the City in the sum of

\$ \_\_\_\_\_, the sum being not less than one hundred percent (100%) of the total Contract amount payable by the City, under the terms of the Contract, for which payment well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT, if the Contractor, its heirs, executors, administrators, successors, assigns or subcontractors shall fail to pay for any materials, provisions, provender or other supplies or teams, implements or machinery used in, upon, for or about the performance of the work contracted to be done, or shall fail to pay for any work or labor thereon of any kind, or shall fail to pay any of the persons named in Civil Code Section 9100, or shall fail to pay for amounts due under the Unemployment Insurance Code with respect to such work or labor as required by the provisions of Division 4, Part 6 of the Civil Code, or shall fail to pay for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Contractor and subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to such work or labor, and provided that the claimant shall have complied with the provisions of that Code, the Surety or Sureties hereon will pay for the same in amount not exceeding the sum specified in the Contract, otherwise the above obligation shall be void. In case suit is brought upon this bond, the Surety will pay a reasonable attorney's fee to the prevailing party to be fixed by the court. This bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Section 9100 of the Civil Code, so as to give a right of action to them or to their assigns in any suit brought upon this bond. And 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 the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

The address or addresses at which the principal and surety(ies) may be served with notices, papers and other documents under the California Bond and Undertaking Law (Code of Civil Procedure section 995.010 et seq.) is the following:

\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS THEREOF, the above bounded parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

For Contractor as Principal:

\_\_\_\_\_  
Name: \_\_\_\_\_

Title: \_\_\_\_\_

For Surety:

\_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Seal)

(NOTE: The date of this bond must not be prior to date of Contract. If Contractor is a partnership, all partners should execute bond.)

**2.4 CONTRACTOR'S WORKERS' COMPENSATION CERTIFICATE  
(LABOR CODE SECTION 1861)**

To: City of Wheatland

I am aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work under this Contract.

BIDDER

Company Name: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

### **3 ABBREVIATIONS AND DEFINITIONS**

#### **3.1 ABBREVIATIONS**

The following abbreviations may be used in the Contract Documents:

AA	Aluminum Association
AASHO	American Association of State Highway Officials
ABMA	American Boiler Manufacturer's Association
ACI	The American Concrete Institute
AGA	American Gas Association
AGC	Associated General Contractors
AGMA	American Gear Manufacturer's Association
AI	The Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute, Inc.
API	American Petroleum Institute
APWA	American Public Works Association
AREA	American Railway Engineering Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
BGHMA	Builders Hardware Manufacturers Association

CCMTC	California Concrete Masonry Technical Committee
CRSI	Concrete Reinforcement Steel Institute
DFPA	Douglas Fir Plywood Association
ETL	Electrical Testing Laboratory
FS	Federal Specification
ICBO	International Conference of Building Officials
IEEE	The Institute of Electrical and Electronics Engineers
IES	Illuminating Engineering Society
IPCEA	Insulated Power Cable Engineers Association
MBMA	Metal Building Manufacturer's Association
MSS	Manufacturers Standardization Society of Valve and Fitting Industry
Standards	
NBFU	National Board of Fire Underwriters
NBS	National Building Standards
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Act of 1970
PCA	Portland Cement Association
SMACNA	Sheet Metal and Air Conditioning Contractor's National Association
SSPC	Steel Structures Painting Council
SSPWC	Standard Specifications for Public Works Construction
UBC	Uniform Building Code
UHPHS	United States Public Health Service
UL	Underwriter's Laboratory



UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
USAS	The United States of America Standard Institute
USBR	United States Bureau of Reclamation
WCLIB	West Coast Lumber Inspection Bureau
WIC	Woodwork Institute of California

### 3.2 DEFINITIONS

For purposes of the Contract Documents, these words and phrases shall be defined as follows:

3.2.1 City means the City of Wheatland, also referred to as the Owner.

3.2.2 As Approved shall be understood to be followed by the words "by the Engineer," unless otherwise qualified.

3.2.3 As Shown and As Indicated shall be understood to be followed by the words "on the Plans."

3.2.4 Bid means the offer of the bidder for the work when made out and submitted on the prescribed bid form, properly completed, signed and guaranteed.

3.2.5 Bid Bond means the cash, cashier's check, certified check, or bidder's bond accompanying the bid submitted by the bidder, as a guarantee that the bidder will enter into a Contract with the City for the performance of work herein described.

3.2.6 Bidder means any individual, firm, partnership or corporation submitting a bid for the work contemplated, and acting directly or through a duly authorized representative.

3.2.7 Board of Directors or Board means the Board of Directors of the City.

3.2.8 Contract means the written agreement covering the performance of the work and the furnishing of labor, materials, tools and equipment in the construction of the work. The Contract shall include all Contract Documents and supplemental agreements amending or extending the work contemplated which may be required to complete the work in a substantial and acceptable manner. Supplemental agreements are written agreements covering alterations, amendments or extensions to the Contract, and include Addenda and Contract Change Orders.

3.2.9 Contract Documents means any or all of the documents listed in section 2.1.2 of the Contract.

3.2.10 Contractor means the person or persons, firm, partnership or corporation or other entity who has entered into the Contract with the City to perform the work.

3.2.11 County means County of Yuba, California.

3.2.12 Date of the Contract means the date on which the Contract is signed by the City's authorized representative.

3.2.13 Days mean calendar days unless otherwise designated.

3.2.14 Engineer means the architect or engineer retained by the City, or the person or persons designated by the City as its engineering representative during the course of construction, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.

3.2.15 He shall include "she" and "it" and his shall include "her" and "its."

3.2.16 Or Equal means the term "or equal" shall be understood to indicate that the "equal" product be the same or better than the product named in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the project design requirements will be made by the Engineer.

3.2.17 Plans or Drawings mean the term "Plans" or "Drawings" refers to the official plans, drawings, profiles, cross sections, elevations, details, and other working drawings and supplementary drawings, or reproductions thereof, signed by the Engineer, which show the location, character, dimensions, and details of the work to be performed, and identified at section 2.1.2. Plans may either be bound in the same book as the balance of the Contract Documents or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding.

3.2.18 Specifications mean the terms, provisions, and requirements contained in the Contract Documents and identified in section 2.1.2 and is synonymous with "Technical Specifications." Where standard specifications, such as those of "ASTM", "AASHO", etc. have been referred to, the applicable portions of such standard specifications shall become a part of these Contract Documents.

3.2.19 State means State of California.

3.2.20 State Standard Specifications mean the edition in effect as of the Date of Execution of the Contract of the Standard Specifications issued by the State of California Business and Transportation Agency, Department of Transportation, unless a specific edition is referenced.

3.2.21 Subcontractor means only those persons, firms or entities having a direct contract with the Contractor, and it includes one who furnishes material worked to a special design according to the Plans or Specifications of this work, but does not include one who merely furnishes material not so worked and would be considered a supplier only.

3.2.22 Time Limits mean all time limits stated in the Contract Documents are of the essence of the Contract.

3.2.23 Work means all the work specified, indicated, shown or contemplated in the Contract Documents to construct the improvements, including all alterations, amendments or extensions thereto made by Contract Change Order or other written orders of the Engineer.

3.2.24 Whenever in the Contract Documents or upon the Drawings the words DIRECTED, REQUIRED, PERMITTED, ORDERED, DESIGNATED, PRESCRIBED, or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation or prescription of the Engineer is intended, and similarly the words APPROVED, ACCEPTABLE, SATISFACTORY, or words of like import, shall mean approved or acceptable to, or satisfactory to the Engineer, unless otherwise expressly stated.

## **4 INSTRUCTIONS TO BIDDERS**

### **4.1 INTRODUCTION**

Each bid shall be in accordance with these Instructions to Bidders and other applicable provisions of the Contract Documents. The Invitation to Bid will specify whether Contract Documents are available on a purchase or deposit basis. Where payment for such sets is specified, no refund will be made.

### **4.2 PLANS**

Copies of project plans can be obtained from the CIPLIST.com internet-based plan house at the following internet website address:

<http://ciplist.com/plans/?Wheatland/city/13912>

### **4.3 LOCAL CONDITIONS**

4.3.1 The quantities of work or material stated in the unit price items of the Bid Schedule are given only as a basis for the comparison of Bids, and the City does not represent or warrant that the actual amount of work or material will correspond therewith, but reserves the right to increase or decrease the quantity of any unit price item of the work as may be deemed necessary or expedient by the Engineer.

4.3.2 The Bidder shall examine carefully the site of the work contemplated and the Contract Documents. The submission of a Bid shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of work to be performed and the materials to be furnished, and as to the requirements of the Contract Documents. Bidders shall thoroughly examine and be familiar with the Plans and Specifications. The failure of any bidder to receive or examine any form, instrument, addendum or other document, or to visit the site and acquaint himself with conditions there existing shall in no way relieve the Bidder from any obligation with respect to its proposal or to the Contract. The Plans for the work show conditions as they are supposed or believed by the City, the Engineer or their representatives to exist; but it is neither intended nor to be inferred that the conditions as shown thereon constitute a representation by the City, the Engineer, or their representatives that such conditions are actually existent, nor shall the City, the Engineer or their representatives be liable for any loss sustained by the Contractor as a result of any inference or extrapolation drawn by the Bidder between conditions as shown on the Plans and the actual conditions revealed during the progress of work, or otherwise. The Bidder's attention is directed to the possible existence of obstructions and public or private improvements which may be within the limits of the work or adjacent thereto, which may or may not be shown on the Plans.

4.3.3 Where the Engineer has made investigations of surface and subsurface conditions in areas where work is to be performed under the Contract, or in other areas, some of which may constitute possible local material sources, such investigations were made only for the purpose of study and design. Where such investigations have been made, bidders or Contractor may, upon written request, inspect the records of the Engineer as to such investigations

subject to and upon the conditions hereinafter set forth. Such inspection of records may be made at the office of the Engineer.

4.3.4 The records of such investigations are not a part of the Contract and are made available for inspection solely for the convenience of the bidder or Contractor. It is expressly understood and agreed by bidder or Contractor that neither the City nor the Engineer assumes any responsibility whatsoever with respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of the interpretation set forth therein or made by the Engineer in his use thereof and there is no representation, warranty or guarantee, either express or implied, that the conditions indicated by such investigations or records thereof are correct or representative of those existing throughout such areas or any part thereof, or that unanticipated developments may not occur or that materials other than, or in proportions different from, those indicated may not be encountered.

4.3.5 Where a log of test borings or other investigations of subsurface conditions have been made by the City in respect to foundation or other structural design, and that information is shown in the plans, said information represents only the statement by the City as to the character of material which has been actually encountered by it in its investigation, and is only included for the convenience of bidders. Water levels that may be shown on a log of test borings are valid only for the stated date of observation. The water level may change from season to season and from year to year. Investigations of subsurface conditions are made for the purpose of design, and the City assumes no responsibility whatever in respect to the sufficiency or accuracy of borings or of the log of test borings or other preliminary investigations, or of the interpretation thereof, and there is no guaranty, either expressed or implied, that the conditions indicated are representative of those existing throughout the work, or any part of it, or that unobserved or unanticipated developments may not occur. Making such information available to bidders is not to be construed in any way as waiver of the provisions of this section and bidders must satisfy themselves through their own investigations as to conditions to be encountered.

4.3.6 The availability or use of information described in these Instructions to Bidders and other bid documents shall not be construed in any way as a waiver of the provisions of the Instructions of Bidders and a Bidder or Contractor is cautioned to make such an investigation and examination as it deems necessary to satisfy itself as to conditions to be encountered in the performance of the work and, with respect to possible local material sources, the quality and quantity of material available from such property and the type and extent of processing that may be required in order to produce material conforming to the requirements of the Specifications.

4.3.7 No information derived from such inspection of records of investigations or compilations thereof made by the Engineer, will in any way relieve the bidder or Contractor from any risk or from properly fulfilling the terms of the Contract.

4.3.8 Information derived from inspection of topographic maps, or from Plans showing location of utilities and structures will not in any way relieve the Contractor from any risk, or from properly examining the site and making such additional investigations as it may elect, or from properly fulfilling all the terms of the Contract.

#### **4.4 FORM OF BID AND SIGNATURE**

Bids shall be submitted only on the forms attached hereto or copies thereof and shall be enclosed in a sealed envelope and marked and addressed as hereinafter directed. The Bidder shall state in figures the unit prices or the specific sums as the case may be, for which he proposes to supply the labor, materials, supplies tools or equipment, and perform the work required by the Contract Documents. If the Bid is made by an individual, it shall be signed by its full name and address shall be given; if it is made by a partnership, it shall be signed with the partnership name by a member of the partnership, who shall also sign his own name, and the name and address of each member of such partnership shall be given; and, if it is made by a corporation the name of the corporation shall be given and it shall be signed by its duly authorized officer or officers, the name(s) and title(s) of all signing officers, of the corporation shall be given, and the address of the corporation and the state in which incorporated shall be stated. Bids will be considered only from persons licensed as required under applicable provisions of the Contractors' State License Law (California Business and Professions Code section 7000, et seq.) and rules and regulations adopted pursuant thereto; and each bidder shall insert its type of contractor's license, license number, and other requested information in the place provided in the bid. No oral, telephonic, e-mail, facsimile or telegraphic Bid or modification of a Bid will be considered.

#### **4.5 SUBMISSION OF BIDS**

4.5.1 All Bids must be submitted not later than the time prescribed, at the place and in the manner set forth in the Invitation to Bid. The City shall not consider any Bid received after the time fixed or received at any place other than the place stated in the Invitation to Bid. Bids must be made on the prescribed Bid forms. A complete Bid requires submission of fully completed and executed: Bid, Designation of Subcontractors (if applicable), Bid Bond (or other bid guarantee), Experience Qualifications and Noncollusion Declaration. Each Bid must be submitted in a sealed envelope, so marked as to indicate its contents without being opened, and addressed in conformance with the instructions in the Invitation to Bid. The bidder is wholly responsible to see that its Bid is submitted at the time and place named for the opening of bids.

4.5.2 Bids shall acknowledge receipt of all addenda (identified by addendum no.) issued during the bidding period. Failure to acknowledge an addendum or clarification may result in the Bid being rejected as not responsive.

4.5.3 Bids shall be open at the time and place specified in the Invitation to Bid, unless changed by addendum. All Bids will be opened and read publicly. Bidders, their representatives and other interested parties, are invited to be present at the opening.

#### **4.6 PREPARATION OF THE BID**

4.6.1 Blank spaces in the Bid shall be properly completed. The phraseology of the Bid must not be changed and no additions shall be made to the items mentioned therein. Unauthorized conditions, limitations or provisions attached to a Bid may render it nonresponsive and may cause its rejection. If erasures, interlineations or other changes appear on the form, each erasure, interlineation or change must be initialed by the person signing the Bid. Alternative Bids will not be considered unless specifically provided for in the Bid Schedule.

Where performance and/or labor and material bonds are required, the Bidder shall name in his Bid the surety or sureties which have agreed to furnish the bonds.

4.6.2 Section 5.36 of the Contract General Conditions provides that the successful Contractor shall pay all federal, state and local taxes, including manufacturers' taxes, sales taxes, use taxes, processing taxes, and payroll, wage, insurance, social security, and unemployment taxes on wages, salaries or any remuneration paid to Contractor's employees. A bidder's bid prices shall be deemed to include all applicable taxes, and there shall be no separate bid item or billing for taxes.

#### **4.7 BID GUARANTEE**

4.7.1 All Bids shall be accompanied by a Bid Bond, as defined, made payable to the City. The Bid Bond must be enclosed in the same envelope with the Bid. The amount of the Bid Bond shall be not less than 10 percent of the total amount of the Bid.

4.7.2 If a bond is utilized, the Attorney in Fact (resident agent) who executes the Bid Bond on behalf of the surety company must attach a copy of his Power of Attorney as evidence of his authority. A notary shall acknowledge the power as of the date of execution of the surety bond which it covers. A bond will be accepted only if it is made out on either the Bid Bond form enclosed in these documents or on a form which substantially conforms to it.

#### **4.8 LIST OF SUBCONTRACTORS; SUBCONTRACTING LIMITS**

4.8.1 Each Bidder shall set forth in its Bid on the form provided the following information in accordance with the provisions of California Public Contract Code section 4100, et seq.: (a) The name, location of the place of business, and California contractor's license number of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement, and of each subcontractor who, under subcontract to the Contractor, is to specifically fabricate and install or provide a portion of the work or improvement according to the Contract Documents, in any amount in excess of 1/2 of 1 percent of the Contractor's total Bid; and (b) The portion of the work that will be done by each such subcontractor. Only one subcontractor shall be listed for each such portion of the work as defined in the Bid. If the Bidder fails to specify a subcontractor for any portion of the work to be performed under the Contract, the Bidder agrees to perform that portion of the work itself.

4.8.2 The Contractor shall perform with its own organization work amounting to not less than 50 percent of the original total contract price, except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the original total contract price before computing the amount of work required to be performed by the Contractor with its own organization. When items of work in the Bid schedule are preceded by the letter (S), such items shall be deemed designated "Specialty Items." Where an entire item is subcontracted, the value of work subcontracted will be based on the contract item bid price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the contract item bid price, determined from information submitted by the Contractor, subject to approval by the Engineer.

## **4.9 INTERPRETATION OF CONTRACT DOCUMENTS**

4.9.1 Any explanation desired by the bidders regarding the meaning or interpretation of any of the Contract Documents must be requested in writing, with sufficient allowance of time for receipt of reply before the time set for opening of Bids. Any such explanations or interpretations will be made only in the form of addenda to the documents and will be furnished to all bidders who shall submit all addenda with their Bids. Neither the Engineer nor any representative of the City is authorized to give oral explanations or interpretations of Contract Documents, and a submission of a Bid constitutes agreement by the bidder that he has placed no reliance on any such oral explanation or interpretation. However, the Engineer may, upon inquiry by bidder, orally direct the bidder's attention to specific provisions of the Contract Documents which cover the subject of the inquiry.

4.9.2 The Bidder shall review the Plans and Specifications prior to submission of his bid and shall report any errors and omissions noted by the Bidder to the City prior to such submission.

## **4.10 MODIFICATION OF BIDS**

A Bidder may modify its Bid by written communication provided such communication is received by the City prior to the closing time for receipt of Bids. The written communication should not reveal the Bid price but should state the addition or subtraction or other modification so that the final prices or terms will not be known by the City until the sealed bid is opened.

## **4.11 WITHDRAWAL AND RETURN OF BIDS**

Bids may be withdrawn without prejudice by written, e-mail, facsimile or telegraphic requests received from the Bidder prior to the time for opening of Bids, and Bids so withdrawn will be returned to bidders unopened. No Bid may be withdrawn after the hour affixed for opening Bids without rendering the accompanying Bid Bond subject to retention as liquidated damages in like manner as in the case of failure to execute the Contract after award, as provided in the Contract Documents. Negligence on the part of the Bidder preparing its Bid shall not constitute a right to withdraw the Bid subsequent to the opening of Bids. Any Bid received after the bid submission deadline shall be returned to the bidder unopened.

## **4.12 DISCREPANCIES**

In the case of discrepancy between unit prices and totals, unit prices will prevail. In case of discrepancy between words and figures, words will prevail.

## **4.13 SERVICING AND MAINTENANCE**

Each Bidder must, if requested, furnish evidence that there is an efficient service organization which regularly carries a stock of repair parts for the proposed equipment to be furnished and installed in the work and that the organization is conveniently located for prompt service.



#### **4.14 DISQUALIFICATION OF BIDDERS**

4.14.1 More than one Bid from an individual, firm, partnership or corporation under the same or different names will not be considered. Reasonable grounds for believing that any individual, firm, partnership or corporation is interested in more than one Bid for the work contemplated may cause the rejection of all Bids in which the individual, firm, partnership or corporation is interested. If there is reason for believing that collusion exists among the bidders, any or all Bids may be rejected. Bids in which the price is obviously unbalanced may be rejected.

4.14.2 All bidders are put on notice that any collusive agreement fixing the prices to be bid so as to control or affect the awarding of this Contract is in violation of the competitive bidding requirements applicable to the City, including Public Contract Code section 7106, and may render void any contract let under such circumstances.

#### **4.15 AWARD OF CONTRACT**

4.15.1 The City reserves the right to accept or reject any and all Bids during the time for awarding the Contract, and to waive any informality or irregularity in any Bid. No Bid can be withdrawn during the time for awarding the Contract. The time for awarding the Contract is provided in section 4.17.

4.15.2 Before a Bid is considered for award, the City may, in addition to the Experience Qualifications form, require a Bidder to submit a statement of facts and detail as to his business, technical organization and financial resources and equipment available and to be used in performing the work. Additionally, the City may require evidence that the Bidder has performed other work of comparable magnitude and type. The City expressly reserves the right to reject any Bid if it determines that the business and technical organization, equipment, financial and other resources or other experience of the Bidder (including the Bidder's subcontractors) is not sufficiently qualified for the work bid upon and, therefore, justifies such rejection.

4.15.2 The award of the Contract, if it is awarded, will be to the lowest responsible and responsive Bidder whose Bid complies with the requirements of the Contract Documents.

#### **4.16 CONTRACT BONDS**

4.16.1 The successful Bidder shall furnish both a Performance Bond and a Payment Bond in the type, form and amount specified in the forms included with the Contract Documents. These bonds shall be furnished on such forms or on substantially similar forms acceptable to the City. The Payment Bond shall comply with California Civil Code sections 9550 and 9554 and applicable provisions of the California Bond and Undertaking Law (California Code of Civil Procedure section 995.010 et seq.). The bonds shall be obtained from a responsible corporate surety (or sureties) acceptable to the City, who is (or are) in good standing with and duly admitted by the Insurance Commissioner of the State of California to act as surety upon bonds and undertakings. The surety (or sureties) shall furnish reports as to its financial condition from time to time as requested by the City. The premiums for the bonds shall be paid by the successful Bidder.

4.16.2 If any surety becomes unacceptable to the City, is deemed insolvent, is no longer an admitted surety in California, or fails to furnish reports as to its financial condition as requested by the City, the Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of the City and of persons supplying labor or materials in the prosecution of the work contemplated by this Contract.

4.16.3 In the event of any conflict between the terms of the Contract and the terms of the bonds, the terms of the Contract shall control and the bonds shall be deemed to be amended thereby. Without limiting the foregoing, the City shall be entitled to exercise all rights granted to it by the Contract in the event of default, without control thereof by the surety, provided that the City gives the surety notice of such default at the time or before the exercise of any such right by the City, and, regardless of the terms of the bonds, the exercise of any such right by the City shall in no manner affect the liability of the surety under the bonds.

#### **4.17 EXECUTION OF CONTRACT**

The successful Bidder will be notified in writing by the City of the award of the Contract within thirty (30) days after opening of Bids, unless the time period is extended as provided in the Invitation to Bid. Accompanying the City's notice of award will be the Contract, which the City may require to be executed in duplicate or triplicate. Within ten (10) days following receipt of such notice of award, the successful bidder will be required to execute and return the original contract(s), together with the performance and payment bonds, and the required certificates and proof of insurance documents (see sections 2.4 and 5.52), to the City. Failure to do so shall be just cause for annulment of the award and for forfeiture of the Bid Bond which shall be retained as liquidated damages, and it is agreed that the Bid Bond sum is a fair estimate of the amount of damages that the City will sustain by reason of such failure. The City will promptly determine whether such Contract, bonds and insurance are as required by the Contract Documents, and upon such determination will forward a fully executed copy of the Contract and a Notice to Proceed with the work to the successful bidder. Signature by both parties constitutes execution of the Contract. In the event of failure of the lowest responsible responsive Bidder to sign and return the Contract with acceptable bonds and insurance as prescribed herein, the City may award the Contract to the next lowest responsible responsive Bidder, and, in the event that Bidder fails to sign and return the Contract with acceptable bonds and insurance, the City may award the Contract to the then next lowest responsible responsive Bidder, etc.

#### **4.18 RETURN OF BID GUARANTEES**

All Bid Bonds will be held until the Contract has been finally executed, after which all Bid Bonds, other than any Bid Bonds which have been forfeited, will be returned to the respective bidders whose Bids they accompanied, but in no event shall non-forfeited bonds be held by the City beyond 60 days from the date that the City awards the Contract.

#### **4.19 POWER OF ATTORNEY**

The Attorney in Fact (resident agent) who executes the Performance Bond and Payment Bond on behalf of the surety company must attach a copy of his Power of Attorney as evidence of

his authority. A notary public shall acknowledge the power as of the date of the execution of the bond which it covers.

#### **4.20 TIME OF COMPLETION**

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may be allowed in accordance with the provisions of the General Conditions. The time allowed for the completion of the work is stated in the Contract.

#### **4.21 LICENSING REQUIREMENTS FOR CONTRACTORS**

The Contractor shall hold such licenses as may be required by the laws of the State of California for the performance of the work specified in the Contract Documents, and shall have the following classification or type of license for the work issued by the California Contractors State License Board: [required license classifications].

#### **4.22 PREVAILING WAGES**

Copies of the prevailing rate of per diem wages are on file at the City's office, and will be made available to any interested party on request. The Contractor shall post at each job site a copy of the determination of the Director of Industrial Relations of the prevailing rate of per diem wages. Furthermore, Contractor must post job site notices, as required by Section 1771.4(a)(2) of the Labor Code and prescribed by regulation.

#### **4.23 BID PROTEST**

Any bid protest must be submitted in writing to the City before 5:00 p.m. of the seventh day following the bid award. The party filing the protest must have actually submitted a bid for the work. A subcontractor of a bidder may not submit a bid protest.

4.23.1 The bid protest shall be in the form of a letter or memorandum and it shall include the following: a complete statement of the basis or bases for the protest, including any supporting documents; a reference to the specific portion(s) of the Contract Documents which form(s) the basis for the protest; and, the name, address and telephone number of the person representing the protesting bidder.

4.23.2 The bidder filing the protest shall concurrently transmit a copy of the protest document and any attached documentation to all other bidders with a direct financial interest who may be adversely affected by the outcome of the protest, including all other bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

4.23.3 The City will issue a prompt decision on the protest. If the City determines that a protest is frivolous, the party originating the protest may be determined to be irresponsible and that party may be determined to be ineligible for future contract awards.

4.23.4 The procedure and time limits set forth in this section are mandatory and are the bidder's sole and exclusive remedy in the event of a bid protest. Failure to

comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code claim, lawsuit or other legal proceeding.

4.23.5 For purposes of this section, a “bid protest” means any protest, objection, complaint or challenge to, concerning or against (a) a rejection of a bidder for any reason, (b) a contract award to the apparent low bidder, (c) another bidder’s bid, or (d) the legality or enforceability of the bid documents.

#### **4.24 INELIGIBLE CONTRACTORS AND SUBCONTRACTORS**

The City shall not accept a bid from a bidder who is ineligible to bid or work on, or be awarded, a public works project pursuant to California Labor Code section 1777.1 or 1777.7. Bidders and the Contractor who is awarded the project contract shall not utilize, or allow work by, any subcontractor who is ineligible to bid or work on, or be awarded, a public works project pursuant to California Labor Code section 1777.1 or 1777.7. (See California Public Contract Code section 6109.) The California Division of Labor Standards Enforcement publishes a list of debarred contractors and subcontractors on the Internet at <http://www.dir.ca.gov/DLSE/debar.html>

#### **4.25 AUDIT OF BID DOCUMENTS**

The City shall have the right to audit all (including review, obtain and copy upon reasonable notice) documents that comprise or relate to a bidder’s bid in connection with any request, claim or contention raised by any bidder, including, but not limited to, Public Contract Code Sections 4000, et seq., or 5000, et seq., or any bid protest. The term “records” and the term “documents” as used herein shall include, but not be limited to, original estimates, subcontracts, bids, proposals, purchase orders, books, documents, accounting records, papers, correspondence, project files and scheduling information, including the original Bid and all documents related thereto and to its preparation, the as-planned construction schedule and any related documents.

#### **4.26 SUBSTITUTIONS DURING BIDDING**

Manufacturers or suppliers of materials and equipment may offer an alternative product to the Contractor, except where alternatives or substitutes are specifically excluded, and request that alternatives to specified products be considered equal. Inclusion of such alternatives in the bid is the responsibility of the Contractor. Inclusion should only be considered if the Contractor believes the offered alternative is equal in quality and performance to the specified product. After award of the Contract, such offers of alternative products will be reviewed and processed as a substitution as provided under General Conditions section 5.24 (Trade Names and Alternatives). Inclusion or offers of alternative products will not be reviewed or processed during the bidding period.

## **5 GENERAL CONDITIONS**

### **5.1 INTENT OF CONTRACT DOCUMENTS/MEANS AND METHODS**

5.1.1 The intent of the Contract Documents is to prescribe the details for the construction and completion of the work which the Contractor undertakes to perform in accordance with the terms of the Contract. Where the Specifications and Plans describe portions of the work in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used. Unless otherwise specified, the Contractor shall furnish all labor, materials, tools, equipment and incidentals and do all the work involved in performing the Contract in a satisfactory and workmanlike manner.

5.1.2 The technical specifications are presented in sections for convenience. However, this presentation does not necessarily delineate trades or limits of responsibility. All sections of the Specifications and Plans are interdependent and applicable to the project as a whole.

5.1.3 The Contract Documents are complementary, and what is called for in any one shall be as binding as if called for in all.

5.1.4 It is expressly stipulated that the drawings, specifications and other Contract Documents set forth the requirements as to the nature of the completed work and do not purport to control the method of performing work except in those instances where the nature of the completed work is dependent on the method of performance.

5.1.5 Except as provided elsewhere in the Contract Documents, neither the City nor the Engineer will be responsible for or have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work. Except as provided elsewhere in the Contract Documents, neither the City nor the Engineer will be responsible for or have control or charge over the acts or omissions of the Contractor, or any of their subcontractors, agents or employees, or any other persons performing any of the work. Any general control of the work exercised by the City or its authorized representatives shall not make the Contractor an agent of the City, and the liability of the Contractor for all damages to persons and/or to public or private property arising from the Contractor's execution of the work shall not be lessened because of such general control.

### **5.2 CONTRACTOR'S UNDERSTANDING**

It is understood and agreed that the Contractor has, by careful examination, satisfied itself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this Contract. No verbal agreement or conversation with any officer, agent or employee of the City, either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.

### 5.3 CHANGES IN THE WORK

5.3.1 The City reserves the right to make such alterations, deviations, additions to, deletions or omissions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the work, as may be deemed by the Engineer to be necessary or advisable and to require such extra work as may be determined by the Engineer to be required for the proper completion or construction of the whole work contemplated. Such changes, no matter how many, shall be within the contemplation of this Contract and shall not be the basis for a compensable delay or a claim for lost profits.

5.3.2 The Engineer shall have the authority to order minor changes in the work not involving any increase or decrease in the Contractor's cost of, or time required for, performance of the Contract. Such minor changes shall be effected by written order of the Engineer, and the Contractor shall carry out such written orders promptly. If the Contractor disagrees with the Engineer's determination that the minor change does not involve any increase or decrease in the Contractor's cost of, or time required for, performance of the Contract, then the Contractor may file and pursue a claim pursuant to section 5.4. The written claim must be submitted to the Engineer within 15 days after the date of the Engineer's written order. If the Contractor believes that any such work is beyond the scope of the contract documents, the Contractor shall provide a written "Daily Extra Work Report" documenting the alleged extra work, which will be submitted to and verified by the Engineer or the City's representative at the end of the day the work was performed.

5.3.3 If any change in the work ordered by the Engineer causes an increase or decrease in the Contractor's cost of, or time required for, performance of the Contract, an adjustment and modification of the Contract will be made in the form of a Change Order which will set forth (a) the changes, additions and/or deductions in the work to be done, (b) the increase or decrease in compensation due the Contractor, if any, or the method by which the increase or decrease, if any, will be calculated, and (c) the adjustment in the time of completion of the work, if applicable. A Change Order may be issued to the Contractor at any time.

5.3.4 The compensation to be paid for any work addressed in a Change Order shall be determined in one or more of the following ways as shown in the Change Order:

- a. By unit prices;
- b. By an agreed-upon lump sum; or
- c. By the cost plus basis determined pursuant to section 5.3.9.

5.3.5 Contractor shall keep full and complete records of the cost of any work addressed in a Change Order in the form and manner prescribed by the Engineer and shall permit the Engineer to have access to such records as may be necessary to assist in the determination of the compensation payable for such work.

5.3.6 With respect to a Change Order involving the deletion or reduction of work, the Engineer shall determine the appropriate reduction in the Contract price based on the lump sum and/or per unit prices in the bid schedule for the items of work deleted or

reduced by the Change Order. The Contractor shall not be entitled to claim damages for anticipated profits on any portion of the work that may be deleted.

5.3.7 Upon receipt of a Change Order signed by the Engineer, the Contractor shall forthwith proceed with the ordered work, unless otherwise directed by the Engineer. If the Contractor agrees with the terms and conditions of the Change Order, then it shall sign the Change Order.

5.3.8 Should the Contractor disagree with any terms or conditions set forth in a proposed Change Order, it shall submit a written protest to the Engineer within 15 days after the receipt of the proposed Change Order. The protest shall state the points of disagreement, addressing, if applicable, the quantities and cost involved and the adjustment of time for completion.

5.3.8.1 If a written protest is not timely submitted by the Contractor, then the proposed Change Order, including all cost and time adjustment provisions, if any, that was submitted to the Contractor shall be deemed final and acceptable to the Contractor even if not signed by the Contractor. Any payment under an unprotested Change Order's cost adjustment provisions shall constitute full compensation for all work included in or required by the Change Order.

5.3.8.2 If the Contractor timely protests a proposed Change Order, it shall nevertheless proceed with the ordered work pending resolution of the protest.

5.3.8.3 If the Contractor timely protests a proposed Change Order, the Engineer shall render in writing its determination of the protest. If the Contractor disputes the determination, then the Contractor may file and pursue a claim pursuant to section 5.4. The written claim must be submitted to the Engineer within 15 days after the date of the Engineer's written determination on the protest. If the Contractor does not timely file a claim, then the proposed Change Order (as may have been revised by the Engineer's determination on the protest), including all cost and time adjustment provisions, if any, shall be deemed final and acceptable to the Contractor even if not signed by the Contractor. Any payment under such a Change Order's cost adjustment provisions shall constitute full compensation for all work included in or required by the Change Order.

5.3.8.4 If the Contractor refuses to accept a Change Order, the City may issue it unilaterally. The Contractor shall comply with the requirements of the Change Order. The City shall provide for an equitable adjustment to the Contract, and compensate the Contractor accordingly. If the Contractor does not agree that the adjustment is equitable, it may submit a claim in accordance with section 5.4.

5.3.9 The following shall constitute the cost plus basis of payment:

5.3.9.1 Charges for all of the labor furnished and used by the Contractor shall be made for manual classifications up to and including general foreman. It will not include charges for assistant superintendents, superintendents, office personnel, timekeepers and maintenance mechanics. The time charged to work shall be subject to the daily approval of the Engineer and evidence of such approval shown on approved Daily Extra Work Reports shall

be submitted with the billing. (See sample Extra Daily Work Report attached to Specification [specification number].) Labor rates used to calculate the costs shall be those basic wages including current employer contributions for fringe benefits and federal and state surcharges and including applicable subsistence and travel allowances, all as actually paid to workers under collective bargaining agreements or as a regular practice of the employer. No time or charges will be allowed except when the workers are actually engaged in the proper, efficient and diligent performance or completion of the work as authorized. Overtime shall not be worked without prior approval of the Engineer.

5.3.9.2 Charges for the rental and operation of the equipment furnished and used by the Contractor shall be made for all prime construction and automotive equipment. It shall not include charges for listed equipment or major tools with a new cost of \$500 or less. Equipment time charges shall be itemized on a Daily Extra Work Report, subject to the daily approval of the Engineer and evidence of such daily approval shall be submitted with the billing. The equipment rental and operation rates used shall be those agreed upon by the Engineer and the Contractor prior to commencement of the work and shall include an approved allowance for depreciation. The cost for each type of approved equipment (active or standby) shall be no greater than the amount allowed in the latest edition of the Caltrans Standard Equipment Rates. Time and charges shall be allowed only when equipment is actually being used for the proper and efficient performance or completion of the work as authorized.

5.3.9.3 Charges for the cost of materials furnished by the Contractor shall be made, provided such furnishing was specifically authorized in the work order and the actual use verified by the Engineer. Charges shall be net cost to the Contractor delivered at the job, including all applicable sales taxes; and a vendor's invoice must accompany the billing along with verification of use of such materials by the Engineer.

5.3.9.4 A charge for major tools, supplies, overhead, supervision and profit will be allowed in the amount of 15% of the total direct labor costs, equipment costs, and material costs, as defined in sections 5.3.9.1 to 5.3.9.3.

5.3.9.5 When all or any part of work is performed by any of the Contractor's subcontractors, the markup percentage established in section 5.3.9.4 shall be applied to the subcontractor's actual cost of such work (as determined in sections 5.3.9.1 to 5.3.9.3), to which a markup of 5% on the subcontracted portion of the extra work may be added by the Contractor.

5.3.10 Lump sum change orders shall include all work and costs associated with the change work item(s) and shall be agreed to and signed by both the Contractor and the City prior to commencing the work.

5.3.10.1 A charge for major tools, supplies, overhead, supervision and profit will be allowed an amount no greater than 15% of the total direct labor, equipment, and material costs.

5.3.10.2 When all or any part of work is performed by any of the Contractor's subcontractors, the markup percentage established in section 5.3.10.1 shall be applied



to the subcontractor's actual cost of such work, to which a markup of no greater than 5% on the subcontracted portion of the extra work may be added by the Contractor.

5.3.11 The consent of the Contractor's bond sureties shall not be required as to any change or extra work ordered by the City, and the liability of the Contractor's bonds and sureties shall be increased or decreased accordingly without notice to the sureties.

5.3.12 The City reserves the right to contract with any person or firm other than the Contractor for any or all extra work.

5.3.13 If the total pay quantity of any item of work required under the Contract to be paid at a unit price exceeds the item as bid by more than 25 percent, then in the absence of an executed contract change order specifying the compensation to be paid, the work in excess of 125 percent of such estimate may, at the City's discretion, be paid for by a cost plus basis of payment as described at section 5.3.9, instead of at the unit price.

5.3.14 Any extra work related to differing site conditions pursuant to Public Contract Code section 7104 shall be addressed in accordance with section 5.45.7.5 of these General Conditions. No claim of the Contractor under this clause shall be allowed unless the Contractor has promptly given the notice required before any such claimed conditions are disturbed.

#### **5.4 CLAIMS AND RESOLUTION OF DISPUTES**

5.4.1 General. The parties intend by this section 5.4 that differences between the parties, arising under the Contract, be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The parties agree to initially strive to resolve all disputes amicably and in an informal manner. Any dispute resolved informally shall be documented by the Engineer, and if the dispute resolution involves a change in the contract work, increase or decrease in the compensation due the contractor, or adjustment in the time of completion of the Work, then the informal dispute resolution shall be confirmed by a Change Order pursuant to section 5.3. Informal discussions or negotiations with the Engineer or other City representatives concerning informal resolution of a dispute shall not toll or suspend the claim filing and other deadlines provided below, unless so provided by the Engineer in writing. The willingness of the Engineer to engage in any such discussions is not a waiver of the City's right to deny a claim or dispute it based on lack of merit, or procedural deficiency, or both.

5.4.2 Compliance Required. Contractor shall not be entitled to any additional time to complete Work or to the payment of any additional compensation for claimed extra work (or otherwise on account of any claim, cause, act, failure to act, or happening of any event or occurrence) unless either City has issued a Change Order pursuant to section 5.3 or a claim has been timely filed and approved pursuant to this section 5.4. If the Contractor fails to file a written claim within the claim deadline of section 5.4.4, then the Contractor agrees that it has waived any right or remedy to thereafter pursue the claim against the City in any administrative, arbitration or litigation proceeding, and the City may elect to document this waiver.

5.4.3 Scope of Claims. A claim for purposes of this section 5.4 means a separate demand by the Contractor for (a) a time extension (including a demand for relief from damages or penalties for delay assessed by the City under the Contract), (b) payment of money or damages arising from work done by, or on behalf of, the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the Contractor is not otherwise entitled to, or (c) an amount the payment of which is disputed by the City.

#### 5.4.4 Filing of Contract Claim; Contents; Filing Deadline

5.4.4.1 The Contractor shall file any "Contract Claim" with the Engineer. A Contract Claim must (a) be in writing, (b) be labeled or clearly indicated as a claim under the Contract, (c) set forth in detail the reasons why the Contractor believes additional compensation or a time extension is or may be due, the nature of the costs involved, and, insofar as possible, the amount of the claim, and (d) include (or reference earlier provided) documents that support and substantiate the claim as to both entitlement and quantification of time, money, or both.

5.4.4.2 A Contract Claim must be submitted to the Engineer within the following claim filing deadlines: (a) if a deadline is set forth in the Contract Documents for filing of the particular claim, then the claim must be filed by the specified time; (b) if the claim relates to extra, additional or unforeseen work for which the Contractor intends to demand additional compensation, a time extension, or both, notice shall be given to the Engineer prior to the time that the Contractor commences performance of the work giving rise to the potential claim for additional compensation or time extension, and Contractor shall not proceed with that work until so directed by the Engineer; and (c) for all other claims not included within (a) or (b), the claim must be filed on or before 15 days after the date of the occurrence, event or circumstance giving rise to the claim. In no event shall a Contract Claim be filed later than the date of final payment.

5.4.5 Processing of Claims, Generally. This Contract provides for three types of Contract Claims, which will be processed and resolved under different subsections. Any claim for money or damages of \$375,000 or less or for a time extension (i.e., any claim subject to Public Contract Code section 20104) shall be processed and resolved in accordance with section 5.4.6. Any claim for money or damages of more than \$375,000 (i.e., any claim not subject to Public Contract Code section 9204 or 20104) shall be processed and resolved in accordance with section 5.4.7. Any Contract Claim sent to City by registered mail or certified mail with return receipt requested (i.e., any claim subject to Public Contract Code section 9204) shall be processed and resolved pursuant to section 5.4.8.

#### 5.4.6 Claims for \$375,000 or Less or for Time Extension

5.4.6.1 Application. This section applies to all claims for \$375,000 or less in value, including any claim for a time extension or for a time extension that includes claimed delay damages of \$375,000 or less.

5.4.6.2 City Response to Contract Claim. The Engineer shall respond in writing to the Contract Claim within 60 days of receipt of the claim (or within 45 days

of receipt for claims of less than \$50,000), or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subsection, upon mutual agreement of the Engineer and the Contractor. The Engineer's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days after receipt (or 15 days after receipt for claims of less than \$50,000) of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater. The City shall not fail to pay money as to any portion of a Contract Claim that is undisputed except as otherwise provided in the Contract Documents.

5.4.6.3 Meet and Confer. If the Contractor disputes the Engineer's written response, or the Engineer fails to respond within the time prescribed, the Contractor may notify the City, in writing, either within 15 days of receipt of the Engineer's response or within 15 days of the Engineer's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon such a demand, the City shall schedule a meet and confer conference within 30 days for the parties to consider settlement of the dispute. If the Contractor fails to timely demand a meet and confer conference within the applicable 15-day period, then the Contractor shall be deemed not to dispute the Engineer's written response to the Contract Claim and the Engineer's decision on the Contract Claim shall be final, conclusive and binding, and the Contractor shall be deemed to have waived all its rights to further protest, judicial or otherwise.

5.4.6.4 Government Code Claim. Following the meet and confer conference, if the Contract Claim or any portion remains in dispute, the Contractor may file a Government Code Claim as provided in Government Code title 1, division 3.6, part 3, chapters 1 (commencing with section 900) and 2 (commencing with section 910). The running of the period of time within which Contractor must file a Government Code Claim shall be tolled from the time the Contractor submits a timely Contract Claim pursuant to section 5.4.4 until the time that the Contract Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process. The City shall respond to any Government Code Claim in accordance with the Government Claims Act.

5.4.6.5 Lawsuit. If the claim is not resolved pursuant to section 5.4.6.4, the Contractor may file a lawsuit on the claim within the limitations period provided by the Government Claims Act. If the Contractor fails to timely file a lawsuit within the limitations period of the Government Claims Act, then the City's response to the Government Code Claim shall be final, conclusive and binding on the Contractor, and the Contractor thereafter shall be barred from filing a lawsuit on the claim.

5.4.6.6 Mediation. If the Contractor timely files a lawsuit, then within 60 days, but no earlier than 30 days, following the filing of responsive pleadings, the court shall submit the matter to non-binding mediation (unless waived by mutual stipulation of both parties). The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties.

If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator. The mediator's fees and expenses shall be split and paid equally between the parties. The court may, upon request by any party, order any witnesses to participate in the mediation process.

5.4.6.7 Arbitration. If the matter remains in dispute following the mediation or if the parties waive the mediation, then the case shall be submitted to judicial arbitration pursuant to Code of Civil Procedure part 3, title 3, chapter 2.5 (commencing with section 1141.10), notwithstanding section 1141.11 of that code. The Civil Discovery Act of 1986 (Code of Civil Procedure part 4, title 3, chapter 3, article 3 (commencing with section 2016)) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. The arbitrator shall be experienced in public works construction law. The arbitrator's fees and expenses shall be split and paid equally by the parties, except where the arbitrator, for good cause, determines a different division. The court may, upon request by any party, order any witnesses to participate in the arbitration process. Any party who, after receiving an arbitration award, requests a trial de novo but does not obtain a more favorable judgment shall (in addition to payment of any costs and fees under Code of Civil Procedure part 3, title 3, chapter 2.5 (commencing with section 1141.10)) pay the attorney's fees of the other party arising out of the trial de novo.

5.4.6.8 Interest. In any lawsuit filed under this subsection, City shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the lawsuit is filed in court.

#### 5.4.7 Claims for More Than \$375,000

5.4.7.1 Application. This section applies to all claims that exceed \$375,000 in value, including any claim for time extension that includes claimed delay damages exceeding \$375,000.

5.4.7.2 City Response to Contract Claim. The Engineer shall respond in writing to the Contract Claim within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim that the City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subsection, upon mutual agreement of the Engineer and the Contractor. The Engineer's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days after receipt of the further documentation. If the Contractor fails to timely dispute the Engineer's decision on the matter in accordance with section 5.4.7.3, then the Contractor shall be deemed not to dispute the Engineer's written response to the Contract Claim and the Engineer's decision shall be final, conclusive and binding, and the Contractor shall be deemed to have waived all its rights to further protest, judicial or otherwise.

5.4.7.3 Government Code Claim. If the Contractor disputes the Engineer's written response to the Contract Claim, the Contractor may file a Government Code Claim as provided in Government Code title 1, division 3.6, part 3, chapters 1 (commencing with

section 900) and 2 (commencing with section 910). City shall respond to any Government Code Claim in accordance with the California Government Claims Act.

5.4.7.4 Lawsuit. If the claim is not resolved pursuant to section 5.4.7.3, the Contractor may file a lawsuit on the claim within the limitations period provided by the Government Claims Act. If the Contractor fails to timely file a lawsuit within the limitations period of the Government Claims Act, then the City's response to the Government Code Claim shall be final, conclusive and binding on the Contractor, and the Contractor thereafter shall be barred from filing a lawsuit on the claim.

5.4.7.5 Judicial Reference. If the Contractor timely files a lawsuit, the case shall be submitted to judicial reference pursuant to California Code of Civil Procedure sections 638 and 640 through 645.1 (or any successor statute) and California Rules of Court title 3, division 9 (commencing with section 3.900). As authorized by Code of Civil Procedure section 638, a referee will consider and decide all factual and legal issues in the action. Each party acknowledges that it will not have any right to a jury trial or to have any judicial officer besides the referee hear or decide the action. When Contractor initiates the superior court lawsuit, it will, at the same time it files the complaint in the action, also file a motion for appointment of a single referee.

- (a) Appointment of a referee shall be by mutual agreement within 30 days between the parties, and if unsuccessful, then by the court and will be governed by Code of Civil Procedure section 640, and subject to objection by either party as provided by Code of Civil Procedure section 641. The referee must be a retired judge or a licensed attorney with at least ten years substantive experience in public works construction matters.
- (b) The parties shall be entitled to discovery and the referee shall oversee discovery and may enforce all discovery orders in the same manner as a superior court judge. The referee shall have the authority to consider and rule on appropriate pre-hearing and post-hearing motions in the same manner as a superior court judge. The referee will have the authority to set a briefing and hearing schedule for any such motion or for a hearing on the merits.
- (c) The referee's statement of decision shall include findings of fact and conclusions of law. The statement of decision will stand as the decision of the superior court and, upon filing of the statement with the clerk of the court, judgment may be entered pursuant to Code of Civil Procedure section 644, subsection (a). The parties will have rights to appeal the final judgment so entered.
- (d) Each Party will pay half of the costs of the referee and the administrative fees of the reference proceeding, and each party will bear its own costs, expenses and attorney fees for the reference proceeding.

#### 5.4.8 Claims Subject to Public Contract Code section 9204

5.4.8.1 The Contract Claim will be processed and resolved pursuant to Public Contract Code section 9204, which is summarized here:

- (a) City Review of Claim. Within 45 days after receiving a complete Contract Claim, City shall review the claim and provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. City will pay any undisputed portion of the claim within 60 days from the date of the written statement. If City fails to timely issue a written statement, the claim shall be deemed rejected in its entirety.
- (b) Meet and Confer Conference. If the Contractor disputes the City's written statement or if the Contract Claim is deemed rejected, the Contractor may demand and the parties will conduct an informal conference to meet and confer regarding settlement in accordance with section 9204, subsection (d)(2). Within 10 business days following the conclusion of the meet and confer conference, City shall provide Contractor a written statement identifying the portion (if any) of the claim remaining in dispute and any undisputed portion will be paid by City within 60 days after this written statement.
- (c) Non-Binding Mediation. Any remaining disputed portion of the claim shall be submitted to nonbinding mediation in accordance with section 9204, subsection (d)(2).
- (d) Interest. Any amount not paid in a timely manner as required by this subsection shall bear interest at a rate of 7 percent per annum until paid.

The foregoing is a summary of section 9204. In the event of any conflict between the summary and section 9204, the statute will govern.

5.4.8.2 Lawsuit and Reference. If mediation is unsuccessful and all or parts of the Contract Claim remain in dispute, then the Contractor may pursue a lawsuit (with judicial reference) in accordance with the procedures set forth at sections 5.4.7.4 through 5.4.7.5.

5.4.9 Contract Work Pending Claim Resolution. Unless otherwise directed in writing by the Engineer, pending resolution of a claim under this section 5.4, the Contractor shall continue to diligently prosecute the Contract work in accordance with the Contract Documents and the instructions of the Engineer.

5.4.10 Tort Claims. The provisions of this section 5.4 apply only to contract-based claims and they shall not apply to tort claims, and nothing in this section 5.4 is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Government Code title 1, division 3.6, part 3, chapters 1 (commencing with section 900) and 2 (commencing with section 910).

## **5.5 GUARANTEE**

5.5.1 In addition to warranties, representations and guarantees stated elsewhere in the Contract Documents, or implied-in-fact or in-law, the Contractor unconditionally guarantees all materials and workmanship furnished hereunder, and agrees to repair or replace or both at its sole cost and expense, and to the satisfaction of the Engineer and the City, any and all materials which may be defective or improperly installed.

5.5.2 The Contractor shall repair or replace to the satisfaction of the Engineer any or all such work that may prove defective in workmanship or materials, ordinary wear and tear excepted, together with any other work which may be damaged or displaced in so doing. Contractor shall leave the site of any such repair or replacement work in satisfactory working order and condition.

5.5.3 In the event of failure to comply with the above stated conditions within a reasonable time, the City is authorized to have the defect repaired and made good at the expense of the Contractor who will pay the costs and charges therefor immediately upon demand, including any reasonable management and administrative costs, and engineering, legal and other consultant fees incurred to enforce this section.

5.5.4 The signing of the Contract by the Contractor shall constitute execution of the above guarantees. Except as otherwise provided in this Contract, the guarantees and warranties shall remain in effect for one year from the date of recording a notice of completion. The City shall have the right to call for such inspection or inspections of the work before the end of the one-year guarantee period and Contractor shall attend and participate in such inspection(s) upon request of the City. This guarantee does not excuse the Contractor from breaches of contract causing defects that occur or are discovered more than one year after the notice of completion. In addition, the warranty and guaranty period for repaired or replaced work or part shall be one year from the date of acceptance of said repaired or replaced work or part, but not less than the remaining warranty period of the original work.

## **5.6 AUTHORITY OF THE ENGINEER**

5.6.1 The Engineer is the representative of the City and has full authority to interpret the Contract Documents, to conduct the construction review and inspection of the Contractor's performance, and to decide questions which arise during the course of the work; and its decisions on these matters shall be final and conclusive. The Engineer has the authority to reject all work and materials that do not conform to the Contract Documents, and has the authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.

5.6.2 If at any time the Contractor's work force, tools, plant or equipment appear to the Engineer to be insufficient or inappropriate to secure the required quality of work or the proper rate of progress, the Engineer may order the Contractor to increase their efficiency, improve their character, to augment their number or to substitute other personnel, new tools, plant or equipment, as the case may be, and the Contractor shall comply with such order. Neither the failure of the Engineer to demand such increase of efficiency, number, or improvement, nor the compliance by the Contractor with the demand, shall relieve the Contractor of its obligation to provide quality work at the rate of progress necessary to complete the work within the specified time.

5.6.3 The Engineer shall have the authority to make minor changes in the work, not involving extra costs, and not inconsistent with the purposes of the work.

5.6.4 Any order given by the Engineer, not otherwise required by the Contract Documents to be in writing shall, on request of the Contractor, be given or confirmed by the Engineer in writing.

5.6.5 Whenever work, methods of procedure, or any other matters are made subject to direction or approval, such direction or approval will be given by the Engineer.

## **5.7 DRAWINGS**

5.7.1 Drawings furnished herewith are for bidding purposes. The Engineer will furnish the Contractor, free of charge, copies of full size Drawings which are reasonably necessary for the execution of the work. The Contractor shall have no claim for excusable delay on account of the failure of the Engineer to deliver such Drawings unless the Engineer shall have failed to deliver the same within two weeks after receipt of written demand therefor from the Contractor. If the Contractor, in the course of the work, finds any discrepancy between the Drawings and the physical condition of the locality, or any errors or omissions in the Drawings, or in the layout as given by points and instructions, it shall be its duty to inform the Engineer in writing, and the Engineer will promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk. All Drawings, Specifications, and copies thereof furnished by the Engineer are the property of the Engineer and shall not be reused on other work and, with the exception of the signed Contract sets, are to be returned to it, on request, at the completion of the work. All models are the property of the City.

5.7.2 The Contractor shall maintain at the site of work one record copy of the Drawings, in good order, and available to the Engineer. The Contractor shall mark the Drawings to record all changes and corrections made during construction. The Contractor shall make all corrections and changes on the Drawings as necessary to produce accurate and complete record Drawings showing the "as built" work. Marked Drawings shall be updated at least weekly. The Contractor shall submit to the Engineer a final, complete and accurate set of record Drawings prior to or simultaneously with the Contractor's request for final payment.

5.7.3 The Drawings shall be supplemented by such shop drawings prepared by the Contractor as are necessary to adequately control the work. Contractor shall not make any changes in any shop drawings after they have been reviewed by the Engineer.

5.7.4 Shop drawings for any structure shall include, but not be limited to: stress sheets, anchor bolt layouts, shop details, and erection plans, which shall be reviewed and approved by the Engineer before any such work is performed.

5.7.5 Shop drawings will be required for cribs, cofferdams, falsework, centering and form work and for other temporary work and methods of construction the Contractor proposes to use. Such drawings shall be subject to the review and approval of the Engineer insofar as the details affect the character of the finished work, but details of design will be left to the Contractor who shall be responsible for the successful construction of the work.

5.7.6 Contractor agrees that shop drawings processed by the Engineer are not Contract Change Orders, and that the purpose of shop drawings submitted by the Contractor is to demonstrate to the Engineer that the Contractor understands the design concept, and to



demonstrate its understanding by indicating which equipment and material it intends to furnish and by detailing the fabrication methods it intends to use.

5.7.7 It is expressly understood, however, that favorable review of the Contractor's shop drawings shall not relieve the Contractor of any responsibility for accuracy of dimensions and details, or for mutual agreements of dimensions and details. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of its shop drawings with the Specifications. Contractor further agrees that if deviations, discrepancies or conflicts between shop drawings and Specifications are discovered either prior to or after shop drawings are processed by the Engineer, the Specifications shall control and shall be followed.

5.7.8 Unless otherwise stated, the Engineer shall have 30 days from the date of receipt of shop drawings for review.

5.7.9 Full compensation for furnishing all shop drawings shall be considered as included in the prices paid for the Contract items of work to which such drawings relate and no additional compensation will be allowed therefor. Any cost related to the Engineer's review of any particular set of shop drawings more than twice, due to incompleteness or unacceptability, shall be borne by the Contractor, and the City reserves the right to withhold such costs from payments due the Contractor.

## **5.8 CONSTRUCTION STAKING AND SURVEYS**

The Engineer will provide the Contractor with drawings showing benchmarks and reference points as it deems necessary to establish lines and grades required for the completion of the site work specified in the Contract Documents. The Contractor shall make or furnish all surveys and set all construction stakes necessary for the completion of the work.

Stakes and marks set by the City or Engineer, if any, shall be carefully preserved by the Contractor. The Contractor shall be charged for the cost of replacing or restoring the stakes and marks that are destroyed or damaged by its operation. This charge will be deducted from any monies due or to become due to the Contractor under the Contract.

## **5.9 PERMITS AND REGULATIONS**

5.9.1 Permits and licenses, of a temporary nature, necessary for the prosecution of the work shall be secured and paid for by the Contractor. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the City unless otherwise specified.

5.9.2 The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as shown on the plans and described in the Specifications. The Contractor shall promptly notify the Engineer in writing of any specification at variance therewith and any necessary changes shall be adjusted as provided in the Contract for changes in the work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations and without such notice to the Engineer, it shall bear all costs arising therefrom.

## **5.10 CONFORMITY WITH CONTRACT DOCUMENTS**

Work and materials shall conform to the lines, grades, cross sections, dimensions and material requirements, including tolerances, shown on Contract Documents. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Engineer shall be the sole judge as to whether the work or materials deviate from the Specifications and plans, and his decision as to any allowable deviations therefrom shall be final and conclusive.

## **5.11 COORDINATION & INTERPRETATION OF CONTRACT DOCUMENTS**

5.11.1 The Contract Documents are complementary and a requirement occurring in one is as binding as though occurring in all.

5.11.2 In the event of conflict between the Plans and the Specifications, the Specifications shall govern, except that, where items are shown on the Plans and are not specifically included in the Specifications, the Plans shall govern.

5.11.3 Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in the Specifications and Plans, the Contractor shall apply to the Engineer for such further explanations as may be necessary and shall conform to them as part of the Contract. In the event of any doubt or question arising respecting the true meaning of the Specifications and Plans, reference shall be made to the Engineer, whose decision thereon shall be final and conclusive.

5.11.4 In the event of any discrepancy between any Plans and the figures written thereon, the figures shall be taken as correct. Detailed drawings shall prevail over general drawings.

5.11.5 Any reference made in the Specifications or on the Plans to any specification, standard, method, or publication of any scientific or technical society or other organization shall, in the absence of a specific designation to the contrary, be understood to refer to the Specification, standard, method, or publication in effect as of the date that the work is advertised for Bids.

## **5.12 SUBCONTRACTS**

5.12.1 The attention of the Contractor is directed to California Public Contract Code section 4100, et seq., regarding subcontracting and said provisions are by this reference incorporated herein and made a part hereof.

5.12.2 Each subcontract shall contain a suitable provision for the suspension or termination thereof should the work be suspended or terminated or should the subcontractor neglect or fail to conform to every provision of the Contract Documents insofar as such provisions are relevant. No subcontractor or supplier will be recognized as such, and all persons engaged in work will be considered as employees of the Contractor, and the Contractor will be held responsible for their work, which shall be subject to the provisions of the Contract Documents. The Contractor shall be fully responsible to the City for the acts or omissions of its

subcontractors and of the persons either directly or indirectly employed by them. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the City. If a legal action, including arbitration and litigation, against the City is initiated by a subcontractor or supplier, the Contractor shall reimburse the City for the amount of legal, engineering and all other expenses incurred by the City in defending itself in said action.

5.12.3 The City and the Engineer reserve the right to approve all subcontractors. Such approval shall be a consideration to the awarding of the Contract and unless notification to the contrary is given to the Contractor prior to the signing of the Contract, the list of subcontractors that is submitted with its proposal will be deemed to be acceptable.

### **5.13 COOPERATION OF CONTRACTORS**

5.13.1 Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to said limits, the Contractor shall cooperate with all such other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved by the City to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.

5.13.2 When two or more contractors are employed on related or adjacent work, each shall conduct its operation in such a manner as not to cause any unnecessary delay or hindrance to the other. Each contractor shall be responsible to the other for all damage to work, to persons or property caused to the other by its operations, and for loss caused the other due to its unnecessary delays or failure to finish the work within the time specified for completion.

### **5.14 SUPERINTENDENCE**

5.14.1 The Contractor shall designate in writing before starting work an individual as authorized representative who shall have the authority to represent and act for the Contractor. This authorized representative shall be present at the site of the work at all times while work is actually in progress on the Contract. When work is not in progress and during periods when work is suspended, arrangements acceptable to the Engineer shall be made for any emergency work that may be required.

5.14.2 The Contractor is solely responsible, at all times, for the superintendence of the work and for its safety and progress.

5.14.3 Whenever the Contractor or its authorized representative is not present on any particular part of the work where it may be desired to give direction, orders will be given by the Engineer, which shall be received and obeyed by the superintendent or foreman who may have charge of the particular work in reference to which the orders are given.

5.14.4 Any order given by the Engineer, not otherwise required by the Contract Documents to be in writing, will on request of the Contractor, be given or confirmed by the Engineer in writing.

## 5.15 INSPECTION OF WORK

5.15.1 Unless otherwise provided, all equipment, materials, and work shall be subject to inspection and testing by the Engineer. The Engineer will observe the progress and quality of the work and determine, in general, if the work is proceeding in accordance with the intent of the Contract Documents. He shall not be required to make comprehensive or continuous inspections to check the quality of the work, and he shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the work. Visits and observations made by the Engineer shall not relieve the Contractor of its obligation to conduct comprehensive inspections of the work and to furnish proper materials, labor, equipment and tools, and perform acceptable work, and to provide adequate safety precautions, in conformance with the intent of the Contract.

5.15.2 Whenever the Contractor varies the period during which work is carried on each day, it shall give due notice to the Engineer so that proper inspection may be provided. Any work done in the absence of the Engineer shall be subject to rejection. Proper facilities for safe access for inspection to all parts of the work shall at all times be maintained for the necessary use of the Engineer and other agents of the City, and agents of the Federal, State, or local governments at all reasonable hours for inspection by such agencies to ascertain compliance with laws and regulations.

5.15.3 One or more inspectors may be assigned to observe the work and to act in matters of construction under this Contract. It is understood that inspectors shall have the power to issue instructions and make decisions within the limitations of the authority of the Engineer. Such inspection shall not relieve the Contractor of its obligation to conduct comprehensive inspections of the work, to furnish proper materials, labor, equipment and tools, and perform acceptable work, and to provide adequate safety precautions in conformance with the intent of the Contract.

5.15.4 The Engineer and his representatives shall at all times have access to the work wherever it is in preparation or progress; and the Contractor shall provide safe and convenient facilities for such access and for inspection. If the Specifications, the Engineer's instructions, laws, ordinances, or any public authority require any material, equipment or work to be specifically tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection, and if the inspection is by an authority other than the City, of the time fixed for inspection. Inspections by the Engineer will be made promptly and, where practicable, at the source of supply.

5.15.5 Work performed without inspection may be required to be removed and replaced under proper inspection and the entire cost of removal and replacing, including the cost of City-furnished materials used in the work, shall be borne by the Contractor, regardless of whether or not the work exposed is found to be defective. Examination of questioned work, other than that installed without inspection, may be ordered by the Engineer and, if so ordered, the work must be uncovered by Contractor. If such work is found to be in accordance with the Contract Documents, the City will pay the cost of reexamination and replacement. If such work is found to be not in accordance with the Contract Documents, the Contractor shall pay such

cost unless it can show that the defect in the work was caused by another contractor, and in that event the City will pay such costs.

5.15.6 The inspection of the work shall not relieve the Contractor of its obligation to fulfill the Contract as herein prescribed, or in any way alter the standard of performance provided by the Contractor; and defective work shall be made good and unusable materials may be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or any part thereof shall be found defective, Contractor shall, within ten (10) calendar days, make good such defect in a manner satisfactory to the Engineer. If the Contractor shall fail or neglect to make ordered repairs of defective work or to remove the condemned materials from the work within ten (10) calendar days after direction by the Engineer in writing, the City may make the ordered repairs, or remove the condemned materials, and deduct the cost thereof from any monies due the Contractor.

5.15.7 The Contractor shall furnish promptly without additional charge all facilities, labor and materials reasonably needed by the Engineer for performing all inspection and tests. Contractor shall be charged with any additional cost of inspection when material and workmanship are not ready at the time specified by the Contractor for its inspection.

5.15.8 Where any part of the work is being done under an encroachment permit or building permit, or is subject to Federal, State, County or City codes, laws, ordinances, rules or regulations, representatives of the government agency shall have full access to the work and shall be allowed to make any inspection or tests in accordance with such permits, codes, laws, ordinances, rules, or regulations. If advance notice of the readiness of the work for inspection by the governing agency is required, the Contractor shall furnish such notice to the appropriate agency.

5.15.9 The Engineer may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the Engineer is assured of the cooperation and assistance of both the Contractor and the material producer. The Engineer or his authorized representative shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. The City assumes no obligation to inspect materials at the source of supply.

## **5.16 TESTS**

The Contractor shall perform at its expense all tests specified or required by the Specifications. The Engineer will perform such tests as he deems necessary to determine the quality of work or compliance with Contract Documents. The Contractor shall furnish promptly without additional charge all facilities, labor, and material reasonably required for performing safe and convenient tests as may be required by the Engineer. All tests by the Engineer will be performed in such a manner as will not unnecessarily delay the work. The Contractor shall not be required to reimburse the City for tests performed by the City or Engineer. If samples of materials are submitted which fail to pass the specified tests, the Contractor shall pay for all subsequent tests.

## **5.17 REMOVAL OF REJECTED/UNAUTHORIZED WORK AND MATERIALS**

5.17.1 All work or materials which have been rejected shall be remedied, or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed it for such removal, replacement, or remedial work.

5.17.2 Any work done beyond the lines and grades shown on the Plans or established by the Engineer or any extra work done without written authority will be considered as unauthorized work and will not be paid for. Upon order of the Engineer, unauthorized work shall be remedied, removed, or replaced at the Contractor's expense.

5.17.3 Upon failure of the Contractor to comply with any order of the Engineer made under this section, the City may cause rejected or unauthorized work to be remedied, removed, or replaced, and may deduct the costs therefor from any monies due or to become due the Contractor.

## **5.18 DEDUCTIONS FOR UNCORRECTED WORK.**

If the Engineer deems it inexpedient to correct work damaged or not done in accordance with the Contract Documents, an equitable deduction from the Contract price shall be made therefor; and such sum may be withheld by the City from Contractor's payment.

## **5.19 EQUIPMENT AND PLANTS**

5.19.1 Only equipment and plants suitable to produce the quality of work and materials required will be permitted to operate on the project.

5.19.2 Plants will be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity to insure the production of sufficient material to carry the work to completion within the time limit.

5.19.3 The Contractor shall provide adequate and suitable equipment and plants to meet the above requirements, and when ordered by the Engineer, shall remove unsuitable equipment from the work and discontinue the operation of unsatisfactory plants.

5.19.4 The Contractor shall identify each piece of its equipment, other than hand tools, by means of an identifying number plainly stenciled or stamped on the equipment at a conspicuous location, and shall furnish to the Engineer a list giving the description of each piece of equipment and its identifying number. In addition, the make, model number and empty gross weight of each unit of compacting equipment shall be plainly stamped or stenciled in a conspicuous place on the unit. The gross weight shall be either the manufacturer's rated weight or the scale weight.

5.19.5 In the case of termination of this Contract before completion from any cause whatever, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City. If the Contractor fails

to do so, the City shall have the right to remove such equipment and supplies at the expense of the Contractor.

## **5.20 CHARACTER OF WORKER**

If any subcontractor or person employed by the Contractor or any subcontractor shall be incompetent or act in a disorderly or improper manner, that subcontractor or person shall be removed from the work immediately, and such subcontractor or person shall not again be employed on the work. Such discharge shall not be the basis for any claim for compensation or damages against the City, the Engineer or any of their officers, directors, employees or agents.

## **5.21 SEPARATE CONTRACTS**

5.21.1 The City reserves the right to let other contracts in connection with this work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate its work with the other contractor's work.

5.21.2 If any part of the Contractor's work depends for proper execution or results upon the work of any other contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such work that render it unsuitable for such proper execution and results. The Contractor's failure to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of the Contractor's work, except as to defects that may develop in the other contractor's work after the execution of its work. To insure the proper execution of its subsequent work, the Contractor shall measure work already in place and shall at once report to the Engineer any discrepancy between the executed work and the drawings.

## **5.22 MATERIALS**

5.22.1 Unless otherwise specifically stated in the Specifications, the Contractor shall furnish all materials necessary for the execution and completion of the work. Unless otherwise specified, all materials shall be new and shall be manufactured, handled, and installed in a workmanlike manner to insure completion of the work in accordance with the Contract Documents. The Contractor shall, upon request of the Engineer, furnish satisfactory evidence as to the kind and quality of materials.

5.22.2 Where materials are to be furnished by the City, the type, size, quantity and location at which they are available will be stated in the Contract Documents.

5.22.3 Manufacturers' and suppliers' warranties, guarantees, operating manuals, instruction sheets and parts listed, which are furnished with certain articles or materials incorporated in the work, shall be delivered to the Engineer before final acceptance of the Contract work.

## **5.23 STORAGE OF MATERIALS; STORAGE AREAS**

5.23.1 Articles or materials to be incorporated in the work shall be stored in such a manner as to insure the preservation of their quality and fitness for the work, and to facilitate inspection.

5.23.2 The Contractor's work and storage areas are limited by the right-of-way lines as indicated on the Plans. The plant facilities are to be installed in property or easements owned by the City as shown on the Plans. The City shall be specifically exempted in any agreement from any liability incurred from the use of private property for construction purposes. The Contractor shall make arrangements and pay for property off-site as required for storage, offices, work assembly areas, etc. The Contractor shall take all responsibility for storage of materials. No equipment for incorporation in the project may be stored in an area subject to flooding.

## **5.24 TRADE NAMES AND ALTERNATIVES**

For convenience in designation in the Specifications and Plans, certain articles or materials to be incorporated in the work may be designated under a trade name or the name of a manufacturer and its catalog information. The use of an alternative article or material that is of equal quality and of the required characteristics for the purpose intended will be permitted, subject to the following requirements:

5.24.1 The burden of proof as to the quality and suitability of alternatives shall be upon the Contractor and it shall furnish all information necessary as required by the Engineer. The Engineer shall be the sole judge as to the quality and suitability of alternative articles or materials and his decision shall be final.

5.24.2 Whenever the Specifications and Plans permit the substitution of a similar or equivalent material or article, no tests or action relating to the approval of such substitute material or article will be made until the request for substitution is made in writing by the Contractor accompanied by complete data as to the equality of the material or article proposed. Such request by the Contractor must be made within thirty five (35) days after award of Contract.

## **5.25 CERTIFICATES OF COMPLIANCE**

5.25.1 A Certificate of Compliance shall be furnished prior to the use of any materials for which the Specifications require that such a certificate be furnished. In addition, when so authorized in the Specifications, the Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance. The Certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the Contract. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the Certificate.

5.25.2 All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate



of Compliance shall not relieve the Contractor of responsibility for incorporating material in the work which conforms to the requirements of the Contract Documents and any such material not conforming to such requirements will be subject to rejection whether in place or not.

5.25.3 The City reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.

5.25.4 The form of the Certificate of Compliance and its disposition shall be as directed by the Engineer.

## **5.26 ASSIGNMENT**

The Contractor shall not assign the Contract or sublet it as a whole or in part without the written consent of the City, nor shall the Contractor assign any monies due, or to become due to it hereafter, without the prior written consent of the City.

## **5.27 CITY ENTRY ON WORK SITE; RIGHT TO OPERATE UNSATISFACTORY EQUIPMENT OR FACILITIES**

5.27.1 The City may, at any time, and from time to time, during the performance of the work, enter the work site for the purpose of installing any necessary work by City labor or other contracts, and for any other purpose in connection with the installation of facilities. In doing so, the City shall endeavor not to interfere with the Contractor and the Contractor shall not interfere with other work being done by or on behalf of the City.

5.27.2 The City reserves the right, prior to completion and final acceptance, to occupy, or use, any completed part or parts of the work, providing these areas have been approved for occupancy by the City. The exercise of this right shall in no way constitute an acceptance of such parts, or any part of the work, nor shall it in any way affect the dates and times when progress payments shall become due from the City to the Contractor or in any way prejudice the City's rights in the Contract, or any bonds guaranteeing the same. The Contract shall be deemed completed only when all the work contracted has been duly and properly performed and accepted by the City.

Prior to such occupancy or use, the City and Contractor shall agree in writing regarding the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the work, insurance, the period for correction of the work, and the commencement of warranties required by the Contract Documents.

In exercising the right to occupy or use completed parts of the work prior to the completion thereof, the City shall not make any use which will materially increase the cost to the Contractor, without increasing the Contract Amount, nor materially delay the completion of the Contract, without extending the time for completion.

5.27.3 If, following installation of any equipment or facilities furnished by the Contractor, defects requiring correction by the Contractor are found, the City shall have the

right to operate such unsatisfactory equipment or facilities and make reasonable use thereof until the equipment or facilities can be shut down for correction of defects without injury to the City.

## **5.28 LANDS FOR WORK; RIGHTS OF WAY; CONSTRUCTION ROADS; TEMPORARY UTILITY SERVICES**

5.28.1 The City will provide the lands, easements, rights of way, and/or encroachment permits necessary or other rights to enter and work on lands necessary for the performance of the work. Other permits and licenses are addressed by section 5.9. Should the Contractor find it advantageous to use any additional land for any purpose whatever, the Contractor shall provide for the use of such land at its expense. The Engineer shall be furnished with a copy of written agreements or otherwise be notified in writing of additional working space which is acquired. Nothing herein contained and nothing marked on the Plans shall be interpreted as giving the Contractor exclusive occupancy of the territory provided by the City. When two or more contracts are being executed at one time on the same or adjacent land in such a manner that work on one contract may interfere with that on another, the Engineer shall decide which contractor shall cease work, and which shall continue, or whether the work on both contracts shall progress at the same time and in what manner; and the decision of the Engineer shall be final and binding. When the territory of one contract is the necessary or convenient means of access for the performance of another contract, such privilege of access or any other reasonable privilege may be granted by the Engineer to the contractor so desiring, to the extent, amount, in the manner, and at the time permitted. No such decision as to the method or time of conducting the work or the use of territory shall be the basis of any claim for delay or damage.

5.28.2 Lands, easements or rights of way to be furnished by the City for construction operations will be specifically shown on the Plans.

5.28.3 The Contractor shall construct and maintain all roads necessary to reach the various parts of the work and for the transportation thereto of construction material and personnel. The cost of constructing and maintaining such roads shall be borne by the Contractor.

5.28.4 The Contractor shall make its own arrangements for any utility services it may require during the life of this project. The Contractor shall make its own arrangements for telephone service which it will require for its field office.

## **5.29 PROGRESS SCHEDULE**

5.29.1 The Contractor shall submit within 10 days after Date of the Contract a schedule or schedules which shall show the dates at which the Contractor will start and complete the several parts of the work. This schedule shall conform to the completion time specified in the Contract. The Contractor shall review and, if necessary, revise the progress schedule at least once per month, and in any event shall submit a current schedule to the Engineer at his request at any time during the contract period.

5.29.2 The Engineer shall be advised in advance by the Contractor when any part of the work is scheduled and the days when no work will take place. If the Contractor fails to notify the Engineer in advance of the day or days when no work will be done,

the Contractor will be charged the cost of inspection for that day or days and such charges may be deducted from any payment due the Contractor.

5.29.3 When, in the judgment of the Engineer, it is necessary to accelerate any part of the work ahead of schedule, the Contractor shall, when directed, concentrate its efforts on such part of the work.

### **5.30 COMMENCEMENT AND PROGRESS OF THE WORK AND TIME OF COMPLETION; CONSTRUCTION SEQUENCE; DELAYS**

5.30.1 The Contractor shall commence the work covered by this Contract within fifteen (15) days after date of issuance of Notice to Proceed from the City to proceed with the work. Work will be considered to have commenced when the Contractor begins ordering materials and equipment or starts site work. The Contractor shall not commence work or incur any expenses in connection therewith, before it is notified to proceed with the work. Work on the total project shall be completed within [calendar days] calendar days from the date of the Notice to Proceed. The time allowed for completion includes an allowance for working time lost due to normal inclement weather. A Pre-Construction conference will be scheduled by the Engineer prior to the Contractor starting work.

5.30.2 The Contractor shall give the Engineer written notice not less than two (2) working days in advance of the actual date on which the work will be started. The Contractor shall be entirely responsible for any delay in the work that may be caused by this failure to give such notice. The Engineer shall have the right to specify the locations where the Contractor shall start and proceed with the work.

5.30.3 The Contractor shall diligently pursue the work and complete the work as specified within the time limits as set forth in the Contract Documents.

5.30.4 When the Contractor foresees a delay in the prosecution of the work and, in any event, immediately upon the occurrence of a delay, the Contractor shall notify the Engineer in writing of the probability of the occurrence and the estimated extent of the delay, and its cause. The Contractor shall take immediate steps to prevent, if possible, the occurrence or continuance of the delay. The Contractor agrees that no claim shall be made for delays that are not called to the attention of the Engineer at the time of their occurrence.

5.30.5 Non-excusable delays in the prosecution of the work shall include delays which could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its subcontractors, at any tier level, or suppliers.

5.30.6 Excusable delays in the prosecution or completion of the work shall include delays which result from causes beyond the control of the Contractor and City and which could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its subcontractors, at any tier level, or suppliers.

5.30.7 Delays caused by acts of god, fire, unusual storms, floods, tidal waves, earthquakes, strikes, labor disputes, and freight embargoes, shall be considered as excusable delays insofar as they prevent the Contractor from proceeding with at least seventy five

(75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical activity item(s) on the latest favorably reviewed progress schedule.

5.30.8 Should inclement weather conditions or the conditions resulting from weather prevent the Contractor from proceeding with seventy five (75) percent of the normal labor and equipment force engaged in the current critical activity item for a period of at least five (5) hours per day toward completion of such operation or operations, and the crew is dismissed as a result thereof, it shall be a weather delay day.

5.30.9 Upon the submission of satisfactory proof to the Engineer by the Contractor, shortages of material may be acceptable as grounds for granting a time extension. In order that such proof may be satisfactory and acceptable to the Engineer, it must be demonstrated by the Contractor that the Contractor has made every effort to obtain such materials, or obtain acceptable substitute materials, from all known sources within reasonable reach of the proposed work. Only the physical shortage of material, caused by unusual circumstances, will be considered under these provisions as a cause for extension of time, and no consideration will be given to any claim that material could not be obtained at a reasonable, practical, or economical cost or price, unless it is shown to the satisfaction of the Engineer that such material could have been obtained only at exorbitant prices entirely out of line with current rates, taking into account the quantities involved and usual practices in obtaining such quantities. A time extension for shortage of material will not be considered for material ordered or delivered late or whose availability is affected by virtue of the mishandling of procurement. The above provisions apply equally to equipment to be installed in the work.

5.30.10 Compensable delays in the prosecution or completion of the work shall include delays that occur through no fault of the Contractor and prevent the Contractor from proceeding with at least seventy-five (75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical activity item(s) on the latest favorably reviewed progress schedule due to the following cause(s):

- a. Delays due solely to the actions and/or inactions of the City.
- b. Delays due to differing site conditions as addressed in sections 5.3.14 and 5.45.7.5.
- c. Delays due to other Contractors employed by the City who interfere with the Contractor's prosecution of the work as defined above.

No delay shall be compensable unless the claimed event or occurrence delays completion of the work beyond the contractual completion date or the completion date shown in the accepted initial or updated schedules, and the delay affects a critical activity while such activity is on the critical path.

5.30.11 Concurrent delays are those delay periods when the prosecution of the work is delayed during the same period of time due to causes from a combination of the delays defined in sections 5.30.5 (Non-excusable delays) 5.30.6 (Excusable delays) or 5.30.10 (Compensable delays) During such concurrent delay periods, time extensions will be granted in accordance with the sections below in this section 5.30; however, the Contractor shall not be

compensated for its delay damages as defined in section 5.30.14, or for any other damages, and the City shall not assess its actual costs as defined in section 5.30.12 (non-excusable delays).

5.30.12 Non-excusable Delays - The City may in its sole discretion grant an extension of time for non-excusable delays if the City deems it is in its best interest. If the City grants an extension of time for non-excusable delays, the Contractor agrees to pay the City's actual costs, including charges for engineering, inspection and administration incurred during the extension.

5.30.13 Excusable or Compensable Delays - If the Contractor is delayed in the performance of its work as defined in section 5.30.6 (excusable delays), or section 5.30.10 (compensable delays), then the Contract completion date may be extended by the City for such time that, in the City's and Engineer's determination, the Contractor's completion date will be delayed, provided that the Contractor strictly fulfills the following:

- a. The Contractor shall provide notification, in accordance with section 5.30.4 and as otherwise provided by this Contract, and may submit in writing a request for an extension of time to the Engineer stating at a minimum the probable cause of the delay and the number of days being requested. Any Contractor time extension request shall be submitted as a change order request in accordance with the requirements of section 5.3.
- b. If requested by the Engineer, the Contractor shall promptly provide sufficient information to the Engineer to assess the cause or effect of the alleged delay, or to determine if other concurrent delays affected the work.
- c. Weather Delays. The Contractor will be granted a non-compensable time extension for weather caused delays, pursuant to section 5.30.8 (weather delays), over and above any allowance provided for in this Agreement for weather days or weather delays.

Should the Contractor fail to fulfill any of the foregoing, which are conditions precedent to the right to receive a time extension, the Contractor waives the right to receive a time extension.

During such extension of time, neither extra compensation for engineering, inspection and administration nor damages for delay will be charged to the Contractor. It is understood and agreed by the Contractor and City that time extensions due to excusable or compensable delays will be granted only if such delays involve controlling operations which would prevent completion of the whole work within the specified Contract time.

Should the Contractor fail to complete the work within the time specified in the Contract, as extended in accordance with this clause if appropriate, the Contractor shall pay to the City liquidated damages in accordance with section 5.34.

#### 5.30.14 Delay Damages

5.30.14.1 Indirect Overhead - The Contractor shall be reimbursed for indirect overhead expenses for periods of time when the work is delayed as defined in section 5.30.10 (Compensable delays). However, no reimbursement for indirect overhead or any other costs or damages shall be made for compensable delays which occur during a concurrent delay as defined in section 5.30.11 (Concurrent delays). No reimbursement for indirect overhead as covered in this section shall be made for any time extensions granted for Contract change orders as provided in section 5.4. As a condition precedent to any reimbursement, the Contractor must fulfill all conditions as provided in section 5.30.13 (Excusable or Compensable delays). No additional markup for overhead or profit shall be provided for such indirect overhead expenses.

Payment to the Contractor for indirect overhead expenses will be made only if the extended Contract period granted for the compensable delay(s) is required to complete the work following the depletion of the original contract period and any time extensions granted other than compensable time extensions. Except as provided herein, the Contractor shall have no claim for damage or compensation for any delay including not limited to extended field costs, extended home office overhead costs, impact, inefficiency, unabsorbed home office overhead, underabsorbed home office overhead, hindrance, disruption, or any other damage arising from delay, no matter how characterized, including delay claims of its subcontractors/suppliers of every tier.

5.30.14.2 Indirect Field Overhead - For those allowable delay periods as defined in section 5.30.14.1 (Indirect Overhead), the Contractor shall be reimbursed for its indirect field overhead based on:

- a. Invoices for all field office equipment.
- b. Actual salary for field office staff.
- c. Fair rental values acceptable to the Engineer for construction equipment idled due to the delay.

5.30.14.3 Indirect Home Office Overhead - For those allowable delay periods as defined in section 5.30.14.1 (Indirect Overhead), the Contractor shall be reimbursed for its daily home office overhead based on the following formula:

$$\text{Contract Bid Price (\$)} \div \text{Contract Period (Days)} \times (0.04) = \text{Daily Home Office Overhead (\$/Day)}.$$

As it is impractical to determine the actual home office overhead, such reimbursement shall be mutually agreed between the City and Contractor to encompass full payment for any home office overhead expenses for such periods of time for the Contractor and all subcontractors. The Contractor agrees to indemnify, defend and hold the City harmless for any indirect overhead claims from its subcontractors.

## **5.31 SUSPENSION OF WORK**

5.31.1 The Engineer may at any time, by notice in writing to the Contractor, suspend any part of the work for such period of time with or without cause, and the

Contractor shall have no claim for damages or additional compensation on account of any such suspension.

5.31.2 Upon receipt of a written notice to suspend any portion of the work issued by the Engineer, the Contractor shall thereupon discontinue all work suspended except for all operations necessary to prevent loss or damage to work already executed as may be directed by the Engineer. In the event a part of the work is suspended, the Contractor, if the suspension is not through its fault or the fault of its subcontractors or agents, shall be paid in accordance with section 5.3.9 for costs of work performed in accordance with such orders of the Engineer during such suspension, provided that this shall not include any cost pertaining to work not suspended by the notice to suspend work. Work shall be resumed by the Contractor after such suspension on subsequent written notice to resume work from the City. In the event of suspension of the entire work by the City, the Contractor, if the suspension is not through the fault of the Contractor or the fault of its subcontractors or agents, shall be paid the sum of \$50 for each calendar day during which the entire work shall have been suspended. Said sum is hereby mutually agreed upon as fixed and liquidated damages in full settlement of all costs and expenses, losses and damages resulting to the Contractor from such suspension.

5.31.3 In the event of any suspension of the work in whole or in part under subsection 5.31.2, if the suspension is not through the fault of the Contractor or the fault of its subcontractors or agents, the Contractor shall be entitled to an extension of time wherein to complete the work to the extent of the delay caused the Contractor thereby. If no agreement can be reached as to the time for extension, the Contractor shall submit a claim to the City within fifteen (15) days of a notice from the City that no agreement can be reached. The claim shall be processed in accordance with section 5.4.

5.31.4 In the event the entire work shall be suspended by order of the City, and shall remain so suspended for a period of ninety (90) consecutive days, through no fault of the Contractor or its subcontractors or agents, and notice to resume the work shall not have been served on the Contractor, Contractor may, at its option, by written notice to the City, terminate the Contract in the same manner and on the same terms as if the termination had been initiated by the City pursuant to section 5.32, and the City shall have no claim for damages because of such termination of the Contract.

## **5.32 TERMINATION FOR DEFAULT; DAMAGES FOR DELAY; TIMELY EXTENSION**

5.32.1 Subject to prior notice from the City and the Contractor's cure rights set forth in this section, the City will have the right to terminate the Contract for cause and/or the Contractor's right to proceed with the work upon the occurrence of any of the following:

- a. Contractor becomes insolvent or files for relief under the bankruptcy laws of the United States.
- b. Contractor makes a general assignment for the benefit of its creditors or fails to pay its debts as the same become due.
- c. A receiver is appointed to take charge of Contractor's property.

- d. The work is not completed within the applicable Contract time, as such Contract time may be adjusted in accordance with this Contract, and Contractor is not diligently prosecuting the completion or correction of the work.
- e. Contractor persistently or repeatedly refuses or fails to supply skilled supervisory personnel, an adequate number of properly skilled workers, proper materials, or necessary equipment to prosecute the work in accordance with the Contract Documents.
- f. Contractor fails to make prompt payment of amounts properly due subcontractors after receiving payment from City.
- g. Contractor disregards applicable laws, regulations or other governmental requirements.
- h. Contractor persistently or materially fails to execute the work in accordance with the Contract Documents.
- i. Contractor persistently or materially fails to comply with applicable safety requirements.
- j. Contractor abandons the work.
- k. Contractor is in default of any other material obligation under the Contract Documents.

5.32.2 Upon the occurrence of any of the preceding events, City will have the right to terminate the Contract for cause and/or the Contractor's right to proceed with the work if Contractor fails to promptly commence to cure such default and diligently prosecutes such cure within 5 days after notice from City, or within such longer period of time as is reasonably necessary to complete such cure.

5.32.3 The rights and remedies of the City provided in this section are in addition to any of the rights and remedies provided by law or under this Contract.

5.32.4 In addition to the City's rights under this section, if at any time before completion of the work under the Contract, it shall be determined by the City that it is advisable for it, for whatever reason, to terminate the work, it may do so upon ten (10) days written notice to the Contractor. Upon service of such notice of termination, the Contractor shall discontinue the work in such manner, sequence, and at such times as the Engineer may direct. The Contractor shall have no claim for damages for such discontinuance or termination, nor any claim for anticipated profits on the work thus dispensed with or uncompleted, nor any other claim except for the work actually performed up to the time of termination, including any extra work ordered by the Engineer to be done, nor for any claim for liquidated damages in accordance with the provisions of section 5.31.



5.32.5 Upon receipt of notice of termination of the Contract and/or the Contractor's right to proceed with the work under this section 5.32, the Contractor shall, unless the notice directs otherwise, do the following:

- a. Immediately discontinue the work to the extent specified in the notice.
- b. Place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary for completion of such portion of the work as is not discontinued.
- c. Promptly cancel, on the most favorable terms reasonably possible, all orders and subcontracts to the extent they relate to the performance of the discontinued portion of the work.
- d. Thereafter do only such work as may be necessary to preserve and protect work already in progress and to protect materials, plants, and equipment on the project site or in transit thereto.

Upon termination of the Contract, the obligations of the Contract shall continue as to portions of the work already performed and, subject to the Contractor's obligations under this section 5.32, as to bona fide obligations assumed by the Contractor prior to the date of termination.

Upon termination of the Contract or the Contractor's right to proceed with the work, the City shall pay to the Contractor the sum of the following:

- a. The amount of the Contract price allocable to the portion of the work properly performed by the Contractor as of the date of termination, less sums previously paid to the Contractor.
- b. Plus previously unpaid costs of any items delivered to the project site that were fabricated for subsequent incorporation into the work.
- c. Plus any proven losses with respect to materials and equipment directly resulting from such termination.
- d. Plus reasonable demobilization costs.
- e. Plus reasonable costs of preparing a statement of the aforesaid costs, expenses, and losses in connection with such termination.

The above payment shall be the sole and exclusive remedy to which the Contractor is entitled in the event of termination of the Contract by the City and/or the Contractor's right to proceed with the work pursuant to this section 5.32; and the Contractor will be entitled to no other compensation or damages and expressly waives same. The City shall have the right to subtract from the above payment such sums as may be deducted consistent with the terms of the Contract Documents.

### 5.33 RIGHTS OF CITY UPON TERMINATION

5.33.1 In the event the right of the Contractor to proceed with the work, or any portion thereof, has been terminated because of the fault of the Contractor and the Contractor has been given five (5) days' notice to cure such fault and has not done so, the City may take over the work and prosecute the same to completion by contract or any other method the City deems expedient, and may take possession of and utilize in completing the work such materials, appliances, equipment and plant as may be on the site of the work and necessary therefor. Whether or not the Contractor's right to proceed with the work is terminated, it and its sureties shall be liable for all damages, including but not limited to, costs of managerial and administrative services, engineering, legal and other consultant fees, sustained or incurred by the City in enforcing the provisions of section 5.32 and in completing or causing to complete the Contract work.

5.33.2 Upon termination, the Contractor shall not be entitled to receive any further payment until the work is finished. If upon completion of the work the total cost to the City, including, but not limited to, engineering, legal and other consultant fees, costs of managerial and administrative services, construction costs and liquidated damages, shall be less than the amount which would have been paid if the work had been completed by the Contractor in accordance with the terms of the Contract, then the difference shall be paid to the Contractor in the same manner as the final payment under the Contract. If the total cost incurred by the City on account of termination of the Contractor and subsequent completion of the work by the City by whatever method the City may deem expedient shall exceed said amount which the Contractor would otherwise have been paid, the Contractor and its sureties shall be liable to the City for the full amount of such excess expense.

5.33.3 The rights and remedies of the City provided in this section are in addition to any of the rights and remedies provided by law or under this Contract.

### 5.34 FAILURE TO COMPLETE THE WORK IN THE TIME AGREED UPON; LIQUIDATED DAMAGES

5.34.1 It is agreed by the parties to the Contract that time is of the essence; and that in case all the work is not completed before or upon the expiration of the time limit as set in the Bid, Contract and/or Progress Schedule as designated by the City (Generally the date of final completion), or as revised by any time extensions that may have been granted, damage will be sustained by the City; and that it may be impracticable to determine the actual amount of damage by reason of such delay; and it is, therefore, agreed that the Contractor shall pay to the City as damages the amount of **\$500 per working day** for each and every day's delay in finishing the work in excess of the number of days specified. The parties expressly agree that this liquidated damage clause is reasonable under the circumstances existing at the time the Contract was made. The City shall have the right to deduct the amount of liquidated damages from any money due or to become due the Contractor.

5.34.2 Notwithstanding the above, the parties expressly agree that the liquidated damages specified above do not include the City's legal, engineering, inspection, superintendence and other similar expenses. Accordingly, the City shall have the right to charge

to the Contractor and to deduct from the final or progress payments for the work the actual cost to the City of legal, engineering, inspection, superintendence, loss of revenue due to water delivery interruptions, and other expenses, which are directly chargeable to the Contract and which accrue during the period of such delay, except that the cost of final inspection and preparation of the final estimate shall not be included in the charges.

5.34.3 Notwithstanding the provisions of section 5.34.1, the Contractor shall not be liable for liquidated damages or delays caused by the removal or relocation of utilities when such removal or relocation is the responsibility of the City or the owner of the utility under California Government Code section 4215.

### **5.35 CLEAN UP**

5.35.1 During the progress of the work, the Contractor shall maintain the site and related structures and equipment in a clean, orderly condition and free from unsightly accumulation of rubbish. Upon completion of work and before the final estimate is submitted, the Contractor shall at its own cost and expense remove from the vicinity of the work all plants, buildings, rubbish, unused work materials, concrete forms, and temporary bridging and other like materials, belonging to it or used under its direction during the construction; and in the event of its failure to do so, the same may be removed by the City after ten (10) calendar days' notice to the Contractor, such removal to be at the expense of the Contractor. Where the construction has crossed yards or driveways, they shall be restored by the Contractor to the complete satisfaction of the Engineer, at the Contractor's expense.

5.35.2 The Contractor shall dispose of all testing or disinfection water without damage to property, and all in accordance with applicable regulations. All chlorinated water shall be dechlorinated prior to discharge.

### **5.36 COMPLIANCE WITH LAWS; PERMITS; TAXES**

Contractor is an independent contractor and shall at its sole cost and expense do the following: comply with all laws, rules, ordinances and regulations of all federal, state and local agencies having jurisdiction over the work; procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the lawful prosecution of the work; pay all federal, state and local taxes, including manufacturers' taxes, sales taxes, use taxes, processing taxes, and payroll, wage, insurance, social security, and unemployment taxes on wages, salaries or any remuneration paid to Contractor's employees, whether levied under existing or subsequently enacted laws, rules or regulations; and pay all property tax assessments on materials or equipment used until acceptance by the City. If any discrepancy or inconsistency is discovered in the Plans or Specifications, or in this Contract in relation to any such law, rule, ordinance, regulation, order or decree, the Contractor shall forthwith report the same to the Engineer in writing. The Contractor shall also protect, defend, hold harmless and indemnify the City, the Engineer, and all of the City's officers, directors, agents, and employees against any claim or liability arising from or based upon the violation of any such law, rule, ordinance, regulation, order or decree, whether by the Contractor itself or by its employees. Particular attention is called to the following:

5.36.1 Contractor is responsible for the safety of its workers and Contractor shall comply with, and require its workers to comply with, all applicable federal and state worker and job site safety-related laws and regulations, including, but not limited to, applicable federal Department of Labor, Occupational Safety and Health Administration (“OSHA”) regulations and California Department of Industrial Relations (including the Division of Occupational Safety and Health and Occupational Safety and Health Standards Board (“Cal/OSHA”)) regulations and safety orders.

5.36.2 The Contractor, upon request, shall furnish evidence satisfactory to the City and Engineer that any or all of the foregoing obligations have been or are being fulfilled. The Contractor warrants to the City that it is licensed by all applicable federal, state and local governmental bodies to perform this Contract and will remain so licensed throughout the progress of the work, and that it has, and will have, throughout the progress of the work, the necessary experience, skill and financial resources to enable it to perform this Contract.

**5.37 PREVAILING WAGE PENALTIES; WAGE CLAIMS PROHIBITED**

5.37.1 The Contractor shall forfeit as penalty to the City not more than the sum of two hundred dollars (\$200) and not less than forty dollars (\$40) for each calendar day or portion thereof for each worker (whether employed by the Contractor or subcontractor) paid less than the stipulated prevailing rates for any work done under the Contract in violation of the provisions of the California Labor Code and in particular, sections 1772 to 1780. The amount of this penalty shall be determined by the Labor Commissioner and shall be based on consideration of the contractor's mistake, inadvertence, or neglect in failing to pay the correct rate of prevailing wages, the previous record of the contractor in meeting its prevailing wage obligations, and a contractor's willful failure to pay the correct rates of prevailing wages. A mistake, inadvertence, or neglect in failing to pay the correct rate of prevailing wages is not excusable if the contractor had knowledge of its obligations under Labor Code sections 1720, et seq. In addition to the aforementioned penalty, each worker shall be paid the difference between the prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which said worker was paid less than the prevailing wage.

5.37.2 The City will not recognize any claims for additional compensation because of the payment of the wages set forth in the Contract Documents. The possibility of wage increases is one of the elements to be considered by the Contractor in determining its Bid, and will not under any circumstances be considered as the basis of a claim against the City or the Engineer.

**5.38 LABOR DISCRIMINATION**

Attention is directed to California Labor Code section 1735 which is applicable to the work under this Contract and which reads as follows: “A contractor shall not discriminate in the employment of persons upon 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 otherwise provided in section 12940 of the Government Code. Every

contractor for public works who violates this section is subject to all the penalties imposed for a violation of this chapter.”

### **5.39 EIGHT HOUR DAY LIMITATION; CERTIFIED PAYROLL REPORTS**

5.39.1 In accordance with the provisions of the California Labor Code, and in particular, sections 1810 to 1815, eight hours labor shall constitute a day's work, and no worker, in the employ of the Contractor, or any subcontractor, doing or contracting to do any part of the work contemplated by this Contract, shall be required or permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of those provisions; provided that subject to Labor Code section 1815, a worker may perform work in excess of either eight (8) hours per day or forty (40) hours during any one week upon compensation for all hours worked in excess of eight (8) hours per day or forty (40) hours during any one week at not less than one and one half times the basic rate of pay. Except as just provided, the Contractor shall forfeit as a penalty to the City the sum of twenty-five dollars (\$25) for each worker employed in the performance of this Contract by it or by any subcontractor under it for each calendar day during which such worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of sections 1810 through 1815.

5.39.2 The Contractor shall comply in all respects with the provisions of Labor Code section 1776, whose provisions are incorporated herein by this reference. In accordance with section 1776, the Contractor and each subcontractor shall keep an accurate record showing the names, addresses, social security numbers, work classifications, and 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 it in connection with the work specified therein, which record shall be open at all reasonable hours at the principal office of the Contractor to the inspection of the City, State and Federal officers and agents. Certified copies of the payroll records shall be furnished or made available for inspection to others as provided in section 1776. These payroll records shall be certified and shall be on forms provided by the State Division of Labor Standards Enforcement, or shall contain the same information as the forms provided by the Division. The Contractor shall file a certified copy of the payroll records with the entity that requested the records within 10 days after receipt of a written request. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the City, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in a manner so as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor shall not be marked or obliterated. The Contractor shall inform the City of the location of the payroll records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address. The Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this section. In the event that the Contractor fails to comply with the 10-day period, he or she shall, as a penalty to the City, 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.

#### **5.40 EMPLOYMENT OF APPRENTICES**

The Contractor's attention is directed to California Labor Code sections 1777.5, 1777.6 and 1777.7 pertaining to employment of indentured apprentices, which are hereby incorporated by reference into this Contract. As applicable, the Contractor or any subcontractor employed by it in the performance of the Contract work shall take such actions as necessary to comply with the provisions of sections 1777.5, 1777.6 and 1777.7.

#### **5.41 WATER POLLUTION**

5.41.1 The Contractor shall exercise every reasonable precaution to protect streams, lakes, reservoirs, and canals from pollution with fuels, oils, bitumens, calcium chloride, and other harmful materials and shall conduct and schedule its operations so as to avoid or minimize muddying and silting of said streams, lakes, reservoirs, and canals. Care shall be exercised to preserve vegetation beyond the limits of construction. The Contractor shall comply with California Fish and Game Code section 5650 and all other applicable statutes and regulations relating to the prevention and abatement of water pollution.

#### **5.42 PATENTS**

The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated into the work, and agrees to indemnify, defend, protect and save harmless the City, the Engineer, and all of their officers, directors, employees, and other representatives, from all suits at law, or actions of every nature for, or on account of, the use of any patented materials, equipment, devices, or processes.

#### **5.43 PUBLIC CONVENIENCE**

5.43.1 This section defines the Contractor's responsibility with regard to convenience of the public and public traffic in connection with its operations.

5.43.2 The Contractor shall conduct its operations as to offer the least possible obstruction and inconvenience to the public; and it shall have under construction no greater length or amount of work than it can prosecute properly with due regard to the rights of the public.

5.43.3 Unless otherwise provided in the Contract Documents, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible.

5.43.4 Spillage resulting from hauling operations along or across any publicly traveled way shall be removed immediately by the Contractor at its expense.

5.43.5 Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners.

5.43.6 Convenient access to driveways, houses and buildings along the line of the work shall be maintained and temporary approaches to crossings or intersecting

highways shall be provided and kept in good condition. When the abutting property owner's access across the right of way line is to be eliminated, or to be replaced under the Contract by other access facilities, the existing access shall not be closed until the replacement access facilities are usable.

5.43.7 Water shall be supplied at Contractor's expense if ordered by the Engineer for the alleviation or prevention of dust nuisance as provided in the Contract Documents.

5.43.8 In order to expedite the passage of public traffic through or around the work, the Contractor shall install signs, lights, flares, barricades, and other facilities for the sole convenience and direction of public traffic. Also, the Contractor shall provide and station competent flagpersons whose sole duties shall consist of directing the movement of public traffic through or around the work. The cost of furnishing and installing such signs, lights, flares, barricades, and other facilities, and the cost of providing and stationing such flagpersons, all for the convenience and direction of public traffic, will be considered as included in the Contract price and no additional compensation will be allowed.

5.43.9 Flagpersons and guards, while assigned to traffic control, shall perform their duties and shall be provided with the necessary equipment in accordance with the current "Instructions to Flagmen" of the California Department of Transportation. The equipment shall be furnished and kept clean and in good repair by the Contractor at its expense.

#### **5.44 UNDERGROUND UTILITIES**

Prior to conducting any excavation, the Contractor shall contact the appropriate regional notification center as required by and shall otherwise comply with California Government Code section 4216, et seq. In accordance with Government Code section 4215, the Contractor shall be compensated for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, and removing or relocating existing main or trunkline utility facilities not indicated in the Contract Plans and Specifications with reasonable accuracy, and for the equipment on the project necessarily idled during such work; provided that the Contractor shall first notify the Engineer before commencing work on locating, repairing damage to, removing or relocating such utilities.

#### **5.45 SAFETY AND TRENCHING**

5.45.1 The Contractor shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety procedures and practices shall conform to all applicable Federal, State, and local laws, ordinances, and codes, and to the rules and regulations established by OSHA and Cal/OSHA, and to other rules of law applicable to the work. Any City obligations relating to safety of the work are separate from and do not alter the Contractor's primary responsibility for safety as provided in this Contract.

5.45.2 The Contractor shall have an Injury/Illness Prevention Program (IIPP) in place to protect the safety of its employees and ensure that its subcontractors also have an IIPP or comply with Contractor's program. The Contractor's IIPP shall comply with and be at

least as effective as the requirements of section 3203 of Title 8 of the California Code of Regulations. Upon request, the Contractor will submit a copy of its IIPP to the City.

5.45.3 The services of the Engineer in conducting construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's work methods, equipment, bracing or scaffolding or safety measures, in, on, or near the construction site, and shall not be construed as supervision of the actual construction nor make the Engineer or the City responsible for providing a safe place for the performance of work by the Contractor, subcontractors, or suppliers; or for access, visits, use work, travel or occupancy by any person.

5.45.4 All work and materials shall be in strict accordance with all applicable State, Federal and local laws, rules, regulations, and codes. The Contractor shall carefully instruct all personnel working in potentially hazardous work areas as to potential dangers and shall provide such necessary safety equipment and instruction as is necessary to prevent injury to personnel and damage to property. Special care shall be exercised relative to electrical work, work involving excavation and in pump sump work.

5.45.5 Nothing in this Contract is to be construed to permit work not conforming to governing law. When Contract Documents differ from governing law, the Contractor shall furnish and install the higher standards called for without extra charge. All equipment furnished shall be grounded and provided with guards and protection as required by applicable federal and state safety regulations and orders.

5.45.6 Shoring and Trench Safety Plan Attention is directed to California Civil Code section 832 relating to lateral and subjacent support, and the Contractor shall comply with this law.

5.45.7 In accordance with California Labor Code section 6705, if the total amount of the contract is in excess of \$25,000 and if the work involves the excavation of any trench or trenches five feet or more in depth, the Contractor shall submit to the City for acceptance, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any such trench or trenches.

5.45.7.1 In accordance with California Labor Code section 6705, if the total amount of the contract is in excess of \$25,000 and if the work involves then excavation of any trench or trenches five feet or more in depth, the Contractor shall submit to the City for acceptance, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any such trench or trenches.

5.45.7.2 The City or the Engineer or their consultants may have made investigations of subsurface conditions in areas where the work is to be performed. If so, these investigations are identified in the Contract Documents and the records of such investigations are available for inspection at the office of the Engineer. The detailed plan showing the design of shoring, etc., which the Contractor is required to submit to the City for acceptance of excavation



will be not accepted by the City if the plan is based on subsurface conditions which are more favorable than those revealed by the investigations made by the City or the Engineer or their consultants; nor will the plan be accepted if it is based on soils-related criteria which is less restrictive than the criteria set forth in the report on the aforesaid investigations of subsurface conditions.

5.45.7.3 The detailed plan showing the design of shoring, etc., shall include surcharge loads for nearby embankments and structures, for spoil banks, and for construction equipment and other construction loadings. The plan shall indicate for all trench conditions the minimum horizontal distances from the side of the trench at its top to the near side of the surcharge loads.

5.45.7.4 Nothing contained in this section shall be construed as relieving the Contractor of the full responsibility for providing shoring, bracing, sloping, or other provisions which are adequate for worker protection. Review of the plan by the City and/or Engineer is only for general conformance to OSHA and Cal/OSHA requirements. Their failure to note exception(s) to the submittal does not relieve Contractor of any responsibility or liability for the plan. Contractor remains solely and completely responsible for all trench safety and for the means, methods, procedures, and materials therefor.

5.45.7.5 In accordance with California Public Contract Code section 7104, in the event that the work involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the City in writing, of any:

- a. Material that the Contractor believes may be material that is hazardous waste, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law;
- b. Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids; or,
- c. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The City shall promptly investigate the conditions reported by the Contractor, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the Contract. In the event that a dispute arises between the City and the Contractor about whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by

Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

#### **5.46 PROTECTION OF PERSON AND PROPERTY**

5.46.1 The Contractor shall take whatever precautions are necessary to prevent damage to all existing improvements, including above ground and underground utilities, trees, shrubbery that is not specifically shown to be removed, fences, signs, mailboxes, survey markers and monuments, buildings, structures, the City's property, adjacent property, and any other improvements or facilities within or adjacent to the work. If such improvements or property are injured or damaged by reason of the Contractor's operations, they shall be replaced or restored, at the Contractor's expense, to a condition at least as good as the condition they were in prior to the start of the Contractor's operations.

5.46.2 The Contractor shall adopt all practical means to minimize interference to traffic and public inconvenience, discomfort or damage. The Contractor shall protect against injury to any pipes, conduits or other structures crossing the trenching or encountered in the work and shall be responsible for any injury done to such pipes or structures, or damage to property resulting therefrom. The Contractor shall support or replace any such structures without delay and without any additional compensation to the entire satisfaction of the Engineer. All obstructions to traffic shall be guarded by barriers illuminated at night. The Contractor shall be responsible for all damage to persons and property directly or indirectly caused by its operations and, under all circumstances, it must comply with the laws and regulations of the County and the State of California relative to safety of persons and property and the interruption of traffic and the convenience of the public within the respective jurisdictions.

5.46.3 The Contractor is cautioned that it must replace all improvements in rights of way and within the public streets to a condition equal to what existed prior to its entry onto the job.

5.46.4 Type and time of construction required at any road subject to interference by Contract work will be determined by those authorities responsible for maintenance of said road. It shall be the responsibility of the Contractor to determine the nature and extent of all such requirements, including provision of temporary detours as required; however, any construction right of way obtained by the City at affected roadways will be adequate for provision of all required detours. As required at any road crossing, the Contractor shall provide all necessary flagpersons, guardrails, barricades, signals, warning signs and lighting to provide for the safety of existing roads and detours. Immediately after the need for temporary detours ceases, or when directed, the Contractor shall remove such detours and perform all necessary cleanup work, including replacement of fences, and removal of pavement. Included shall be all necessary replacement of existing roadway appurtenances, grading work, soil stabilization and dust control measures, as required and directed. The cost of all work specified under this section shall be borne by the Contractor.

5.46.5 The Contractor shall examine all bridges, culverts, and other structures over which it will move its materials and equipment, and before using them, it shall properly strengthen such structures as necessary for their safe operation and use. The Contractor

shall be responsible for any and all injury or damage to such structures caused by reason of its operations.

#### **5.47 HAZARDOUS MATERIALS; HAZARD COMMUNICATION**

5.47.1 Proposition 65 and the California Health and Safety Code requires businesses to provide warnings prior to exposing individuals to materials listed by the Governor as chemicals “known to cause cancer or reproductive toxicity.” The City may use chemicals on the Governor’s list at many of its facilities. In addition, many of these chemicals are present at non-City-owned facilities and locations. Accordingly, in performing the work or services contemplated under this Contract, Contractor, its employees, agents, and subcontractors may be exposed to chemicals on the Governor’s list. Except as provided in section 5.47.2, Contractor is responsible for notifying its employees, agents, and subcontractors that work performed hereunder may result in exposures to chemicals on the Governor’s list.

5.47.2 Before starting work, the Contractor shall have a written Hazard Communication Program (“HCP”) in place that complies with the requirements of section 5194 of Title 8 of the California Code of Regulations, including the requirements of 8 C.C.R. section 5194(e). The information in the Contractor’s HCP must include the methods by which the Contractor will communicate to the City which hazardous substances it will use and store on the job site(s) to which the City’s and Contractor’s employees and subcontractors may be exposed. The Contractor will submit its HCP to the City at the same time as submittal of its initial project schedules as provided in section 5.29 of these General Conditions. The Contractor also will provide copies of safety data sheets (“SDS”) for all hazardous substances brought onto and used or stored on the job site(s). The Contractor also will ensure that all hazardous substances are marked with Proposition 65 and any other visible warning labels as required by law. Whenever possible, the Contract shall provide SDS for all hazardous substances to the City prior to bringing a hazardous substance onto a job site, but will provide all SDS by no later than the time the hazardous substance is physically brought onto the site. The City will communicate the Contractor’s HCP and SDS information to the City’s employees who work on or will enter the job site(s). The City will provide the Contractor with a copy of the City’s HCP and SDS information specific to City operations on the job site(s). The Contractor shall, in turn, convey this information to its employees and subcontractors. During the course of the work, the Contractor will keep copies of both its and the City’s HCP, SDS and other relevant information at Contractor’s office on the job site(s).

5.47.3 If the Work includes the construction, alteration, improvement, or maintenance of electric power generation, control, transformation, transmission or distribution lines or equipment within the meaning of Code of Federal Regulations title 29, section 1910.269 or 1926.950, then the Contractor will implement and comply with the requirements of the “contract employer” as described and set forth in sections 1910.269 and 1926.950, including, but not limited to, the obligations to properly train the Contractor workers on safety-related work practices and procedures, exchange information with the City concerning unique hazardous conditions presented by the Work, instruct the Contractor workers about the hazardous conditions relevant to the Work, and coordinate with the City on safety-related work rules and procedures. The Contractor also shall be responsible for transmitting safety-related information under sections 1910.269 and 1926.950 with any subcontractors retained by it to perform electrical-related Work under the Contract.

#### **5.48 RESPONSIBILITY FOR REPAIR OF FACILITIES**

All public or private facilities, including but not limited to canals, structures, telephone cables, roadways, curbs, gutters, parking lots, private drives, levees and embankments for creeks, ponds and reservoirs disturbed during construction of the work shall be repaired and/or replaced by the Contractor to match facilities existing prior to construction. In addition, the Contractor shall be responsible for any settlement damage to such facilities or adjoining areas for a period of one year after acceptance of such required facilities.

#### **5.49 CITY'S REPAIR**

In the event the Contractor refuses or neglects to make good any loss or damage for which it is responsible under this Contract, the City may itself, or by the employment of others, make good any such loss or damage, and the cost and expense of doing so, including any reasonable engineering, legal and other consultant fees, and any costs of administrative and managerial services, shall be charged to the Contractor. Such costs and expenses may be deducted by the City from claims for payment made by the Contractor for work completed or remaining to be completed.

#### **5.50 CONTRACTOR'S LICENSE NOTICE**

STATEMENT REQUIRED BY CALIFORNIA BUSINESS & PROFESSIONS CODE SECTION 7030: "CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS STATE LICENSE BOARD WHICH HAS JURISDICTION TO INVESTIGATE COMPLAINTS AGAINST CONTRACTORS IF A COMPLAINT REGARDING A PATENT ACT OR OMISSION IS FILED WITHIN FOUR YEARS OF THE DATE OF THE ALLEGED VIOLATION. A COMPLAINT REGARDING A LATENT ACT OR OMISSION PERTAINING TO STRUCTURAL DEFECTS MUST BE FILED WITHIN 10 YEARS OF THE DATE OF THE ALLEGED VIOLATION. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS STATE LICENSE BOARD, P.O. BOX 26000, SACRAMENTO, CALIFORNIA 95826."

#### **5.51 PUBLIC WORKS CONTRACTOR REGISTRATION**

In accordance with California Labor Code Section 1771.1(a), a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this Division 2, Part 7, Chapter 1 of the Labor Code (commencing with Section 1720), unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code. In accordance with Labor Code section 1771.4(a)(1), this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

#### **5.52 INSURANCE**

5.52.1 The Contractor shall procure and maintain for the duration of the Contract the following insurance against claims for injuries to persons or damages to property

which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representatives, employees or subcontractors.

5.52.2 Coverage shall be at least as broad as:

- a. Commercial general liability coverage (Insurance Services Office occurrence form CG 0001), including liability coverage for premises and operations, explosion and collapse hazard, underground hazard, products/completed operations hazard, contractual liability, use of independent contractors, and broad form property damage with completed operations.
- b. Automobile liability coverage (Insurance Services Office form CA 0001, code 1, any auto).
- c. Workers' compensation insurance in the statutory limits required by the State of California and employer's liability insurance.
- d. Course of construction (also known as builder's risk) insurance form providing coverage for all risks of physical loss, damage or destruction to the work, to insure against such losses until final acceptance of the work by the City.

5.52.3 The Contractor shall maintain coverage limits of not less than:

- a. General Liability: \$5,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage. If commercial general liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- b. Automobile Liability: \$2,000,000 per accident for bodily injury, including death, and property damage.
- c. Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
- d. Course of construction: Completed value of the project.

The above minimum insurance coverage limits can be met through provision of umbrella or excess policy insurance coverage consistent with the provisions of this section 5.52.

5.52.4 Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or the Contractor shall procure a bond or other security guaranteeing payment of losses and related investigations, claim administration and defense fees, costs and expenses. All policies that include a self-insured retention shall include a provision that payments of defense costs and damages (for bodily injury, property damage, personal injury or any other coverages included in the policy) by any party, including additional insureds and insurers, shall satisfy the self-insured retention limits.

5.52.5 The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

5.52.5.1 The City, its officers, officials, employees, agents and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Contractor, products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees, agents or volunteers. The additional insured coverage or endorsement shall comply with California Insurance Code section 11580.04.

5.52.5.2 For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, agents or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

5.52.5.3 Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City, its officers, officials, employees, agents or volunteers.

5.52.5.4 The 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.

5.52.5.5 Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after 30 days' prior written notice by U.S. mail has been given to the City, or after 10 days' written notice in the case of cancellation for non-payment of premium.

5.52.6 Course of Construction Coverage Requirements. Course of construction policies shall contain, or be endorsed to contain, the following provisions: (a) City shall be named as loss payee; and (b) The insurer shall waive all rights of subrogation against the City.

5.52.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-:VII or equivalent and that are admitted to do business and in good standing in California, unless otherwise approved by City. In the case of Workers' Compensation and Employer's Liability insurance, coverage provided by the California State Compensation Insurance Fund is acceptable.

5.52.8 Verification of Coverage. Before commencing work, Contractor shall provide to City the following proof of insurance: (a) certificate(s) of insurance on ACORD Form 25-S (or insurer's equivalent) evidencing the required insurance coverages; and (b) endorsement(s) on ISO Form CG 20 10 (or insurer's equivalent), signed by a person authorized to bind coverage on behalf of the insurer(s) and certifying the additional insured coverages, or equivalent additional insured blanket endorsement. The City reserves the right to require complete

copies of all required insurance policies and/or endorsements affecting required insurance coverage at any time.

5.52.9 Subcontractors. The Contractor shall include all actions and activities of its subcontractors as insureds under its policies, or shall require each subcontractor to provide insurance coverage consistent with the foregoing and to furnish separate endorsements or certificates to the City. All coverages for subcontractors shall be subject to all of the requirements stated in this section.

5.52.10 Obligation to Maintain Coverage. Contractor shall maintain all required insurance coverages for the period provided in this section 5.52. If any of the required coverages expire during the coverage period, Contractor shall obtain renewal or replacement coverages and deliver certificates for the renewed or replacement coverages and any required endorsements to the City at least 10 days before the expiration date of the existing coverage.

5.52.11 Survival of Guarantee. Any products/completed operations insurance coverage shall be maintained after completion of the project for the full guarantee period.

5.52.12 The requirements as to the types, limits, and the City's approval of insurance coverage to be maintained by the Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Contractor under the Contract.

5.52.13 In addition to any other remedy the City may have, if the Contractor or any of the subcontractors fails to maintain the insurance coverage as required in this section 5.52, the City may obtain such insurance coverage as is not being maintained, in form and amount substantially the same as required herein, and the City may deduct the cost of such insurance from any amounts due or which may become due the Contractor under this Contract.

### **5.53 INDEMNITY AND DEFENSE OBLIGATION**

5.53.1 To the fullest extent permitted by law, Contractor shall protect, defend, indemnify and hold harmless the City and Engineer, and their respective officers, directors, agents, employees, volunteers, representatives, boards, and consultants from and against all penalties and fines imposed by law and all loss, claim, cause of action, demand, suit, judgment, cost, damage, expense, and liability (including but not limited to court or arbitration costs and reasonable attorneys' and expert witness fees) resulting from injury to or death of persons, including without limitation employees of the City, Engineer and Contractor, or damage to or loss of property, caused by, arising out of or in any way connected with the Contractor's or its subcontractors' or suppliers' performance, operations or activities under this Contract, except to the extent the sole negligence, active negligence or willful misconduct of an indemnified party proximately causes the loss, claim, demand, cost, suit, judgment, penalty, fine, cause of action, damage, expense, or liability.

5.53.2 Contractor's duty to defend is a separate and distinct obligation from Contractor's duty to indemnify. Upon the request of an indemnified party hereunder, Contractor shall defend any suit asserting a claim covered by this indemnity and shall pay any costs and expenses that may be incurred by an indemnified party in enforcing this indemnity. The

Contractor shall be obligated to defend, in all legal, equitable, administrative, or special proceedings, the City and/or Engineer, and their respective officers, directors, agents, employees, volunteers, representatives, boards, and consultants, immediately upon tender to Contractor of the claim in any form or at any stage of an action or proceeding, whether or not liability has been established. The obligation to defend extends through final judgment, including exhaustion of any appeals. In all cases, the indemnified party shall have the right to approve counsel selected by Contractor in the defense of any legal action or with respect to any claim, which approval shall not be unreasonably withheld. In addition, the indemnified party shall have the right to participate in and be represented by counsel of its own choice and at its own expense in any legal action or with respect to any claim. The defense obligation includes an obligation to provide independent defense counsel if the Contractor asserts that liability is caused in whole or in part by the negligence or willful misconduct of an indemnified party.

5.53.3 The City may withhold from payment due Contractor hereunder such amounts as, in the City's opinion, are sufficient to provide security against all loss, damage, expense, penalty, fine, cost, claim, demand, suit, cause of action, judgment, or liability covered by the foregoing indemnity provision.

5.53.4 In any and all claims against the City or the Engineer and his consultants, and each of their officers, directors, employees and agents by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under this section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable under Workers' Compensation statutes, disability benefit statutes or other employee benefit statutes.

5.53.5 Neither termination of this Contract, completion of the acts to be performed under this Contract, nor the Engineer's approval or the City's acceptance of the work shall release Contractor from its obligations to indemnify and defend the City, and the Engineer, and their respective officers, directors, agents, employees, volunteers, representatives, boards, and consultants, as provided in sections 5.53.1 and 5.53.2, so long as the event upon which the claim is predicated shall have occurred prior to the effective date of any such termination or completion and arose out of or was in any way connected with performance of operations under this Contract by Contractor, its employees, agents, suppliers or subcontractors, or the employee, agent or subcontractor of any one of them,.

5.53.6 Submission of insurance certificates or submission of other proof of compliance with the insurance requirements in this Contract does not relieve Contractor from liability under this indemnification and hold harmless clause. The obligations of this indemnity section shall apply whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.

5.53.7 In accordance with California Public Contract Code section 9201(b), if City receives any written third-party claim relating to work performed under this Contract, then City agrees to promptly notify Contractor about the third-party claim.



## **5.54 PROTECTION OF WORK**

5.54.1 The Contractor shall be responsible for the care of all work until its completion and final acceptance; and it shall, at its own expense, replace damaged or lost material and repair damaged parts of the work or the same may be done at its expense by the City and the Contractor and its sureties shall be liable therefor. The Contractor shall make its own provisions for properly storing and protecting all material and equipment against theft, injury, or damage from any and all causes. Damaged material and equipment shall not be used in the work. The Contractor shall take all risks from floods and casualties except as provided by law, and shall make no charge for the restoration of such portions of the work as may be destroyed or damaged by flood or other casualties or because of danger from flood or other casualties or for delays from such causes. The Contractor may, however, be allowed a reasonable extension of time on account of such delays, subject to the conditions hereinbefore specified.

5.54.2 The Contractor shall effectively secure and protect adjacent property and structures, livestock, crops and other vegetation. If applicable, the Contractor shall open fences on or crossing the right of way and install temporary gates of sound construction thereon so as to prevent the escape of livestock. Adjacent fence posts shall be adequately braced to prevent the sagging or slackening of the wire. Before such fences are opened, the Contractor shall notify the owner or tenant of the property and, where practicable, the opening of the fence shall be in accordance with the wishes of said owner or tenant. The Contractor shall be responsible that no loss or inconvenience shall accrue to the owner or tenant by virtue of its fences having been opened or the gate not having been either shut or attended at all times. Where special types of fences are encountered, the Contractor shall install temporary gates made of similar materials and of suitable quality to serve the purposes of the original fences. In all cases when the Contractor removes fences to obtain work room, it shall provide and install temporary fencing as required, and on completion of construction shall restore the original fence to the satisfaction of the Engineer. All costs of providing, maintaining and restoring gates and fencing shall be borne by the Contractor. The Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for protection required by public authority or local conditions.

5.54.3 The Contractor shall use extreme care during construction to prevent damage from dust to crops and adjacent property. The Contractor, at its own expense, shall provide adequate dust control for the right of way and take other preventative measures as directed by the Engineer.

5.54.4 The Contractor shall be responsible for all damage to any property resulting from trespass by the Contractor or its employees in the course of their employment, or subcontractors or their employees in the course of their employment, or anyone directly or indirectly employed by any of them, where such trespass was committed with or without the consent or knowledge of the Contractor.

5.54.5 The Contractor shall see that the worksite is kept drained and free of all ground water and any other water which may impede the progress or execution of the Contract work.

5.54.6 The Contractor shall be responsible for any damage caused by drainage or water runoff from construction areas and from construction plant areas.

5.54.7 In an emergency affecting the safety of life, or of the work, or of adjoining property, the Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act at its discretion to prevent such threatened loss or injury, and it shall so act without appeal if so instructed or authorized. Should the Engineer deem an emergency condition to exist, the Contractor shall immediately do those things and take those steps ordered by the Engineer. The decision of the Engineer in this respect shall be final and conclusive. Any claims for compensation made by the Contractor on account of emergency work shall be determined as specified under section 5.3.

5.54.8 Except as provided by California Government Code section 4215, the Contractor shall be responsible for the removal, relocation and protection of all public and private utilities, including irrigation facilities in the nature of utilities, located on the site of the construction project if and to the extent that the same are identified in the Contract Documents; and the Contractor shall not be entitled to any extension of time or claim for damages for extra compensation in connection therewith. If and to the extent that such utilities or facilities are not identified in the Contract Documents, as between the Contractor and the City, the City will be responsible for the cost of their removal, relocation or protection, as the case may be, but the Contractor shall perform any such work in conformance with applicable provisions of section 5.3, if so directed by the Engineer and in such situation the Contractor shall not be responsible for delay in completion of the project caused by the failure of the City or the owner of the utility to provide for such removal or relocation. If the Contractor, while performing the Contract, discovers utility or irrigation facilities not identified by the City in the Contract Documents, it shall immediately notify the Engineer in writing.

5.54.9 When the work to be performed under the Contract crosses or otherwise interferes with existing streams, watercourses, canals, farm ditches, pipelines, drainage channels, or water supplies, the Contractor shall provide for such watercourse or pipelines and shall perform such construction during the progress of the work so that no damage will result to either public or private interests; and the Contractor shall be liable for all damage that may result from failure to so provide during the progress of the work.

## **5.55 ACCIDENTS**

5.55.1 The Contractor shall provide and maintain, in accordance with California Labor Code section 6708 and Cal/OSHA requirements, adequate emergency first aid treatment for its employees and anyone else who may be injured in connection with the work.

5.55.2 The Contractor shall promptly report in writing to the Engineer all accidents of any nature arising out of, or in connection with, the performance of the work, on or adjacent to the site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injury or serious damage are caused, the accident shall be reported immediately by telephone or messenger to the City and the Engineer.

5.55.3 If any claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

#### **5.56 NO PERSONAL LIABILITY**

Neither the City, the Engineer, nor any of their officers, directors, agents, or employees shall be personally responsible for any liability arising under the Contract, except such obligations as are specifically set forth herein.

#### **5.57 MEASUREMENT OF QUANTITIES**

Where the Contract provides for payment on a lump sum price basis, no measurement of quantity will be made. Where the Contract provides for payment on a unit price basis, the quantities of work performed will be computed by the Engineer on the basis of measurements taken by the Engineer, and these measurements shall be final and conclusive. All quantities of work computed under the Contract shall be based upon measurements by the Engineer according to United States Measurements and Weights. Methods of measurement are specified herein and in the Specifications.

#### **5.58 SCOPE OF PAYMENT**

5.58.1 The Contractor shall accept the compensation provided in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced under the Contract; also for loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the acceptance by the City and for all risks of every description connected with the prosecution of the work; also for all expenses incurred in consequence of the suspension or discontinuance of the work as provided in the Contract; and for completing the work according to the Specifications and Plans. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.

5.58.2 No compensation will be made in any case for loss of anticipated profits. Increased or decreased work involving supplemental agreements will be paid for as provided in such agreements.

#### **5.59 PROGRESS ESTIMATE**

For each calendar month of Contract work, the Engineer will prepare a progress estimate of all work performed under the Contract. Within the first ten (10) days of each succeeding calendar month, the Engineer will prepare in writing and certify to the City, an estimate which in his opinion is a fair approximation of the value of all work done under the Contract, including any amounts due the Contractor for extra work and change orders. In arriving at the value of the work done, the Engineer will give consideration to the value of labor and materials which have been incorporated into the permanent work by the Contractor during the preceding month. Consideration will not be given to preparatory work done or for materials or equipment on hand.

In order to assist the Engineer, the Contractor shall furnish the Engineer with copies of invoices for all such items delivered to the job site and incorporated into the work.

## **5.60 PROGRESS PAYMENTS**

5.60.1 Unless otherwise provided for at a different rate in the Invitation to Bid and the Contract, the City will pay the Contractor ninety-five (95%) percent of the amount of each properly submitted and undisputed progress payment request. Five (5%) percent, or any higher rate specified in the Invitation to Bid and the Contract, of the amount of each payment request shall be retained by the City until final completion and acceptance of all work under the Contract; provided, however, that if the Engineer, at any time after fifty (50%) percent of the work has been completed, finds that satisfactory progress is being made, the City may, in its sole discretion, pay any or all of the remaining progress payments in full or at a lower retention. In no case shall the City make a progress payment to the Contractor that exceeds one hundred percent (100%) of the value of the work actually completed to the date of the payment request.

5.60.2 The Contractor may invoice the City for no more than seventy-five (75%) percent of the cost of materials and equipment stored onsite, as long as the material or equipment has been inspected and approved by the Engineer or the City's representative, the quantity of material or equipment can be determined to the City's satisfaction after Contractor delivery of a paid invoice for such materials or equipment, and the materials or equipment are properly stored and protected in accordance with the manufacturer's recommendations. The Contractor retains liability for any damage or degradation of the quality of stored materials and equipment until after they are incorporated into the work and the work is approved by the City in accordance with the applicable requirements of the Contract Documents.

5.60.3 In accordance with California Public Contract Code section 20104.50, a written payment request from the Contractor shall be reviewed by the Engineer as soon as practicable in order to determine whether it is proper. If it is determined not to be a proper payment request suitable for payment, then the Engineer shall return it to the Contractor with a written explanation of the deficiencies as soon as practicable, but not later than 7 days after receipt of the payment request. If the payment request is determined to be properly submitted and is undisputed, the Engineer will certify the payment as provided above and the City shall make the payment to the Contractor within 30 days after receipt of the payment request. If a properly submitted and undisputed payment request is not paid within this 30 day period, then the City shall pay interest on the overdue amount to the Contractor at the legal rate set forth at California Code of Civil Procedure section 685.010. This section shall not apply if City funds are not available for payment of the payment request or if payment is delayed due to an audit inquiry by the financial officer of the City.

5.60.4 The Contractor may, in accordance with California Public Contract Code section 22300, substitute securities for any monies which the City may withhold to insure performance under the Contract. Alternatively, on written request of the Contractor and at its expense, the City shall make payments of the retention earnings directly to an escrow agent pursuant to an escrow agreement entered into consistent with the terms of Public Contract Code section 22300.

5.60.5 When, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract, or when in his judgment the total amount of the work done since the last estimate amounts to less than \$1,000, no pay estimate will be prepared and no progress payment will be made.

5.60.6 No progress estimate or payment shall be considered to be an approval or acceptance of any work, materials or equipment. Estimated amounts and values of work done and materials and equipment incorporated into the work will be conformed with actual amounts and values as they become available in subsequent progress estimates, progress payments and the final estimate and payment. All estimates and payments will be subject to correction in subsequent progress estimates and payments and the final estimate and payment.

5.60.7 It is mutually agreed between the parties to the Contract that no payments made under the Contract, including progress payments and the final payment, shall be evidence of the performance of the Contract, either wholly or in part, and no payment shall be construed to be an acceptance of any defective or incomplete work or improper materials.

5.60.8 City reserves the right to make payments jointly to the order of the Contractor and to any of its subcontractors or suppliers that might have a right to file a stop notice with the City. The City shall have no obligation to pay or to ensure the payment of money to a subcontractor or supplier, except as may otherwise be required by law.

5.60.9 Each progress payment made to the Contractor in accordance with the Engineer's determination of progress payment requests is contingent upon the Contractor furnishing the City with a signed written waiver and release of all claims against the City arising out of or in any way connected to the Contract. Disputed Contract claims must be specifically stated and excluded by the Contractor from the operation of the waiver and release. The waiver and release shall be substantially in the form provided in Civil Code sections 8132 (Exhibit A) or 8134 (Exhibit B). The Contractor may only use the conditional waiver and release if the City does not pay all or a portion of a progress payment estimate submitted by the Contractor and the Contractor disputes the City's determination.

In the event that the Contractor fails or refuses to furnish the City with a signed written waiver and release of all claims against the City arising out of or in any way connected to the Contract, Contractor's acceptance of each progress payment shall be Contractor's release of all claims against the City in relation to all work paid to date to the fullest extent permitted by law.

CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT (EXHIBIT A)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

**Identifying Information**

Name of Claimant: \_\_\_\_\_  
Name of Customer: \_\_\_\_\_  
Job Location: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Through Date: \_\_\_\_\_

**Conditional Waiver and Release**

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: \_\_\_\_\_  
Amount of Check: \$ \_\_\_\_\_  
Check Payable to: \_\_\_\_\_

**Exceptions**

This document does not affect any of the following:

- (1) Retentions.
- (2) Extras for which the claimant has not received payment.
- (3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:

Date(s) of waiver and release: \_\_\_\_\_

Amount(s) of unpaid progress payment(s): \$ \_\_\_\_\_

- (4) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

**Signature**

Claimant's Signature: \_\_\_\_\_  
Claimant's Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

UNCONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT (EXHIBIT B)

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

**Identifying Information**

Name of Claimant: \_\_\_\_\_  
Name of Customer: \_\_\_\_\_  
Job Location: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Through Date: \_\_\_\_\_

**Unconditional Waiver and Release**

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment:

\$ \_\_\_\_\_.

**Exceptions**

This document does not affect any of the following:

- (1) Retentions.
- (2) Extras for which the claimant has not received payment.
- (3) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

**Signature**

Claimant's Signature: \_\_\_\_\_  
Claimant's Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

## 5.61 COMPLETION AND FINAL ACCEPTANCE

5.61.1 The following definitions govern in interpreting this article and wherever such terms may appear in the Contract Documents:

5.61.1.1 “Final Completion” means the time when the work has been fully completed in accordance with the Contract Documents and is ready for acceptance and final payment by the City.

5.61.1.2 “Final Inspection” means the inspection conducted by the City after to verify that the work has reached Final Completion.

5.61.1.3 “The Final Punch List” is the listing of items that, in the Engineer’s opinion, remain uncompleted after Substantial Completion but that must be completed by the Contractor prior to Final Completion.

5.61.1.4 “Semi-Final Inspection” means that inspection conducted by the Engineer to determine if the work is Substantially Complete.

5.61.1.5 “Substantial Completion” means the work has progressed to the point that: (1) the work is ready for beneficial use and occupancy by the City for the intended purpose, (2) all fire and life safety work has been completed, inspected and accepted, (3) all mechanical and process systems and equipment are complete and have been put in automatic operation, (4) the total value of uncompleted work is less than one-half of one percent of the Contract Price and any approved cost extensions and (5) completing the work will not significantly interfere with the City’s convenience, or use or cost of operating the work.

5.61.2 When specifically provided for in the Contract Documents or when agreed to in writing by the City and the Contractor, the City may begin using a portion of the work even though it is not Substantially Complete. In such a case, the Contractor, the City and the Engineer shall first agree on and document responsibilities for security, operation, safety, maintenance, utilities, insurance, warranties, and guarantees for that portion of the work being used by the City. The City, the Contractor and the Engineer shall inspect such portion of the work and shall prepare a list of work to be completed or corrected before final acceptance. The City’s use of any portion of the work shall not constitute final acceptance of that portion of the work prior to Final Completion and acceptance of the work as a whole. The City shall allow the Contractor reasonable access to complete or correct work in areas being used by the City. Partial beneficial occupancy shall not relieve the Contractor of Liquidated Damages or waive any of the City’s rights under the Contract unless the Contract Documents expressly provide for and identify such portion of the work to be considered Substantially Complete before the remaining portions of the work or waiver of specific City rights.

5.61.3 When the Contractor considers the work nearly complete, the Contractor shall review the Contract Documents, inspect the work and prepare a list of deficiencies (Punch List). When the Punch List is prepared, the Contractor will deliver copies to the Engineer and the City. The Contractor shall complete or correct the items on the Punch List until, in the Contractor’s opinion, the work is Substantially Complete and ready for occupancy and use by the City. The Contractor shall then deliver the completed Punch List to the Engineer and notify the



Engineer in writing that the Contractor believes the work is Substantially Complete and ready for Semi-Final Inspection.

5.61.4 After the Contractor notifies the Engineer in writing that it believes the work is substantially complete, the Engineer will conduct the Semi-Final Inspection and may add additional items to the Contractor's Punch List. As a result of this inspection, the Engineer may determine that: (1) the work is not sufficiently complete to warrant a Semi-Final Inspection, additions to the Contractor's Punch List, or the preparation of a Final Punch List; (2) the work is sufficiently complete for the Engineer to prepare a Final Punch List but certain incomplete or Defective work prohibits use of the work for its intended purpose and therefore, the work is not Substantially Complete; or (3) that the work is Substantially Complete and usable for its intended purpose and the Engineer can prepare a Final Punch List. In preceding cases (1) and (2), the Contractor shall continue the work and call for a second Semi-Final Inspection when it believes the work is ready. If the Contractor does not achieve Substantial Completion on the second attempt, it shall reimburse the City the cost of the Engineer's services for additional inspections. In case (3), the Engineer will prepare a Final Punch List and a notice of Substantial Completion, which shall state the time agreed to by the City and the Contractor, not to exceed 30 days, in which the Contractor shall complete all remaining Punch List items and ready the work for Final Inspection. The Engineer shall attach a copy of the Final Punch List to the notice of Substantial Completion. Time to complete punch list items provided in this section 5.61.4 is for the convenience of the City and is intended as a deadline; and therefore, nothing in this section shall extend the time of completion for the fixed in the Contract Documents or excuse the failure of the Contractor to timely deliver the work as complete in accordance with the Contract Documents.

5.61.5 When the Contractor has completed or corrected all items on the Engineer's Final Punch List and has made all required final submittals, the Contractor shall give the Engineer written notice that the work is ready for Final Inspection and acceptance and upon receipt of a final Application for Payment, the Engineer shall make a Final Inspection. If the Engineer finds the work is not fully complete, it shall notify the Contractor of items still requiring completion or correction. The Contractor shall immediately correct these deficiencies and call for a re-inspection. When, on the basis of its knowledge of the work, observations and inspections, the Engineer finds that the work is acceptable and fully complete in accordance with the Contract Documents, and when all final submittals have been made, the Engineer will recommend that the City issue and file a Notice of Completion designating Final Completion of the work, make Final Payment and accept the work in accordance with the terms and conditions of the Contract Documents.

5.61.6 The Engineer's failure to include an item on the Final Punch List, to make the Semi-Final or the Final Inspection, or to recommend final acceptance shall not alter the Contractor's responsibility to complete all work in accordance with the Contract Documents. If any lien or stop notice remains unsatisfied, the Contractor shall immediately take all steps necessary to remove any such lien or stop notice before Final Payment is made.

5.61.7 The making of Final Payment shall constitute a waiver of claims by the Contractor except those arising from:

5.61.7.1 Liens, claims, security interests or encumbrances arising out of the Contract and unsettled;

5.61.7.2 Failure of the work to comply with the requirements of the Contract Documents; or

5.61.7.3 Terms of the one-year guarantee period and special warranties required by the Contract Documents.

5.61.7.4 Any of the Contractor's continuing obligations under the Contract Documents.

## **5.62 FINAL PAYMENT**

Within 10 days after the date of completion and Contractor's delivery to the City of a complete release of all liens arising out of this Contract, or receipts in full covering all labor, materials and equipment for which a lien could be filed, or a bond satisfactory of the City to defend and indemnify the City against such liens, the City shall accept the work and file in the office of the County Recorder, a Notice of Completion of the work herein agreed to be done by the Contractor. On the expiration of 60 days after the recordation of such Notice of Completion and there being no liens or stop notices filed, the difference between said final estimate and all payments theretofore made to the Contractor shall be due and payable to the Contractor, subject to any requirements concerning the furnishing of a maintenance bond, and excepting only such sum or sums as may be withheld or deducted in accordance with the provisions of this Contract or as required by law. All prior certifications upon which partial payments may have been made, being merely estimates, shall be subject to correction in the final certificate. In accordance with California Public Contract Code section 7107(c), in the event of a dispute between the City and the Contractor, the City may withhold from the final payment an amount not to exceed 150% of the disputed amount. If any liens are filed or exist after Final Payment is made, the Contractor shall refund to the City all money that the City may be compelled to pay in discharging such liens, including all costs and reasonable attorney's fees.

## **5.63 FINAL RELEASE**

Final payment to the Contractor in accordance with the approved final estimate is contingent upon the Contractor furnishing the City with a signed written waiver and release of all claims against the City arising out of or in any way connected to the Contract. Disputed Contract claims in stated amounts may be specifically excluded by the Contractor from the operation of the waiver and release. The waiver and release shall be substantially in the form provided in Civil Code sections 8138 (Exhibit A) or 8136 (Exhibit B). The Contractor may only use the conditional waiver and release form if the City does not pay all or a portion of the final payment estimate submitted by the Contractor and the Contractor disputes the City's determination on such estimate. In the event the Contractor fails to furnish the City with a signed written waiver and release of all claims against the City arising out of or in any way connected to the Contract, Contractor's acceptance of final payment is Contractor's release of all claims against the City to the fullest extent permitted by law.

UNCONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT (EXHIBIT A)

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

**Identifying Information**

Name of Claimant: \_\_\_\_\_  
Name of Customer: \_\_\_\_\_  
Job Location: \_\_\_\_\_  
Owner: \_\_\_\_\_

**Unconditional Waiver and Release**

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

**Exceptions**

This document does not affect any of the following:

Disputed claims for extras in the amount of: \$ \_\_\_\_\_

**Signature**

Claimant's Signature: \_\_\_\_\_

Claimant's Title: \_\_\_\_\_

Date of Signature: \_\_\_\_\_

CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT (EXHIBIT B)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

**Identifying Information**

Name of Claimant: \_\_\_\_\_  
Name of Customer: \_\_\_\_\_  
Job Location: \_\_\_\_\_  
Owner: \_\_\_\_\_

**Conditional Waiver and Release**

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: \_\_\_\_\_  
Amount of Check: \$ \_\_\_\_\_  
Check Payable to: \_\_\_\_\_

**Exceptions**

This document does not affect any of the following:

Disputed claims for extras in the amount of: \$ \_\_\_\_\_

**Signature**

Claimant's Signature: \_\_\_\_\_  
Claimant's Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

## **5.64 RIGHT TO WITHHOLD PAYMENTS**

In addition to all other rights and remedies of the City hereunder and by virtue of law, the City may withhold or nullify the whole or any part of any progress payment or withhold up to 150% of the disputed amount from the final payment (see Public Contract Code section 7107(c)) to such extent as may reasonably be necessary to protect the City from loss on account of:

5.64.1 Defective work not remedied, irrespective of when any such work be found to be defective;

5.64.2 Claims or liens filed or reasonable evidence indicating probable filing of claims or liens including, but not limited to, claims under California Labor Code sections 1775, 1776, or 1777.7;

5.64.3 Failure of the Contractor to make payments properly for labor, materials, equipment, or other facilities, or to subcontractors and/or suppliers;

5.64.4 A reasonable doubt that the work can be completed for the balance then unearned;

5.64.5 A reasonable doubt that the Contractor will complete the work within the agreed time limits;

5.64.6 Costs to the City resulting from failure of the Contractor to complete the work within the proper time; or

5.64.7 Damage to work or property.

Whenever the City shall, in accordance herewith, withhold any monies otherwise due the Contractor, written notice of the amount withheld and the reasons therefor will be given the Contractor. After the Contractor has corrected the enumerated deficiencies, the City will promptly pay to the Contractor the amount so withheld. When monies are withheld to protect the City against claims or liens of mechanics, suppliers, materialmen, subcontractors, etc., the City may at its discretion permit the Contractor to deliver a surety bond in terms and amount satisfactory to the City, indemnifying the City against any loss or expense, and upon acceptance thereof by the City, the City shall release to the Contractor monies so withheld.

## **5.65 WAIVER OF INTEREST**

The City shall have no obligation to pay and the Contractor hereby waives the right to recover interest with regard to monies that the City is required to withhold by reason of judgment, order, statute or judicial process, or may withhold pursuant to the provisions of this Contract.

## **5.66 SATISFACTION OF CLAIMS AND LIENS**

Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the City, a complete release of all liens and claims arising out of this Contract, or receipts in full in lieu thereof and, if required in either case, an

affidavit that so far as it has knowledge or information the releases and receipts include all the labor and material for which a lien or claim could be filed; but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the City, to indemnify the City against any lien or claim. If any lien or claim remains unsatisfied after all payments are made, the Contractor shall refund to the City all monies that the latter may be compelled to pay in discharging such a lien, or claim, including all costs and reasonable attorney's fees.

#### **5.67 ASSIGNMENT**

In accordance with California Public Contract Code section 7103.5, the Contractor hereby offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under section 4 of the Clayton Act (15 U.S.C. section 15) or under the Cartwright Act (Chapter 2 (commencing with section 16700) of part 2 of division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the Contract Documents. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor, without further acknowledgment by the parties.

#### **5.68 AVAILABILITY AND AUDIT OF INFORMATION**

5.68.1 The City's duly authorized representatives shall have, during the term of the Contract and for three years thereafter, the right to inspect, copy and audit all of the Contractor's and its subcontractors' books, accounts, records, and other material of all description, including but not limited to source documents and computer files, and to interview personnel, pertaining to the Contract to verify or review the quantity, quality, work program and progress of the work, reimbursable costs, amounts claimed by the Contractor, pricing data, estimates of cost for fixed rates including those applicable to proposed changes, and for any other reasonable purposes. "Books," "accounts," and "records" as used herein shall include, but not be limited to, original estimates, subcontracts, bids, proposals, purchase orders, books, documents, accounting records, papers, correspondence, project files and scheduling information, including the original Bid and all documents related thereto and to its preparation, the as-planned construction schedule and any related documents.

5.68.2 The Contractor's and its subcontractors' accounts shall be kept in accordance with generally accepted accounting principles in the particular industry and shall be kept in such a manner and in sufficient detail to clearly disclose the nature and amounts of the different items of service and cost pertaining to the Contract and the basis for charges or allocations to the Contract. The Contractor and its subcontractors shall preserve all such accounts and records for a period of three years after the term of the Contract.

5.68.3 The Contractor shall include the necessary provisions in its subcontracts to ensure that its subcontractors comply with this provision.

5.68.4 The parties acknowledge that this Contract, and performance and payments under this Contract, are subject to examination and audit by the State Auditor

General for three years following final payment under this Contract pursuant to California Government Code section 8546.7.

#### **5.69 INTEGRATION**

The Contract Documents constitute the sole, final, complete, exclusive and integrated expression and statement of the terms of this contract among the parties concerning the subject matter addressed herein, and supersedes all prior negotiations, representations or agreements, either oral or written, that may be related to the subject matter of this Contract, except those other documents that are expressly referenced in the Contract Documents.

#### **5.70 WAIVER**

The waiver at any time by any party of its rights with respect to a default or other matter arising in connection with this Contract shall not be deemed a waiver with respect to any subsequent default or matter.

#### **5.71 REMEDIES NOT EXCLUSIVE**

The remedies provided in this Contract are cumulative and not exclusive, and are in addition to any other remedies that may be provided by law or equity. The exercise by either party of any remedy under this Contract shall be without prejudice to the enforcement of any other remedy.

#### **5.72 SEVERABILITY**

The invalidity, illegality or unenforceability of any provision of the Contract Documents shall not render the other provisions unenforceable, invalid or illegal.

#### **5.73 GOVERNING LAW AND VENUE**

Except as otherwise required by law, this Contract shall be interpreted, governed by, and construed under the laws of the State of California. The County shall be venue for any litigation concerning the enforcement or construction of this Contract.

#### **5.74 NOTICES**

Any notice, demand, invoice or other communication required or permitted to be given under this Contract shall be in writing and either served personally or sent by prepaid, first class U.S. mail and addressed as follows: for the City, either to the Engineer or the City at the addresses set forth in the Invitation to Bid; for the Contractor, at the address set forth in its Bid. Any party may change its address by notifying the other party in writing of the change of address.

**(END OF GENERAL CONDITIONS.)**

**TECHNICAL SPECIFICATIONS**  
(Section 10 - Special Provisions)

For

CITY OF WHEATLAND

**ADVANCED METERING INFRASTRUCTURE (AMI) WATER METER  
INSTALLATION PROJECT**

**October 2020**

**Prepared By:**

Dane H Schilling, RCE XXXXX, Exp. XX/XX/XX

10/06/2020

**Date:**



11641 Blocker Drive, Suite 170  
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APPENDIX

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## **SECTION 10 SPECIAL PROVISIONS**

### **10-1 GENERAL**

#### **10-1.01 General Description of Work**

The City of Wheatland provides water to approximately 1,151 service connections composed of approximately 1,109 residential water meters and 42 commercial/industrial/landscape. Work will include replacement of the approximately 1,151 existing water service meters and conversion to Mueller Advanced Meter Infrastructure (AMI) endpoints, replacement of meters at six (6) water supply wells located throughout the City, and installation of two (2) new meters in the City's Corporation Yard area, all located in the City of Wheatland. Miscellaneous changes will be required in piping, meter boxes, and ancillary structures/equipment at some of the meter locations. Most of the existing water meters are more than 15 years old with manual or touch-read systems. The well site meters are old and are connected to the water system's SCADA system. The two new meters will be connected to the City's SCADA system by others.

Meters are generally located within front yards of residential connections, and behind walks in front of commercial connections. The City estimates that about 100 meters are located in driveways, approximately 25 of which will require plumbing modifications, new meter boxes, and related driveway repairs.

Meter body replacements will be performed in accordance with Section 10-4. The Contractor will perform a meter box audit on all 1,151 existing water services and six (6) City supply meters to collect all relevant data needed for completion of the work as well as other data for the City's operations and maintenance records in accordance with Section 10-3. Contractor will be required to use a Work Order Management System (software program) (Section 10-3.05) to collect data on the existing and newly installed meters and document services requiring additional work using logic and information provided by the City. Contractor will provide all data collected in the audit to the City in digital database format to facilitate the conversion process in the City's tracking and billing software.

The unit price bid for each item shall be full compensation for supplying all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the bid item.

#### **10-1.02 Order of Work**

The Project (City Wide) Map is provided in Appendix A. A sample of the service address data for all metered water services is included in Appendix B. The Contractor shall develop a routing plan that effectively covers all metered service locations. All services will require a meter box audit and data collection as described in Section 10-3 and meter replacement and endpoint installation in accordance with Section 10-4. The contractor shall submit a routing plan to the City which divides the City into a minimum of four (4) work zones and delineates the planned progression of work. The Contractor shall

perform all aspects of work comprehensively in a sequence which substantially completes (95% or more) the contract work in a given work zone prior to proceeding with work in the next zone. Contract work in a preceding zone shall reach final completion before work in the following zone reaches 50% complete. Work shall be planned in a sequence which progresses through the zones adjacent to each other to the extent reasonable. Contractor shall submit prior to construction a block-by-block routing plan and schedule detailing the extents of each work zone and describing the planned progression of work through each work zone to the City. Scheduling of AMI System and meter installation shall be arranged to avoid disruption of the City's ability to bill customers on a monthly basis. The contractor shall also develop a schedule and work plan for the replacement of City supply meters at the six (6) well sites.

The first order of work for every metered service will be to perform a meter box audit of the existing meter body, box, lid, endpoint, and encoder and determine the requirements for work beyond meter and endpoint installation using the logic described in Section 10-3.03E. Data collection before and after meter retrofits shall be performed in accordance with Sections 10-3.03 and 10-3.04, respectively. The Contractor will be required to provide upgraded/updated GPS locations for all meters in addition to collecting data in the fields provided in Sections 10-3.03 and 10-3.04. Following the meter box audit, the contractor will perform meter replacements in accordance with Section 10-4, collect all data in the fields specified in Section 10-3.04, and confirm that the meter has been successfully activated prior to leaving the service location.

The Contractor will be required to provide a starting group of not more than 20 services to complete as a test run of the data collection, meter retrofits, data collection, and data transfer into the City system prior to being authorized to work on further meter, endpoint and encoder replacements.

The Contractor shall furnish and install Mueller MI.NET® M NODE Fixed Meter Interface Unit (MIU) End Points with Nicor Connector for all metered services. Meters installed will be Mueller brand, and models are delineated by meter size in Section 10-4.12.

Before beginning work on any metered service, the Contractor shall notify property owners and tenants in accordance with Section 10-2.10. Work shall be performed in a timely manner and shutdowns shall be in accordance with Section 10-4.03. The Contractor shall confirm final number of meters and endpoints to be installed prior to beginning meter retrofits.

Before removing or disconnecting existing meter components, the Contractor shall verify the service meter address, Location ID, and associated account number, and determine the requirements for work beyond meter and endpoint installation in accordance with Section 10-3. The Contractor shall digitally capture and record the final meter reading in digital database format. Meter and endpoint shall be replaced in accordance with Section 10-4. The Contractor shall capture and digitally record the initial register reading once the new meter is installed and the endpoint is connected to the register and activated. Data collection during meter replacement and installation shall be performed in accordance with Section 10-3.04. Meter activation and endpoint communication with the fixed network system shall be confirmed by the Contractor before leaving the installation site.

### **10-1.03 City Selected AMI System Vendor**

The City recently solicited proposals from vendors to provide a complete turn-key AMI system solution. The City selected Mueller Systems to provide the AMI software, system, meters, endpoints, and the necessary AMI system infrastructure. The AMI system infrastructure, except for meter endpoints, will be installed under a separate contract prior to the start of construction of this project. Mueller's team will working be in coordination with the selected meter installation contractor to ensure that upon the installation of the new meters and endpoints, communication between endpoints and the City's AMI infrastructure is working properly.

Additionally, the City has obtained pre-negotiated not-to-exceed list pricing from Mueller for the procurement of meters and endpoints to be installed under this contract. The negotiated pricing and supply conditions for the estimated quantities of metering equipment listed is included as Appendix C of these Specifications and will be used by Mueller for selling those materials directly to the Contractor under this contract. The Contractor shall purchase the meters and endpoints specified directly from Mueller.

### **10-1.04 Project Schedule**

Based on the current schedule, contract award is expected to occur in December 2020.

The City is in the process of upgrading their billing system to Tyler Technologies Incode. This is expected to be complete by February 2021.

Following the billing system upgrade, Mueller will be performing software installation, setup of CIS integration with the Mueller system, and installation of the AMI infrastructure to prepare for the meter installation effort. This is expected to take approximately two (2) months and will be completed before the start of the installation effort.

The Notice to Proceed for this Work will not be issued before April 2021.

### **10-1.05 Prevailing Wage Special Determination**

See Section 4.22 for general prevailing wage requirements. The City has obtained a special wage determination from the Director of Industrial Relations for this project which is included herein as Appendix I.

### **10-1.06 Contractor Experience Requirements**

The contractor shall provide written verification to the City that the Contractor has installed a minimum of two (2) Mueller AMI systems over the last three (3) years. The Contractor shall certify in writing that foremen and workers on-site are experienced and knowledgeable in all elements of the work identified within this project. Confirmation of Contractor, foremen, and worker experience shall be submitted with Contractor's bid.

### **10-1.07 Measurement and Payment**

Full compensation for compliance with and work items required under this 10-1 “General” section which are not otherwise specified shall be considered as having been included in the price paid for the various items of work and no additional compensation will be allowed therefor.

## **10-2 GENERAL CONSTRUCTION REQUIREMENTS**

### **10-2.01 Scope of Work**

The work to be performed under these Special Provisions generally consists of installing water meters and endpoints, on existing water services at commercial and residential properties within designated areas of the City of Wheatland as indicated in Appendix A. ***This section provides a general definition; scope of work details can be found in Section 10-3 of these provisions.*** The work to be performed includes retrofit of existing water services to accept new water meter bodies, encoders, and end points, installation of new meter box lids, and any other work required to complete the project as specified in these Special Provisions and as shown on the Drawings.

The Contractor shall provide all labor, materials, tools, and equipment to complete in place all work necessary to furnish, install, remove, pressure test, disinfect, and connect the water meters and appurtenances as specified in these Special Provisions. The work shall be so performed that upon contract completion the project shall be ready for use as described in these Special Provisions.

All field personnel must be uniformed with company name decaled on all vehicles. Contractor’s meter installation personnel shall wear easily recognizable uniforms displaying the Contractor’s name. Contractor shall be responsible for restoring meter sites to original conditions and shall be responsible for all repairs due to damages occurring from improper installation procedures and/or negligence. All costs associated with the care and protection of the work area and all necessary precautions taken to prevent damage to existing lines and contractor personnel shall be considered incidental and included in the bid price. All project workmanship will be to the satisfaction of the City, as stipulated by this contract and will be inspected by the City’s Representative before approval.

### **10-2.02 Shop Drawings and Submittals**

The Contractor’s shop drawings and submittals shall include, but not be limited to, the following:

- A. Construction Activity Time Schedule – due at pre-construction conference
- B. Meter Installation Routing Plan – due at pre-construction conference
- C. Public Notification Information – due at pre-construction conference
- D. Material and Equipment Storage Locations – due at pre-construction conference
- E. Pre-construction and Post-construction Photographs – included in meter audit and data collection process and saved with meter service record
- F. Final Data Delivery in the format specified by the City – contractor shall submit, at minimum, weekly reports of all meter changeouts performed and data collected. Final submittal of data

upon completion of each work zone shall be provided in addition to weekly data submittals.

When review is required of any drawing or information regarding materials, the Contractor shall prepare or secure, and submit a digital copy in pdf format to the Engineer. The Engineer, after taking appropriate action, will return a marked up version to the Contractor in pdf format. Hard copies may be requested by the City at any time and shall be provided at no additional cost to the City.

#### **10-2.03 Manufacturer's Instructions**

Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, adjusted, tested, used, cleaned, maintained, and conditioned as recommended by the manufacturer. Contractor shall provide a copy of the manufacturer's instructions for all materials being supplied and installed.

#### **10-2.04 Materials to be Supplied**

All equipment, material and supplies called for in these Specifications shall be new and currently manufactured items, unless otherwise specified.

#### **10-2.05 Proof of Compliance with Contract**

In order that the Engineer may determine whether the Contractor has complied with the requirements of the contract documents not readily determinable through inspection and tests of plant, equipment, work, or materials, the Contractor shall at any time when requested, at the Contractor's expense, submit to the Engineer properly authenticated documents or other satisfactory proofs as to his compliance with such requirements.

#### **10-2.06 Construction Activity Time Schedule**

The Contractor shall submit a detailed schedule, using the Critical Path Method, at the pre-construction conference. The schedule shall show the order in which the Contractor proposes to carry out the work, the total float period, the logical relationships between work activities, the critical path, the dates on which the Contractor will commence the different tasks including procurement of materials and equipment, delivery of materials, posting of "No Parking" signs, notification of property owners, installation of meters, etc., and the contemplated dates for completing such tasks. The schedule shall be consistent in all respects with the completion time requirements.

No progress payments will be made for work completed prior to acceptance of the schedule.

The Contractor shall contact the Engineer at least forty-eight (48) hours in advance of any change in the work schedule. If the Contractor desires to make a major change in his method or operations after commencing construction, or if the activity time schedule fails to reflect the actual progress of the work, the Contractor shall submit a revised schedule to the Engineer in advance of beginning revised operations.

At the very minimum, the Contractor shall update the construction activity time schedule every thirty (30) calendar days throughout the duration of the project.

All work shall be complete in four (4) consecutive months from the start of the installation effort.

#### **10-2.07 Construction Funding Signage Requirements (Bid Item No. 15)**

The Contractor shall provide signage near three (3) City Limit sign locations within local right of way to be designated by the City.

During meter installation, temporary portable signs are to be placed at a prominent location in the work zone in which work is being performed. The signs must be maintained for the duration of project and relocated as work progresses through the various work zones. The signs must include the disclosure statement, color logos, and other content specified by the City following contract award. The sign shall be prepared in a professional manner.

Minimum Sign Dimensions: 4' tall x 8' wide made of ¾" thick exterior grade plywood.

Signage content is subject to change. The awarded contractor shall confirm content with City prior to ordering.

Construction Funding Signage shall be paid for on a lump sum basis. The contract lump sum price paid for "Construction Funding Signage" (Bid Item No. 16) shall include full compensation for supplying all labor, materials, tools, equipment and incidentals, and for performing all work necessary to complete this item as specified herein, in accordance with these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed. No payment for Construction Signage or any part thereof will be approved for payment under the contract until all applicable items listed in this section have been completed.

#### **10-2.08 Construction Photographs**

Construction photographs shall be captured in accordance with Section 10-3.02.

#### **10-2.09 Mobilization and Demobilization (Bid Item No. 1)**

Mobilization shall consist of preparatory work and operations, including, but not limited to those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for establishment of all offices and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items. Mobilization shall include demobilization as defined herein.

Mobilization shall include but not be limited to the following principal items:

- A. Signed Contract by the City and the Contractor.
- B. Completion of all tasks and submittal of all documents (bonds, insurance, schedule, etc.) required as conditions of issuing the Notice to Proceed.



- C. Transportation of all Contractor's equipment required for operations.
- D. Providing field office trailers if needed by the Contractor.
- E. Providing all on-site communication facilities, including telephones and radio pagers.
- F. Obtaining all required permits.
- G. Having all OSHA required notices and establishment of safety programs.
- H. Attendance at Pre-Construction Conference of Contractor's principal construction personnel.
- I. Distribution of pre-construction notifications to residents as described in Section 10-2.10.
- J. Beginning work on the project or at the subject site as applicable.

Demobilization shall include, but not be limited to: removal of all equipment, signage, unused materials, all temporary utilities, job trailers, and all temporary communication facilities and restoration of all work and storage areas to pre-construction conditions or better.

Mobilization and Demobilization shall be paid for on a lump sum basis. The contract lump sum price paid for "Mobilization and Demobilization" (Bid Item No. 1) shall include full compensation for supplying all labor, materials, tools, equipment and incidentals, and for doing all the work involved in mobilization and demobilization as specified herein, complete and in place, specified in the Caltrans Standard Specifications, these special provisions, and no additional compensation will be allowed.

**Maximum allowed lump sum price is five (5) percent of the total bid price.**

No payment for mobilization, demobilization, or any part thereof will be approved for payment under the contract until all applicable items listed in this "Mobilization and Demobilization" section have been completed.

#### **10-2.10 Notifications**

The Contractor shall:

- A. Inform customer when their water supply will be shut off for the swap out of meter body.
- B. Immediately notify the City of any objections or concerns raised by customer.
- C. Contact customers to arrange access to meters if located behind a fence or on private property.
- D. Prepare Notification Letters in conformance with Appendix D and distribute:
  - 7 days prior to beginning work (can be sent via mail or be a door hanger) and
  - 24 hours prior to beginning work (door hanger)

#### **10-2.11 Existing Facilities**

Attention is directed to Section 5-1.36D of the Standard Specifications and these special provisions.

It is not the intent of the contract documents to show the exact size or location of existing underground utilities or structures and the agency Engineer assumes no responsibility therefor. Whenever any such utilities are indicated thereon the Contractor shall be responsible for verifying their actual location and depth in the field, by potholing if necessary. The Contractor shall be responsible for any damage to utilities as a result of his operations.

The Contractor shall exercise care not to damage existing property including but not limited to trees, shrubs and landscaping outside the work area. Any damage caused by the contractor shall be replaced by the Contractor at his expense.

Trees and shrubbery that are not to be removed, and pole lines, fences, signs, markers and monuments, buildings and structures, conduits, pipe lines under or above ground, sewer and water lines, all facilities and any other improvements or facilities within or adjacent to the work shall be protected from injury or damage. If such objects are injured or damaged by the Contractor's operations, they shall be replaced or restored at the Contractor's expense, to a condition as good as when the Contractor entered upon the work, or as good as required by the Specifications accompanying the contract, if any such objects are a part of the work being performed under the contract. The Engineer may make or cause to be made such temporary or permanent repairs as are necessary to restore to service any damaged facility. The cost of such repairs shall be borne by the Contractor and may be deducted from any monies due or to become due to the Contractor under the contract.

Prior to commencing any excavation, the Contractor shall notify the following three (3) days in advance:  
Underground Service Alert (800) 642-2444

Full compensation for supplying all labor, materials, tools, equipment and incidentals, and for doing all the work involved in protecting or repairing property as specified in these Special Provisions shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

#### **10-2.12 Protection and Restoration of Existing Improvements**

The Contractor shall be responsible for the protection of public and private property adjacent to the work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements within the right-of-way or on adjacent private properties which are not designated for removal, but that are damaged or removed as a result of its operations. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension. Existing stripes and pavement markings not indicated for removal that are damaged by the work shall be replaced.

#### **10-2.13 Project Site Maintenance**

Throughout all phases of construction until final acceptance, including any periods of work suspension, the Contractor's work areas and storage area site shall be kept clean and free from rubbish and debris.

Excess excavated materials from any source shall be removed from the site immediately. Materials and equipment shall be removed from the site as soon as they are no longer necessary.

Before the final inspection, the site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be included in the Contractor's bid. In the event that the Contractor fails to perform this final cleanup, the City may remove and/or dispose of the articles or materials at the Contractor's expense.

Where parking is to be restricted during construction, "NO PARKING" signs shall be placed two days in advance.

Maintain pedestrian and bicyclist path of travel during and after work hours. If sidewalk closure is necessary to perform meter replacement, contractor shall place "Sidewalk Closed" signs on either end of the block, in accordance with the latest version of the MUTCD.

#### **10-2.14 Sanitary Facilities**

The Contractor shall provide and maintain enclosed, portable restrooms for the use of personnel engaged in the work. These accommodations shall be maintained in a neat and sanitary condition, and shall comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation.

#### **10-2.15 Staging and Storage**

The Contractor shall store all equipment and materials in a manner which does not interfere with public right of way. No equipment will be allowed to be parked overnight within the limits of the City public right-of-way that is not within the construction zone and closed to traffic.

Contractor may make arrangements with other local property owners for temporary staging areas; however, the location shall first be brought to the attention of the Engineer for approval. Contractor will also be required to provide proof in writing from the property owner that the Property is allowed for use as a temporary staging area.

Contractor shall take adequate measures to secure all equipment and materials at the staging area after the completion of work each day. The City will not be responsible for any damage or loss incurred on Contractor's equipment or materials.

#### **10-2.16 Measurement and Payment**

Full compensation for compliance with and work items required under this 10-2 "General Construction Requirements" section which are not otherwise specified shall be considered as having been included in the price paid for the various items of work and no additional compensation will be allowed therefor.

### **10-3 METER BOX AUDIT AND DATA COLLECTION**

#### **10-3.01 General**

**Prior to the installation or modification of any new parts or equipment on any given water service, the Contractor shall perform an audit of each water service and collect the required data from the**

**existing meter and endpoint (transmitter) unit.** All data collection shall be automated and digital for the serial and part numbers, using bar code scanners where applicable. Contractor shall utilize a work order management system capable of the functions described in Section 10-3.05 to collect all data prior to and following construction in accordance with Sections 10-3.03 and 10-3.04.

Global Positioning System (GPS) location data shall be collected using a Global Navigation Satellite System (GNSS) receiver rated for sub-meter accuracy. Contractor shall submit equipment manufacturer's product data sheet to City for approval of GNSS receiver prior to use. Contractor shall furnish all necessary hardware and software required for data collection.

### **10-3.02 Construction Photographs**

This item shall consist of providing pre-construction and post-construction photographs of all work. Contractor shall provide the Engineer with digital files.

Digital before and after photographs of each meter location shall be taken from 1-3 feet above the open meter box looking at the meter box contents and conditions. Additionally, before and after photos shall be taken from the edge of roadway pavement in front of the meter looking directly at the meter box. Digital before and after photos shall be loaded into the database record for the service address (minimum of 6 photos per service, in accordance with Section, 10-3.03C) in separate fields. All photographs shall be taken with a digital camera or mobile device in still-mode, geo-referenced/tagged and provided to the City via linked data fields connected to the subject service address.

### **10-3.03 Meter Box Audit**

Meter Box Audits at each service shall include the following:

- A. Ensure meter information and address match physical address. Confirm corner addresses (properties adjacent to two intersecting streets) with the City's Public Works Department. If address associated with any meter is unclear, Contractor shall verify address with the City prior to Contractor proceeding with meter swap out.
- B. Inspect existing meter box (meter, lid, encoder, valves, piping, etc).
  1. If box is full of water, Contractor shall pump water out and dispose of properly and safely. Document source of excess water in the Work Order Management System.
  2. If box is full of debris/dirt, remove dirt and debris to below bottom of meter as needed to perform contract work. Any requirement for Contractor to remove and off haul all debris/dirt from box shall be documented in the Work Order Management System.
  3. Digitally record and photograph, in accordance with these Specifications, any signs of meter or site tampering, including meter bypass, and report to the City's Public Works Department. If meter is bypassed or in a tampered condition, pull bypass and complete work in coordination with City.
  4. Notify City of any such mentioned conditions in 1 through 3 above prior to further work. City may opt to have work performed by others.

- C. Take clear digital photos of existing meter (with date and time stamp). Photographs must be able to be viewed electronically by searching service street address and account number. Photos shall include at least one clear photo for each of the following:
1. Pre-install work area
  2. Meter pit
  3. Defects as noted in item B above
  4. Old meter final read
  5. Serial numbers of meter and transmitter
  6. Post install work area
- D. Contractor shall perform a field audit of all supply and demand meter locations to determine or confirm and report on the data listed below for each meter. Data to be collected prior to performing meter retrofits shall include and utilize the exact data field titling noted in Table 1 below to ensure that data can be easily integrated with the City's billing system. Some information will be provided by the City as indicated below. Exact field titles and entries are subject to change and shall be verified by the City prior to the selected contractor entering information into the Work Order Management System.

**Input or Provided    TABLE 1 – METER BOX AUDIT - DATA TO COLLECT**

Field Title	Input or Provided	Explanation
ACCOUNT #	Provided by City	City Account number for each service will be provided by the City and will need to be used to confirm correlation with address data being collected
LOCATION ID	Provided by City	Location ID according to City-provided data
ACCOUNT TYPE	Provided by City	Account type according to City-provided data (Residential, commercial, etc.)
SECTION	Provided by City	Route number according to City-provided data
CUSTOMER NAME	Provided by City	Customer name associated with account according to City-provided data.
CONTACT	Provided by City	Name of Contact Person according to City-provided data
TELEPHONE	Provided by City	Telephone number of contact person according to City-provided data
CITY	Provided by City	City of site served according to City-provided data.
SERVICE ADDRESS	Provided by City	Street address of site served according to City-provided data
ZIP	Provided by City	Zip code of site served according to City-provided data
ST ADDRESS NO	Provided by City	Numeric portion of street address as identified in the field and cross checked with City-provided data
ST ADDRESS NAME	Provided by City	Name of Street as identified in the field and cross checked with City-provided data
ST ADDRESS TAG	Provided by City	Street name tag as identified in the field and cross checked with City-provided data (i.e., Drive, Road, Court, etc...)
ADDRESS NO APP	Provided by City	Any appendage to street Number as identified in the field and cross checked with City-provided data (A, B, C, etc.)
PREVIOUS READ	Provided by City/Verify	Previous reading according to City-provided data. Verify that current read on meter is reasonably within the
METER SIZE	Input/Verify	Meter size (inches)

METER ID	Input (New Field)	Manufacturer Identification (Serial) Number (read by bar code scanner where possible)
INSTALL DATE	Input (New Field)	Date of meter replacement
LID MAT	Input (New Field)	Plastic, composite, metal, etc.
LID SIZE	Input (New Field)	Meter box lid size
LID COND	Input (New Field)	GOOD= no cracks, well-fitted, no warp, has recessed 2" endpoint mount hole FAIL = <b>any of the above not true</b>
BOX COND	Input (New Field)	GOOD=no cracks or breakouts, set-to-grade (within ½" high or 1" low) FAIL = <b>any of the above not true</b>
BOX TYPE	Input (New Field)	Existing Meter box type
ROCK	Input (New Field)	Drain Rock Condition C= Clean and visible V= Visible but dirty FAIL= Box partly or completely filled with dirt, meter/curb stop valve not accessible (requires maintenance)
LAY LENGTH	Input (New Field)	Existing service meter lay length (meters smaller than 1")
PIPE SIZE	Input (New Field)	Determined by size of meter valve (inches)
PIPE MATERIAL	Input (New Field)	Copper, PVC, Galvanized Iron, etc.
METER LOCATION	Input (New Field)	Driveway, Lawn, Planter, Lot Line
LATITUDE	Input (New Field)	GPS collected latitude (sub-meter accuracy)
LONGITUDE	Input (New Field)	GPS collected longitude (sub-meter accuracy)
METER MAKE	Input (New Field)	Existing Meter Manufacturer Name
ENDPOINT ID	Input (New Field)	Existing endpoint ID (read by bar code scanner where possible)
METER TYPE	Input (New Field)	Type of register (ADE/RTR/HR-E/HR-E_LCD)
# DIALS	Input (New Field)	Quantity of digits on register
USAGE	Input (New Field)	Gallons, CU FT, etc
STATUS	Input (New Field)	Meter Changeout Status (PENDING/IN PROGRESS/COMPLETE)
DEFECTS	Input (New Field)	Check for and note damage, tampering, or leaks

All data shall be collected digitally using an approved software application (app) based data collection and work order management system loaded on a mobile device or computer to be furnished by the contractor for their own use. The selected system shall allow for the convenient tracking of all details.

- E. Record or verify meter data listed in Table 1 above. The data collected in the meter box audit shall be used by the Contractor to inform and confirm the work required at each given service under this Contract. All services shall receive a new meter and AMI endpoint installed in the existing meter box lid. Upgrades to existing meter boxes shall follow the following logic:
  1. Where an existing service is set with the meter greater than 2-feet deep (typically occurs with two meter boxes stacked on top of each other), Contractor shall perform plumbing modifications in accordance with Section 10-4.07 to raise the meter to fit within one standard meter box and replace the double stacked boxes with one standard meter box set to grade.

2. Where an existing meter box is filled with dirt and debris to a level which hinders the ability to perform a successful meter swap out, contractor shall clean out the meter pit in accordance with Section 10-4.09.
3. Where the existing meter box lid is cracked, poorly-fitted, warped, or does not have a recessed 2" endpoint mount, work shall include the replacement of the existing meter box lid. Lid replacement shall be in accordance with Section 10-4.10.
4. Where an existing meter box is broken or structurally inadequate, contractor shall remove and replace the existing meter box with a new box in accordance with Section 10-4.11.

All work performed at meter boxes shall be clearly documented in the work order management system before and after construction including photo documentation in accordance with Item C above. Any work performed that is not documented in accordance with Item C above will be considered to be voluntary and will be done at the Contractor's expense.

The contractor may choose to perform the meter box audit in conjunction with meter replacements. However, the City shall not be charged for multiple trips made by the contractor to a meter box in order to address non-standard conditions or extra work items already described in these specifications. Due to the variability and unknown conditions of each meter, it is recommended that the meter box audit be performed ahead of the meter replacements to allow the contractor to order and stock the appropriate material quantities.

#### **10-3.04 Data Collection During Meter Replacement**

Prior to the removal of any existing parts or equipment on any given service, the Contractor shall verify the service address for each water service and capture and digitally record the final meter reading in digital database format. The Contractor shall capture and digitally record the initial register reading once the endpoint is connected to the encoder and activated. All data shall be collected digitally using an approved software application (app) based data collection and work order management system loaded on a mobile device or computer to be furnished by the Contractor for their own use. The selected system shall allow for the convenient tracking of all important details including, but not limited to the data fields listed in Table 1 in Section 10-3.03 and Table 2 below.

All data collected before and after meter retrofits shall be provided to the City digitally in a form readily usable in a relational database without any manual data entry. Data collected with the meter retrofits shall include and utilize the exact data field titling noted in Table 2 below. Exact field titles are subject to change and shall be verified with the City prior to contractor setting up the work order management system.

**TABLE 2 – METER RETROFIT - DATA TO COLLECT**

Field Title	Explanation
INSTALL DATE	Date of installation in MM/DD/YYYY format
LID REPLACED	YES/NO
BOX REPLACED	YES/NO
PLUMBING MOD	Plumbing Modification Performed? YES/NO
OLD READING	Record the final register reading prior to removal for replacement of meter or endpoint
METER ID	New Mueller Meter Identification (Serial) Number (ready by barcode scanner)
AMI ID	New Mueller Endpoint Identification (Serial) Number (read by bar code scanner)
FIRST READ	Record the initial register reading after replacement of encoder or endpoint

Contractor shall upload all installation data on a weekly basis and ensure it is accurate and reconciled at the end of each week. All conflicts of data are to be resolved by the Contractor. Data files are to be delivered to the City within one week following the week of meter and endpoint installation.

### **10-3.05 Work Order Management System**

Contractor shall utilize an electronic work order management system that is capable of:

- A. Electronically accepting and processing vendor-provided inventory data files
- B. Electronically accepting and processing fixed-length or csv file with current meter and account data from the billing system.
- C. Accepting periodic updates of meter and account data from the billing system.
- D. Validating that installed meter IDs and AMI module (MIU) IDs are within the work order management inventory, otherwise installation data is flagged for correction prior to being included in a meter swap file
- E. Electronically creating a fixed-length or csv file based on provided file specification to facilitate an automated meter swap out in the utility billing system.
- F. Storing and displaying digital photo series for each installation including before, final read of old meter, pit set, any ancillary items incorporated into work and after change out
- G. Provide City and Engineer with 24/7 access via any internet-connected, web browser
- H. Client's viewing of pre-installation information online and on-demand, including:
  1. Account Number
  2. Customer Name
  3. Customer Address
  4. Old meter serial #
  5. Last meter reading
  6. Change-out status
- I. Client's viewing of post-installation information online and on-demand, including the pre-installation information noted above as well as:
  1. Data collected during the Meter Box Audit
  2. New meter and AMI Module (MIU) IDs
  3. Old meter close-out reading(s)



4. New meter initial reading(s)
  5. Information on any authorized extra work performed
  6. The date of installation
  7. Installer name or initials
  8. All installation pictures (viewable online within the browser)
  9. Installation comments, including any customer interactions
- J. Client's specified search criteria, across all work order management system data, by any of the following data elements:
1. Account Number
  2. Customer Name
  3. Customer Address
  4. Meter Serial ID
  5. AMI Module (MIU) ID
- K. Online and on-demand access to installation reports exportable in a CSV or Excel format including:
1. Summary dashboard showing current installation key performance indicators
  2. Field production (installations completed to date) by route
  3. Accounts with pending installation issues (inaccessible, dangerous/unsafe conditions, suspected theft, customer refusal, etc.) by route
  4. Meter installations remaining by route
- L. Providing awareness of all scheduled commercial customer appointment times to the appropriate installers for the current day.

### **10-3.06 Measurement and Payment**

- A. Meter Box Audit, Pre- and Post-Construction Photographs, and Service Data Collection  
 – This item shall consist of furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved, including, but not limited to performing meter box audit, providing pre- and post-construction photographs, and all data collection and delivery to City following meter retrofits. This item will be paid per water service.

Full compensation for compliance with and work items required under this 10-3 "Meter Box Audit and Data Collection" section which are not otherwise specified shall be considered as having been included in the price paid for the various items of work and no additional compensation will be allowed therefor.

## **10-4 METER REPLACEMENT AND ENDPOINT INSTALLATION**

### **10-4.01 General**

The City does not have a readily identified property available to offer as a staging area for use by proposers. Use of unused portions of City property which are not explicitly open to public use or actively used by City operations may be proposed in the written proposal for consideration by the City.

All quantities are estimated for the purposes of cost comparison and establishment of contract values. Actual quantities will be verified through the meter audit and the contract quantities will be adjusted.

All existing services and supply wells have meters which are to be removed and disposed of by the Contractor. All existing services have touch-read AMR units which are to be removed and disposed of by the Contractor.

The City has selected Mueller Systems to provide the meters and advanced metering infrastructure (AMI) endpoints for the project at a pre-negotiated price. The negotiated not-to-exceed list pricing and supply conditions for the estimated quantities of metering equipment listed in the quote from Mueller is provided in Appendix C of these Specifications and will be used by Mueller for selling those materials directly to the Contractor under this contract. The Contractor shall purchase the meters and endpoints specified directly from Mueller.

The Contractor shall contract directly with Mueller to obtain the parts and equipment according to that quote to the extent the listed estimate of parts and equipment is required for completion of the work required under this contract. The provisions and requirements of this specification do not in any form relieve the Contractor of the obligation to obtain any materials which are listed and described in these specifications for the completion of work under this contract.

The Contractor shall have sole responsibility for arrangement of purchase, coordination of delivery and storage of the materials required for performance of work included in this contract.

The Contractor will purchase the following new meters and endpoints for required sizes at the pre-negotiated, not-to-exceed list price provided by the City's selected vendor.

- Mueller / Mi.Net<sup>®</sup> M Node End Points w/Nicor Connector
- Mueller / Solid State Meter (SSM)
- Mueller / HbMag Meter

All meter, encoder, and endpoint installations shall be completed in conformance with ALL applicable Mueller Installation Manuals and AWWA standards, including, but not limited to, the following:

- Mi.Node M Installation User Guide
- Mi.Tech Install Tool User Guide
- Mueller Solid State Meter (SSM) Installation Guide
- Mueller HbMag Installation Guide
- All applicable AWWA standards

Mueller is contracted with the City to provide training to the contractor's installers which will include both classroom training and field training. Contractor should plan for all installers to spend up to one full work day in training with Mueller prior to beginning the meter installation effort.

The City does not know how many 1", ¾", or 5/8" meters are currently in place. An estimate has been provided based on record data, but the Contractor is responsible for verification of all meter sizes during

the meter box audit prior to performing meter replacement. Contractor is fully responsible for verifying the number of existing meters in each size and ordering appropriate quantities from Mueller.

#### **10-4.02 Service Water Meter Replacement**

The City's current general metered service specifications are included in the City's Standard Specifications located on the City's website. All work shall be completed in accordance with the City Standards. The work to be performed under this item includes:

- A. Replace water meters – Remove and replace existing water meters with meters of the same size. The City will provide personnel to assist contractor with locating meters that the contractor is unable to reasonably locate.
- B. Meter replacement plan – All meters must be replaced in four consecutive months from the start of the installation effort. Provide a phasing plan and replacement schedule in accordance with Section 10-1.02.
- C. Contractor shall provide reports to the City describing nonstandard meter installations, plumbing modifications, and lid and box replacements. Contractor shall provide a report for each work zone upon completion of a zone.
- D. Contractor shall prevent all foreign material from entering the water meter while being installed. Any parts, tools, construction debris, or other foreign material that accidentally enters the meter or service line must be recovered before installation of the water meter.
- E. Contractor shall take all necessary precautions to keep meter and meter parts clean and sanitary during installation and plumbing modifications in accordance with AWWA C651 and to the satisfaction of the City. Any disinfection requirements shall conform to AWWA C651.
- F. All water meters shall be replaced and placed back into service as soon as possible. No water service shall remain out of service without prior approval of the Engineer. All debris resultant from the Contractor's excavation or construction operation shall be removed from each site the same day at the Contractor's expense. No excess materials shall be dumped or drained into the storm drains or sewer. All materials removed shall be disposed outside of the right-of-way, which shall be left with a clean and finished appearance. Any water service lines, meter couplings, angle meter valves, service fittings, irrigation lines, sprinkler heads, meter boxes or lids damaged during excavation or installation shall be repaired and water tested with the City's inspector present, prior to any backfill or pouring of sidewalk or concrete pad.
- G. All existing landscaping, ground cover, grass, plants, shrubs, and/or trees, which are damaged during construction, shall be replaced with the same type or approved variety within 48 hours.
- H. Contractor shall be responsible for disposal of all existing meters that are taken out of service.
- I. Where a new meter has been installed or other modifications are performed on the water service plumbing under this contract, the Contractor shall perform the flushing from the hose bib nearest to or on the water piping where it enters the home. Contractor shall flush the service for a minimum of two (2) minutes. If the service water fails to clear, the Contractor shall cooperate with the City to clear the water under a time & materials extra work basis.
- J. Many of the new meters will be installed in existing small boxes where the box will not be changed out. Contractors are encouraged to field review the existing conditions in order to provide pricing.

- K. Meter installation shall be performed in conjunction with the installation of the AMI endpoints.

The City anticipates that there are some existing 5/8" meters, but it is unknown how many there are. For services with existing 5/8" meters, Contractor shall perform minor modifications in accordance with Section 10-4.08 to install a new 3/4" meter in place of the existing 5/8" meter.

It is expected that the majority of the existing 3/4" meters have a 7.5" lay length, but there are likely some meters with a 9" lay length. Contractor will need to identify existing lay lengths during the meter box audit process and order the correct meter.

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to replace the City's existing 1,151 demand meters of various sizes (Bid Items No. 3a through 3c). All existing demand meters shall be replaced at the unit price provided, regardless of quantity.

This item does not include the cost to furnish the demand water meters. Demand meters will be furnished under Bid Items No. 13a-13h.

#### **10-4.03 Water Service Shutdowns for Water Meter Replacement**

Water service shutdowns for water meter replacement will be approved once complete preparation, satisfactory to the Engineer, is made to minimize the length of time for any shutdown. For commercial establishments, the Contractor shall coordinate the shutdown with the property owner or tenant to minimize disruptions to their business.

Contractor shall notify all property owners adjacent to the work seven (7) days prior to commencing any work. The Contractor shall also be responsible for issuing a second notice to property owners twenty-four hours in advance of commencing work. Notifications shall be in accordance with Section 10.2.18 and as shown in Appendix D. Once any service is interrupted, the Contractor shall work continuously and diligently to complete the work required under the service outage and restore service as quickly as reasonably achievable. **Normal time of interruption of water service for meter work shall be less than one (1) hour. Maximum time of interruption of water service to any residence or business shall be four (4) hours.**

#### **10-4.04 Supply Meter Replacement (Bid Item No. 4)**

The work to be performed under this item includes:

- A. Replacement of the six (6) existing City supply meters – Remove and replace existing water meters with meters of the same size. The City will provide personnel to assist contractor with access to the well sites.
- B. Meter replacement at the supply wells must be coordinated with the City. Provide a replacement schedule and coordinate all shutoffs and replacements with the City.
- C. Contractor shall prevent all foreign material from entering the water meter while being installed. Any parts, tools, construction debris, or other foreign material that accidentally

- enters the meter or service line must be recovered before installation of the water meter.
- D. Contractor shall take all necessary precautions to keep meter and meter parts clean and sanitary during installation and plumbing modifications in accordance with AWWA C651.
  - E. Mains shall be disinfected in accordance with AWWA C651.
  - F. Meters shall be replaced and placed back into service as soon as possible. No water service shall remain out of service without prior approval of the Engineer. All debris resultant from the Contractor's construction operation shall be removed from each site the same day at the Contractor's expense. No excess materials shall be dumped or drained into the storm drains or sewer. All materials removed shall be disposed outside of the right-of-way, which shall be left with a clean and finished appearance. Any water service lines, meter couplings, angle meter valves, service fittings, irrigation lines, sprinkler heads, meter boxes or lids damaged during excavation or installation shall be repaired and water tested with the City's inspector present, prior to any backfill or pouring of sidewalk or concrete pad.
  - G. All existing landscaping, ground cover, grass, plants, shrubs, and/or trees, which are damaged during construction, shall be replaced with the same type or approved variety within 48 hours.
  - H. Contractor shall be responsible for disposal of all existing meters that are taken out of service.
  - I. Replacement of City supply meters has the following additional requirements:
    1. No more than one City well can be out of service at a time. Plan replacement of supply meters to allow for testing and reactivation of previous installations before the next well is taken out of service.
    2. Replacement of City supply meters shall include the installation of two plain end spools and flanged adaptors. A downstream test port (3") shall be included in one of the spools to allow for calibration testing. Installation of the test port shall be performed in the same operation as replacement of the respective supply meter.
    3. Plan and prepare for supply meter replacement and related work to be performed and complete within four hours of deactivation of the respective well, including the test port installation.
    4. It is anticipated that in order to install replacement supply meters with a test port at wells or on supply system, Contractor will have to remove additional fittings and/or cut into existing piping and install a special spool and an additional restrained joint mechanical fitting with the new meter. Special coordination will be required to schedule shutdowns for supply meter installation. Contractor shall submit a replacement plan for each well site. Photos of the 6 existing supply meters being replaced as part of this project are included in Appendix F. Photos demonstrate existing site conditions as well as adjacent piping and fittings.

**Table 3 - Supply Well Replacement Details**

<b>Location</b>	<b>Location Description</b>	<b>Meter Size</b>	<b>Work to be done</b>
Well #3	208 4 <sup>th</sup> Street (City of Wheatland Corp Yard)	8"	Replace meter and add test port
Well #4	413 2 <sup>nd</sup> St	6"	Replace meter and add test port

	(2 <sup>nd</sup> and Olive)		
Well #5	511 Evergreen Dr	6"	Replace meter and add test port
Well #5	511 Evergreen Dr (secondary meter)	8"	<b>No changes</b>
Well #6	1010 Wheatland Rd (Southeast corner of Wheatland High School)	6"	Replace meter and add test port
Well #7	McCurry Street	6"	Replace meter and add test port
Well #8	Carpenter Way	6"	Replace meter and add test port

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to replace the City's existing supply meters, connect the new supply meter to existing SCADA system, utilizing existing wiring, and install a spool with test port at each new meter in accordance with these Special Provisions (Bid Item No. 4). This item does not include the cost to furnish the water meters. Supply meters will be furnished under Bid Items No. 13h-13j. Not-to-exceed list pricing provided by Mueller in Appendix C includes two MJxPE spools (one of which will include a 3" test port) and one HYMAX GRIP® for each supply meter.

#### **10-4.05 New 6" Supply Meter Installation (Bid Item No. 5)**

One **new** 6" supply meter shall be installed at the City corporation yard on an existing vertical 6" pipe on the City's ground level storage tank. Photos of the installation location are included in Appendix G.

Work under this item includes:

- Installation of one 6" Mueller HbMag meter on existing 6" line
- Cut pipe and install flanged coupling adapter, spool, and spool with 3" test port. Coat spools and FCAs to match tank color.
- Furnish and install approximately 40 LF of 3/4" diameter rigid conduit between the new meter to the exterior wall of the building. Provide pull rope and seal ends with electrical tape.
- Associated trench pavement repair
- Disinfection and testing in accordance with applicable AWWA standards
- Phasing of work and/or bypass of the 6" main to limit shutoff to 2 hours max.

All work shall be scheduled and coordinated with the City. Water main shutoff shall be no longer than two (2) hours. If time needed to complete the work exceeds 2 hours, contractor shall prepare and implement a bypass plan to the satisfaction of the City Engineer, at no additional cost.

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to supply a new 6" supply meter and necessary fittings, conduit, excavation, and pavement repair in accordance with City standards and these specifications. This item does not include the cost to furnish the water meter. The 6" supply meter will be furnished under Bid Item No. 13h.

#### **10-4.06 New 12" Supply Meter Installation (Bid Item No. 6)**

One new 12" supply meter shall be installed at the City corporation yard on an existing 12" water main. Photos of the installation location as well as a site plan of the existing piping and meter vault detail are included in Appendix H.

Installation of the meter and vault shall be in accordance with the detail provided in Appendix H. Work under this item includes:

- Installation of one 12" Mueller HbMag meter on existing 12" line
- Cut pipe and install meter with downstream spool with 3" test port
- Furnish and install precast meter vault in accordance with the details provided in Appendix H
- Furnish and install one 12" resilient wedge gate valve upstream of the meter and vault
- Furnish and install approximately 20 LF of 3/4" diameter rigid conduit between the new vault and the existing communications pull box.
- Associated trench pavement repair
- Disinfection and testing in accordance with applicable AWWA standards
- Phasing of work and/or bypass of the 12" main to limit shutoff to 2 hours max.

All work shall be scheduled and coordinated with the City. Water main shutoff shall be no longer than two (2) hours. If time needed to complete the work exceeds 2 hours, contractor shall prepare and implement a bypass plan to the satisfaction of the City Engineer, at no additional cost.

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to supply a new 12" supply meter, fittings, vault, gate valve, conduit, excavation, and pavement repair in accordance with City standards and these specifications. This item does not include the cost to furnish the water meter. The 12" supply meter will be furnished under Bid Item No. 13j.

#### **10-4.07 Water Meter Plumbing Modification - 5/8", 3/4", 1", 1½", and 2" (Bid Item No. 7)**

This item includes modifications of water meter plumbing where required to raise the plumbed depth of the water meter. Modifications are expected to include connection to existing meter valve, piping as needed, installing new meter valve, installing new service-side piping and customer shut-off valve, connecting to existing customer piping, and resetting the existing meter box to grade. Valves shall be brass ball valves and all work shall conform to the detail included in Appendix E.

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to perform the work specified herein including but not limited to: remove the double stacked boxes (if applicable), modify the existing piping to raise the existing meter to fit within a standard meter box depth in conjunction with the installation of a new ¾"-inch, 1-inch, 1½-inch or 2-inch meter, and reset the meter box to grade.

This item does not include the cost to furnish the water meters themselves. Water meters will be furnished under a separate bid item. The number of existing services that require plumbing modifications to raise the water meter is unknown. All existing services that are required to be raised shall be modified at the unit price bid, regardless of quantity.

#### **10-4.08 Minor Plumbing Modifications - 5/8" (Bid Item No. 8)**

The City anticipates that there are some existing 5/8" meters, but it is unknown how many there are. For services with existing 5/8" meters, Contractor shall change the spud pieces on the existing service to accommodate a new 3/4" meter in place of the existing 5/8" meter.

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to perform the work specified herein including but not limited to: replace meter spud pieces to accommodate the threads of a new 3/4"-inch meter. This item does not include the cost to furnish the water meters themselves. Water meters will be furnished under a separate bid item. The number of existing 5/8" meters that require minor modifications to receive a 3/4" meter is unknown. All existing 5/8" services that are required to be modified shall be modified at the unit price bid, regardless of quantity.

#### **10-4.09 Meter Pit Cleanout (Bid Item No. 9)**

If box is full of debris/dirt, Contractor shall remove dirt and debris to below bottom of meter as needed to perform contract work.

Unit cost amount bid shall include all labor, materials, tools, equipment, and incidentals to remove debris/dirt from meter box and off haul as required by these specifications. The number of meter pits that need cleaning is unknown. All meter pits that are required to be cleaned out shall be cleaned at the unit price bid, regardless of quantity.

#### **10-4.10 Water Meter Box Lid Replacement (Bid Item No. 10)**

Details for water services detail the meter box and lid requirements and are included in Attachment E. All work shall be completed in accordance with the City Standards except where the detail provided varies from the detail provided in these specifications.

Meter box lids shall only be replaced if the lid is cracked or broken.

The scope for this item includes the removal and disposal of the existing meter box lid, and furnish and install new lid.

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to replace as needed any water meter box lid to make the AMI system function at the intended capacity. The number of meter box lids needing replacement is approximate. All meter box lids that are required to be replaced shall be replaced at the unit price bid, regardless of quantity.



#### **10-4.11 Water Meter Box Replacement (Bid Item No. 11)**

A modified City Standard Detail for water services including the meter box and lid replacement requirements and are included in Attachment E. All work shall be completed in accordance with the City Standards except where the standard details vary from the modified details provided in these specifications.

Boxes shall be replaced only if the existing meter box is broken or structurally inadequate.

The scope for this item includes replacement of water meter box per detail in Appendix E and disposal of the existing broken box. Lid replacement shall be accounted separately under Bid Item No. 10.

Unit price amount bid shall include all labor, materials, tools, equipment, and incidentals to replace any water meter box with existing damage or install new water meter box as needed to accommodate new water meter. The number of meter boxes needing replacement is approximate. All meter boxes that are required to be replaced shall be replaced at the unit price provided, regardless of quantity.

#### **10-4.12 Driveway Repair (Bid Item No. 12)**

The City anticipates approximately 25 existing meters that are located in driveways will require plumbing modifications and/or box replacement. Driveways affected by meter replumbing and/or box replacement shall be repaired to match existing conditions or better. This item only includes plain concrete replacement with medium broom finish. Special materials and finishes, if required will be handled under time and materials accounting. Assume that approximately 30 square feet (5'x6') of existing concrete driveway per service will require replacement. Meter plumbing modification shall be accounted for separately under Bid Item No. 7. Meter box replacement shall be accounted for separately under Bid Item No. 11.

Payment of this item will be made on a per service basis at the unit price bid per each location. The price bid per location shall include all labor, materials, tools, equipment, and incidentals to repair the existing concrete driveway after performing water meter plumbing modifications and meter box replacement. 30 square-feet of driveway repair is anticipated for each affected service.

This item does not include the cost to furnish and install the water meter box or replumb the existing service. Water meter box replacement will be supplied under Bid Item No. 11. Water meter plumbing modification will be supplied under Bid Item No. 7.

All driveway repairs that are necessary to accommodate plumbing modifications and/or meter box replacement shall be performed at the unit price provided, regardless of quantity.

#### **10-4.13 Furnish Water Meters (Bid Item No. 13a through 13j)**

The scope for this item includes:

- A. Furnish 1,151 service (demand) meters and 8 supply meters to the City per the following table and specifications:

Bid Item No.	Meter Size / Use	Quantity	Meter Make / Model
13a	¾" / service	614	Mueller / SSM
13b	1" / service	495	Mueller / SSM
13c	1½" / service	22	Mueller / SSM
13d	2" / service	15	Mueller / SSM
13e	3" / service	1	Mueller / HbMag
13f	4" / service	1	Mueller / HbMag
13g	6" / service	3	Mueller / HbMag
13h	6" / supply*	6	Mueller / HbMag
13i	8" / supply*	1	Mueller / HbMag
13j	12" / supply	1	Mueller / HbMag

\*Pre-Negotiated pricing for 6" and 8" supply meters includes one PExMJ spool, one PExMJ spool with 3" test port, and HYMAX GRIP®.

**10-4.14 Furnish AMI Endpoint (Bid Item No. 14)**

The scope for this item includes furnishing 1,151 Mueller Mi.Net® M Node AMI endpoints and mounting hardware.

The not-to-exceed pricing provided by Mueller includes the cost of one Through the Lid Hanger (TTL-H) per endpoint purchased.

This item does not include the cost to install AMI endpoints. Endpoint installation will be supplied under Bid Item No. 15.

Unit price amount bid to furnish AMI endpoints at each of the City's demand meters shall be based on the not-to-exceed list pricing provided by Mueller included in Appendix C.

**10-4.15 Installation of AMI Endpoint (demand meters only) (Bid Item No. 15)**

The scope for this item includes:

- A. Install AMI endpoints being furnished under Bid Item No. 14 per the manufacturer's recommendations. Mount endpoint in lid of meter box or otherwise as required per

manufacturer's recommendations. Any requirement to mount the endpoint or an antenna outside the meter box shall be subject to City approval.

- B. Mount and equipment shall not create a vertical lip greater than ¼ inch above the lid with the lid fully seated in the meter box.
- C. Install contractor shall verify successful installation and communication of the endpoint with the network in field by using the Mueller Mi.Tech Handheld Installation tool test function prior to leaving the service address.

Unit price amount bid to install AMI endpoints at each demand meter shall include manufacturer recommended mounting in lid or box with all required hardware and fittings.

#### **10-4.16 Meter Activation and Activation Confirmation**

Installation of the MIU endpoints and association of each endpoint with the customer account requires the use of a Mueller Mi.Tech Field Installation Tool. The Contractor shall provide a Mueller Mi.Tech Field Installation Tool to be used for all endpoint installations and activations. The contractor may purchase the installation tool(s) from Mueller for use on this project at the unit price provided in Appendix C. Installer shall immediately activate the endpoint and use the Mi.Tech Field Installation Tool to confirm activation of each meter endpoint prior to leaving the installation site.

#### **10-4.17 Disinfection and Pressure Testing of Water Services**

Disinfection and pressure testing of water services shall conform to AWWA C651.

#### **10-4.18 Measurement and Payment**

Full compensation for compliance with and work items required under this 10-4 "Meter Replacement and Endpoint Installation" section which are not otherwise specified shall be considered as having been included in the price paid for the various items of work and no additional compensation will be allowed therefor.

# **APPENDIX**

APPENDIX A: PROJECT (CITY-WIDE) MAP

APPENDIX B: SAMPLE PROJECT SITE ADDRESS DATA

APPENDIX C: NOT TO EXCEED LIST PRICING FROM MUELLER SYSTEMS

APPENDIX D: EXAMPLE NOTIFICATION LETTERS

APPENDIX E: MODIFIED CITY STANDARD DETAILS

APPENDIX F: CITY SUPPLY METER REPLACEMENT LOCATION PHOTOS

APPENDIX G: NEW 6-INCH CITY SUPPLY METER INSTALLATION

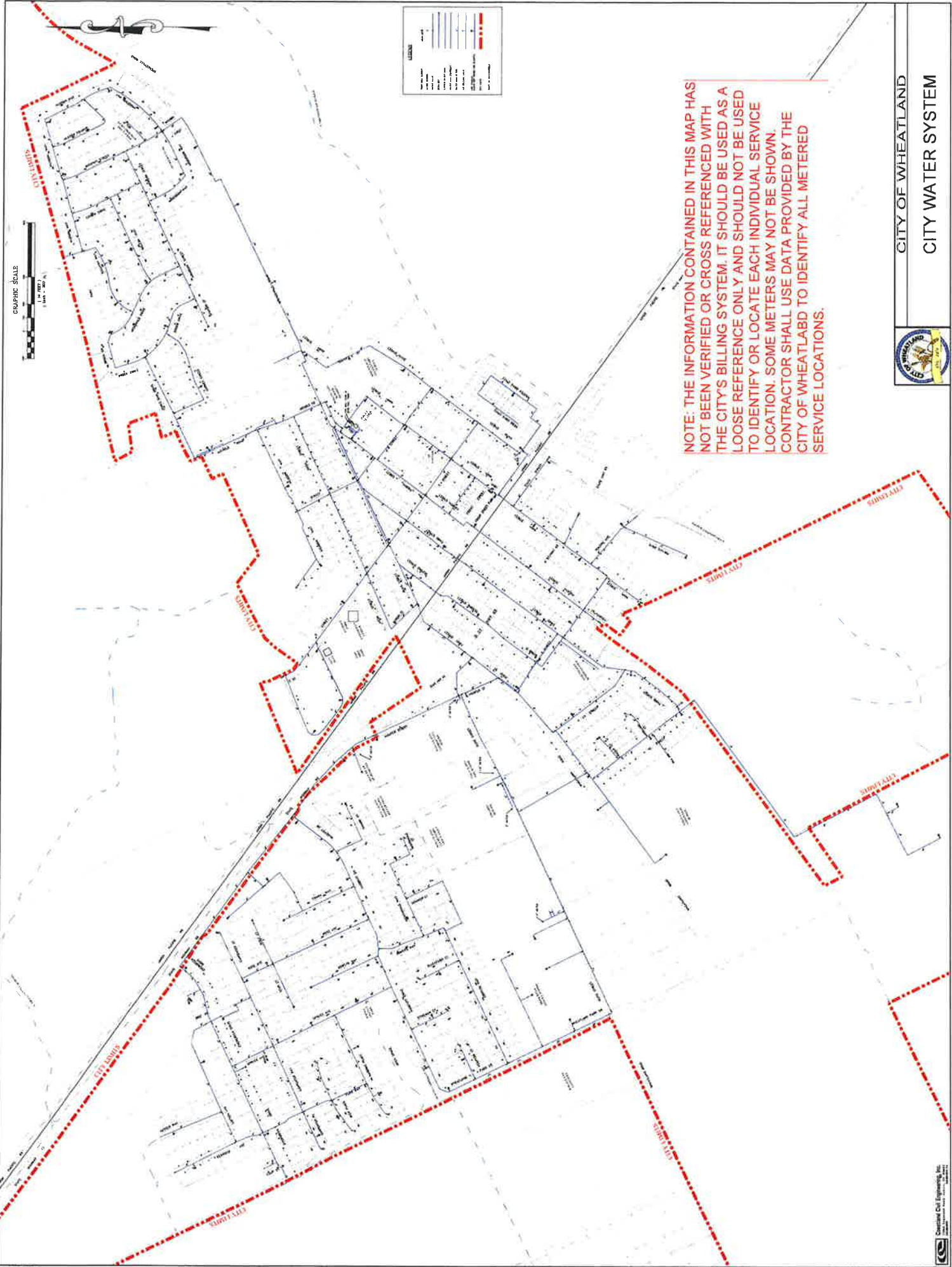
APPENDIX H: NEW 12-INCH CITY SUPPLY METER INSTALLATION

APPENDIX I: SPECIAL WAGE DETERMINATION

# **Appendix A**

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Project (City-Wide) Map



NOTE: THE INFORMATION CONTAINED IN THIS MAP HAS NOT BEEN VERIFIED OR CROSS REFERENCED WITH THE CITY'S BILLING SYSTEM. IT SHOULD BE USED AS A LOOSE REFERENCE ONLY AND SHOULD NOT BE USED TO IDENTIFY OR LOCATE EACH INDIVIDUAL SERVICE LOCATION. SOME METERS MAY NOT BE SHOWN. CONTRACTOR SHALL USE DATA PROVIDED BY THE CITY OF WHEATLAND TO IDENTIFY ALL METERED SERVICE LOCATIONS.

CITY OF WHEATLAND  
CITY WATER SYSTEM



## **Appendix B**

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### **Project Site Address Data Sample**

City-wide service address data will be provided to the awarded contractor in excel format

### Utility Billing - Address Information

\*\*Active Accounts - Sorted by Location ID

Location ID	Cycle	Section	Read Seq #	ACTIVE ACCOUNTS
AND1-000094-0000-01	001	RT1	0000002830	94 ANDERSON WAY
AND1-000098-0000-01	001	RT1	0000002840	98 ANDERSON WAY
AND1-000099-0000-01	001	RT1	0000001000	99 ANDERSON WAY
AND1-000156-0000-01	001	RT1	0000002810	156 ANDERSON WAY
AND1-000158-0000-01	001	RT1	0000002800	158 ANDERSON WAY
AND1-000160-0000-02	001	RT1	0000002790	160 ANDERSON WAY
AND1-000161-PARK-00	001	RT1	0000001010	ANDERSON WAY #PARK
AND1-000162-0000-02	001	RT1	0000002780	162 ANDERSON WAY
AND1-000164-0000-02	001	RT1	0000002770	164 ANDERSON WAY
AND1-000166-0000-04	001	RT1	0000002760	166 ANDERSON WAY
AND1-000168-0000-01	001	RT1	0000002750	168 ANDERSON WAY
AND1-000169-0000-01	001	RT1	0000001020	169 ANDERSON WAY
AND1-000171-0000-01	001	001	0000001030	171 ANDERSON WAY
AND1-000172-0000-01	001	RT1	0000002730	172 ANDERSON WAY
AND1-000173-0000-01	001	RT1	0000001040	173 ANDERSON WAY
AND1-000174-0000-01	001	RT1	0000002720	174 ANDERSON WAY
AND1-000175-0000-01	001	RT1	0000001050	175 ANDERSON WAY
AND1-000176-0000-01	001	RT1	0000002710	176 ANDERSON WAY
AND1-000177-0000-01	001	001	0000001060	177 ANDERSON WAY
AND1-000178-0000-01	001	RT1	0000002700	178 ANDERSON WAY
AND1-000179-0000-01	001	RT1	0000001070	179 ANDERSON WAY
AND1-000180-0000-01	001	RT1	0000002690	180 ANDERSON WAY
AND1-000182-0000-01	001	RT1	0000002680	182 ANDERSON WAY
BLAC-000502-0000-01	001	RT5	0000012820	502 BLACKFORD CT
BLAC-000503-0000-03	001	001	0000012740	503 BLACKFORD CT
BLAC-000504-0000-01	001	RT5	0000012810	504 BLACKFORD CT
BLAC-000505-0000-01	001	RT5	0000012750	505 BLACKFORD CT
BLAC-000506-0000-01	001	RT5	0000012800	506 BLACKFORD CT
BLAC-000508-0000-02	001	RT5	0000012790	508 BLACKFORD CT
BLAC-000509-0000-02	001	RT5	0000012770	509 BLACKFORD CT
BOW1-000400-0000-01	001	RT5	0000010260	400 BOWERS WAY
BOW1-000402-0000-01	001	RT5	0000010250	402 BOWERS WAY
BOW1-000501-0000-01	001	001	0000012860	501 BOWERS WAY
BOW1-000503-0000-01	001	RT5	0000012870	503 BOWERS WAY
BOW1-000507-0000-01	001	RT5	0000012880	507 BOWERS WAY
BOW1-000600-0000-01	001	RT5	0000012910	600 BOWERS WAY
BOW1-000601-0000-02	001	RT5	0000009940	601 BOWERS WAY
BOW1-000602-0000-01	001	RT5	0000012900	602 BOWERS WAY
BOW1-000603-0000-01	001	RT5	0000009950	603 BOWERS WAY
BOW1-000700-0000-02	001	RT5	0000009930	700 BOWERS WAY
BOW1-000701-0000-01	001	RT5	0000009760	701 BOWERS WAY
BOW1-000702-0000-02	001	RT5	0000009920	702 BOWERS WAY
BOW1-000703-0000-01	001	RT5	0000009770	703 BOWERS WAY
BOW1-000704-0000-01	001	RT5	0000009910	704 BOWERS WAY
BOW1-000705-0000-01	001	RT5	0000009780	705 BOWERS WAY
BOW1-000707-0000-02	001	RT5	0000009790	707 BOWERS WAY
BOW1-000708-0000-01	001	RT5	0000009890	708 BOWERS WAY
BOW1-000709-0000-00	001	RT5	0000009800	709 BOWERS WAY
BOW1-000710-0000-01	001	RT5	0000000000	710 BOWERS WAY
BOW1-000711-0000-00	001	RT5	0000009810	711 BOWERS WAY
BOW1-000712-0000-00	001	RT5	0000009870	712 BOWERS WAY
BOW1-000713-0000-00	001	RT5	0000009820	713 BOWERS WAY
BOW1-000714-0000-00	001	RT5	0000009860	714 BOWERS WAY
BOW1-000715-0000-02	001	RT5	0000009830	715 BOWERS WAY
BOW1-000716-0000-00	001	RT5	0000009850	716 BOWERS WAY
BOW1-000717-0000-03	001	RT1	0000009840	717 BOWERS WAY



## **Appendix C**

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Not to Exceed List Pricing From Mueller Systems

**PRE-NEGOTIATED LIST PRICE VALUES FOR MUELLER METER AND ENDPOINT EQUIPMENT**

Associated Bid Item	Description	Estimated Quantity	Units	Unit Price <sup>1</sup>
13a	¾" Water Meters (Mueller SSM)	614	EA	\$98.00
13b	1" Water Meters (Mueller SSM)	495	EA	\$170.00
13c	1-1/2" Water Meters (Mueller SSM)	22	EA	\$435.00
13d	2" Water Meters (Mueller SSM)	15	EA	\$552.00
13e	3" Water Meters (Mueller SSM)	1	EA	\$2,798.00
13f	4" Water Meters (Mueller SSM)	1	EA	\$3,212.00
13g	6" Water Meters (demand) (Mueller HbMAG)	3	EA	\$5,089.00
13h	6" Water Meters (supply) <sup>2</sup> (Mueller HbMAG)	6	EA	\$5,089.00
13i	8" Water Meters (supply) <sup>2</sup> (Mueller HbMAG)	1	EA	\$7,203.00
13j	12" Water Meters (supply) <sup>3</sup> (Mueller HbMAG)	1	EA	\$11,096.98
14	Endpoint <sup>4</sup> (Mueller Mi.Node)	1,151	EA	\$72.00
N/A	Mi.Tech Handheld Installation Device	1	EA	\$5,000.00

<sup>1</sup>Unit price does not include sales tax or shipping and handling

<sup>2</sup>6" and 8" supply meter list price includes two PExMJ spools with HYMAX GRIP®, one spool for each meter includes a 3" test port.

<sup>3</sup>12" supply meter list price includes one PExMJ spool with 3" test port and HYMAX GRIP®

<sup>4</sup>Endpoint list price includes one through-the-lid hanger (TTL-H) per endpoint purchased

# Appendix D

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Example Notification Letters

## NOTIFICATION LETTERS

**[Distribute 7 working days prior to beginning work]**

Dear Resident,

The City of Wheatland awarded a construction contract to (Contractor) to install new Advanced Metering Infrastructure water meters at commercial and residential properties in your neighborhood. The purpose of this City-wide project is to convert the City's water consumption metering system to an automated reading system, provide leak detection, and promote water conservation.

During the course of construction, on street parking may be temporarily removed to accommodate traffic and construction work. Access to your driveway may be temporarily restricted when construction takes place in front of your house. At the end of each work day, we will open all lanes of traffic to the public. Our work hours are typically between 7 AM to 5 PM.

**Your water service may be temporarily shut-off for a short period of time not more than 4 hours, between the hours of 7:30 AM and 3:30 PM. This work is currently scheduled for <Insert Date>.**

We may need access to your backyard to complete this work. Please provide access to your backyard and make arrangements for any pets that may be a problem. **If special arrangements are required, please contact <Contractor Superintendent> at <phone number> or a project representative listed below.** Once the meter has been installed we may need to use your hose bib and garden hose to flush the line.

General public and construction crew safety is of primary concern to us and we encourage you to observe the construction signs. We realize this construction project may be a temporary inconvenience and we will strive to minimize the impacts to our residents.

**If you have any questions or problems, please contact any one of the project representatives listed below:**

**Contractor Superintendent:** <Name, Phone Number>

**City Inspector:** <Name, Phone Number>

**City Project Manager:** <Name, Phone Number>

Thank you for your cooperation on this very important project.

[Distribute 24 hours prior to beginning work]

Dear Resident,

**Your water service will be temporary shut-off tomorrow for a short period of time not more than 4 hours, between the hours of 7:30 AM and 3:30 PM.**

We may need access to your backyard to complete this work. Please provide access to your backyard and make arrangements for any pets that may be a problem. **If special arrangements are required, please contact <Contractor Superintendent> at <phone number> or a project representative listed below.** Once the meter has been installed we may need to use your hose bib and garden hose to flush the line.

**Contractor Superintendent:** <Name, Phone Number>

**City Inspector:** <Name, Phone Number>

**City Project Manager:** <Name, Phone Number>

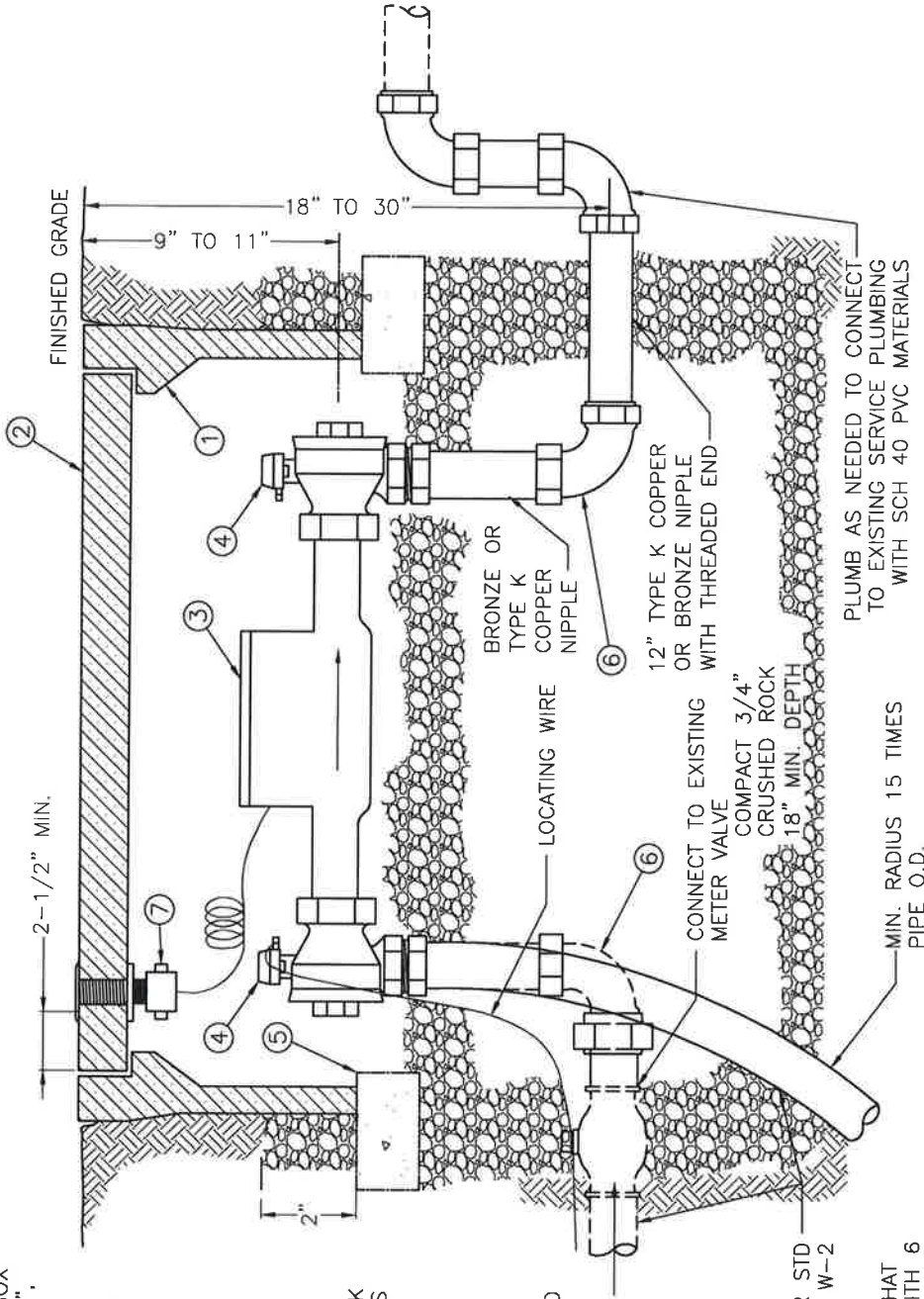
Thank you for your cooperation on this very important project.

# Appendix E

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## Modified City Standard Details

- ① REINFORCED CONCRETE UTILITY BOX (CHRISTY N36 FOR 1-1/2" & 2", N30 FOR 1", OR EQUAL)
- ② COMPOSITE OR FIBRELYTE NON-CONCRETE LID WITH PROBE HOLE OPTION (CHRISTY N30RP, N36RP, OR FL36P OR EQUAL).
- ③ MUELLER SOLID STATE METER (SSM)
- ④ BRONZE ANGLE METER STOP BALL VALVE WITH LOCK-WING
- ⑤ SUPPORT FULL BOX PERIMETER UNIFORMLY WITH CONCRETE BRICK OR BLOCK. COVER ANY OPENINGS OR HOLES IN THE SIDE OF BOX WITH BRICK OR BLOCK.
- ⑥ BRONZE COMPRESSION BY THREADED 90° FITTING.
- ⑦ MUELLER MI-NET M NODE ENDPOINT WITH THROUGH THE LID HANGER (TTL-H)



NOTE:  
ALL METALLIC PIPES AND FITTING THAT ARE BURIED SHALL BE ENCASED WITH 6 MIL PLASTIC SO THAT NO SOIL IS IN CONTACT WITH THE PIPES AND FITTINGS.

PLUMB AS NEEDED TO CONNECT TO EXISTING SERVICE PLUMBING WITH SCH 40 PVC MATERIALS

CONNECT TO EXISTING METER VALVE COMPACT 3/4" CRUSHED ROCK 18" MIN. DEPTH MIN. RADIUS 15 TIMES PIPE O.D.



DEPARTMENT OF PUBLIC WORKS

REPLUMB EXISTING RESIDENTIAL SERVICE, METER REPLACEMENT, BOX REPLACEMENT, AND LID REPLACEMENT FOR AMI PROJECT

SCALE: NONE  
DATE: MAY 2020

REVISED STD W-3

# **Appendix F**

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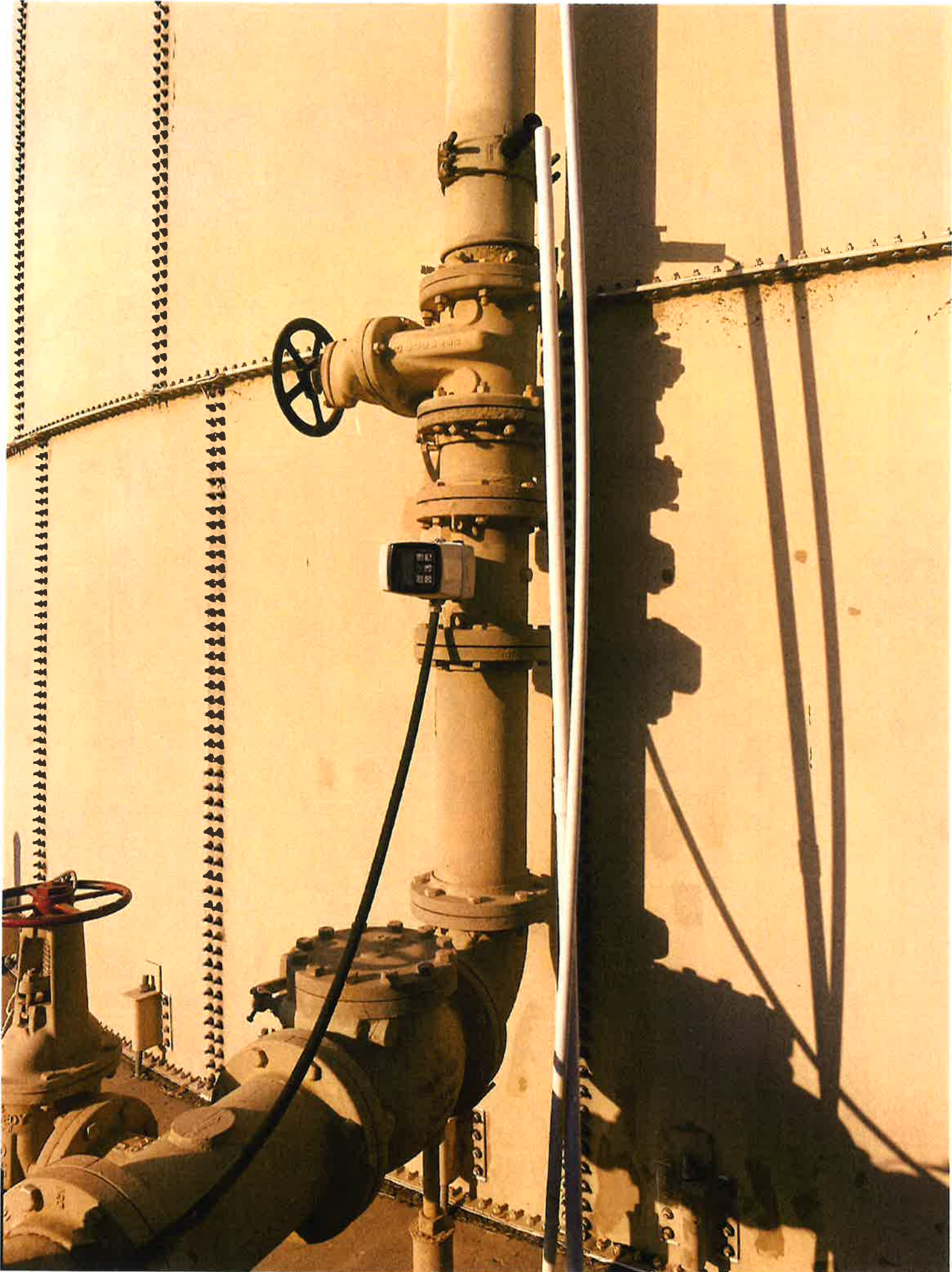
## City Supply Meter Replacement Location Photos



## Well #3 Existing Meter and Site Photos

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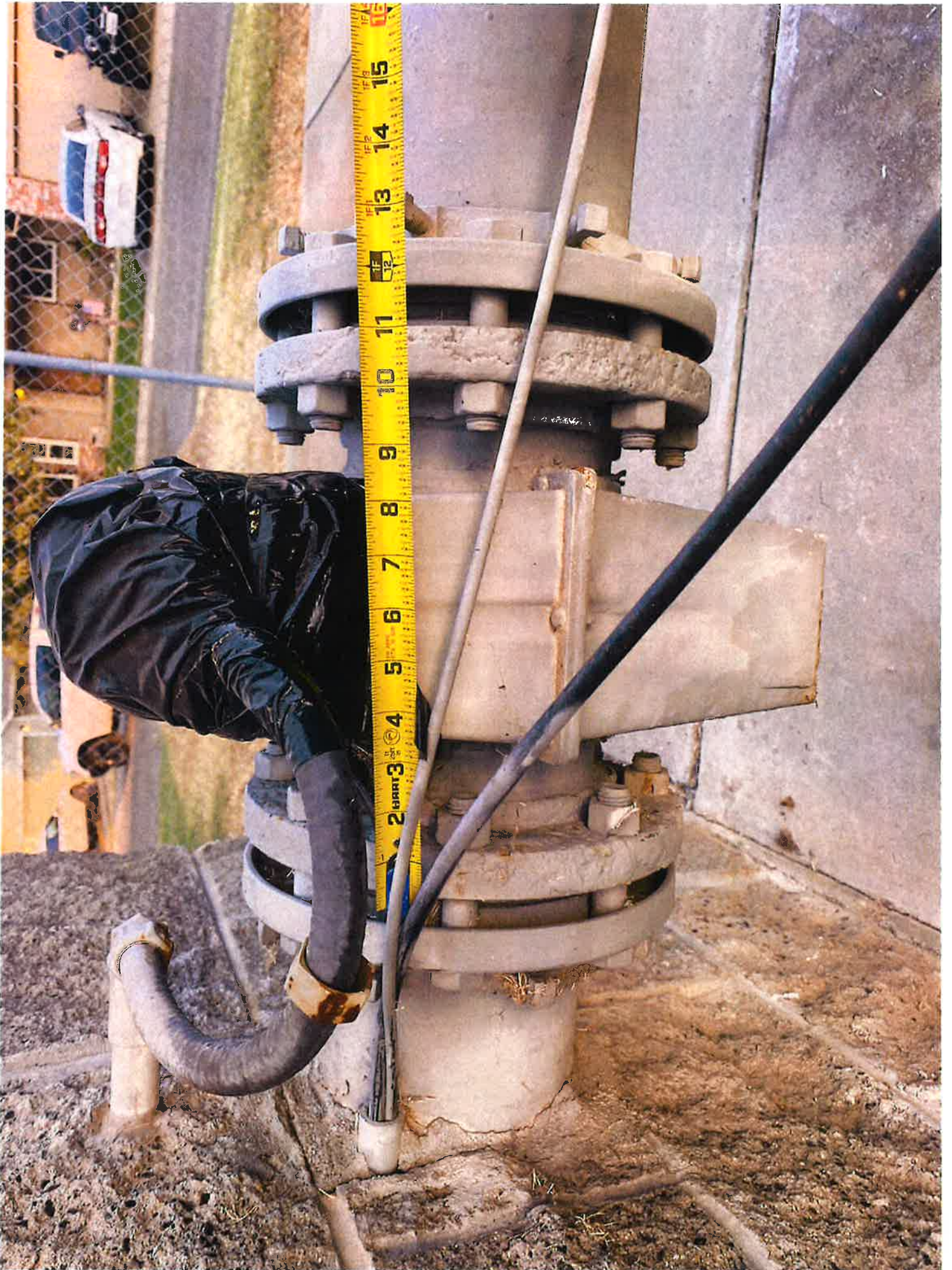




## Well #4 Existing Meter and Site Photos

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## Well #5 Existing Meter and Site Photos

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FLOW →

COOK	
SER. NO.	P. MAX.
TAG. NO.	T. PROC.
CAL. FACT. 1	T. AMR.
CAL. FACT. 234	

## Well #6 Existing Meter and Site Photos

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← FLOW →

CODE	10000000000000000000	700-0000
SER. NO.	000000000000000000	
TAG. NO.		
CAL. FACT.	1.0000	
CN. FACT.	0.0000	
DATE		
BY		
TESTED		

## Well #7 Existing Meter and Site Photos

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## Well #8 Existing Meter and Site Photos

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SIEMENS

5000



**SIEMENS**

SITRANS F M MAGFLO  
MAG5000

Code No. 7MA5210-1AA10-1AA01

Serial No. 1119317106 100000 1706

IP 67

Typical

Max. process temperature 50 °C

Max. process pressure 10 bar

Max. pipe diameter 2.5" (63.5 mm)

Max. pipe diameter 2.5" (63.5 mm)

Max. pipe diameter 2.5" (63.5 mm)

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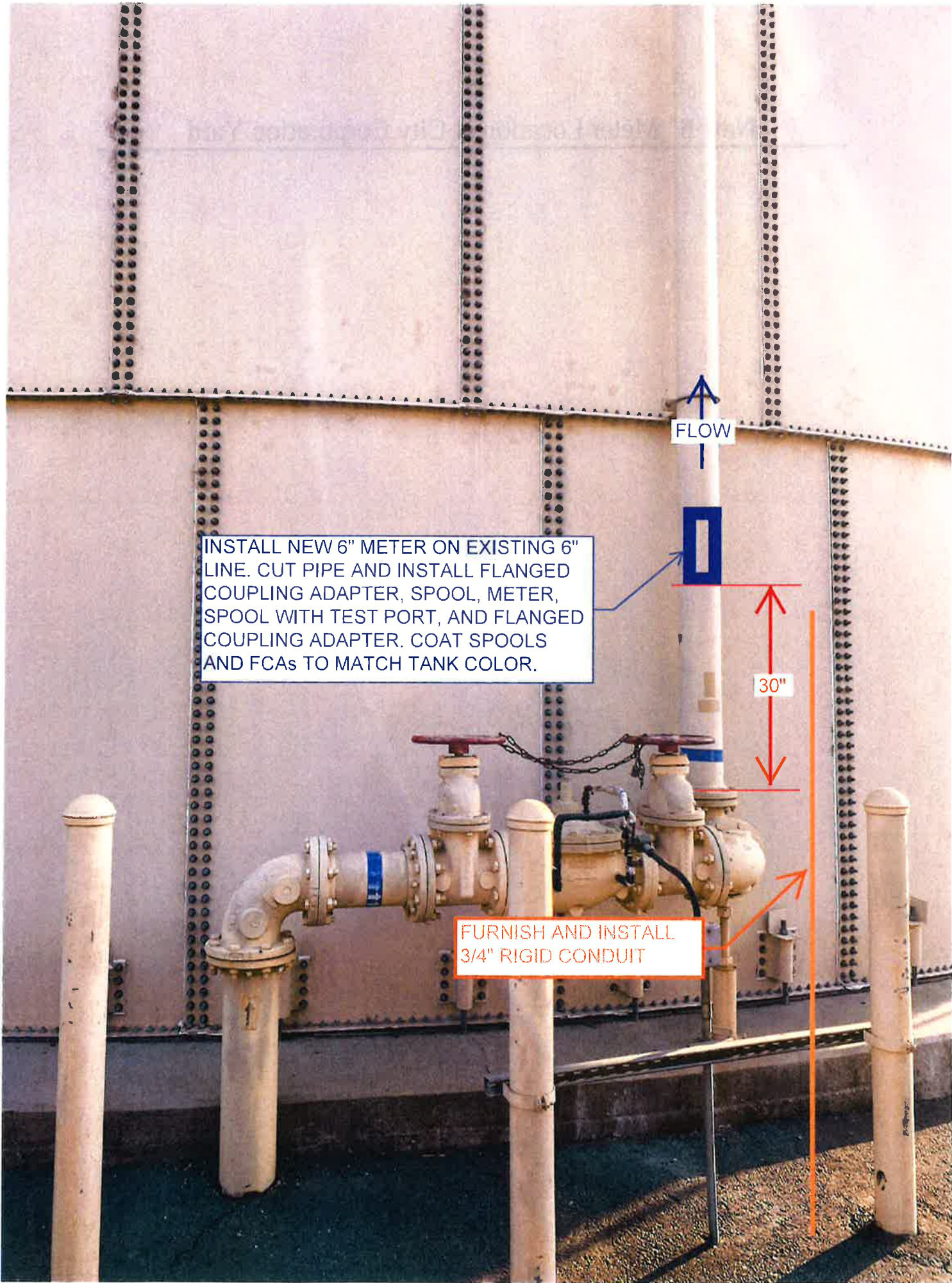
4 5 6 7 8 9 10 11 12 13

# Appendix G

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## New 6-inch Supply Meter Installation

## New 6" Meter Location at City Corporation Yard



INSTALL NEW 6" METER ON EXISTING 6" LINE. CUT PIPE AND INSTALL FLANGED COUPLING ADAPTER, SPOOL, METER, SPOOL WITH TEST PORT, AND FLANGED COUPLING ADAPTER. COAT SPOOLS AND FCAs TO MATCH TANK COLOR.

↑  
FLOW  
↓

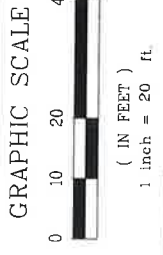


30"

FURNISH AND INSTALL 3/4" RIGID CONDUIT







**LEGEND**

WATER PIPELINE

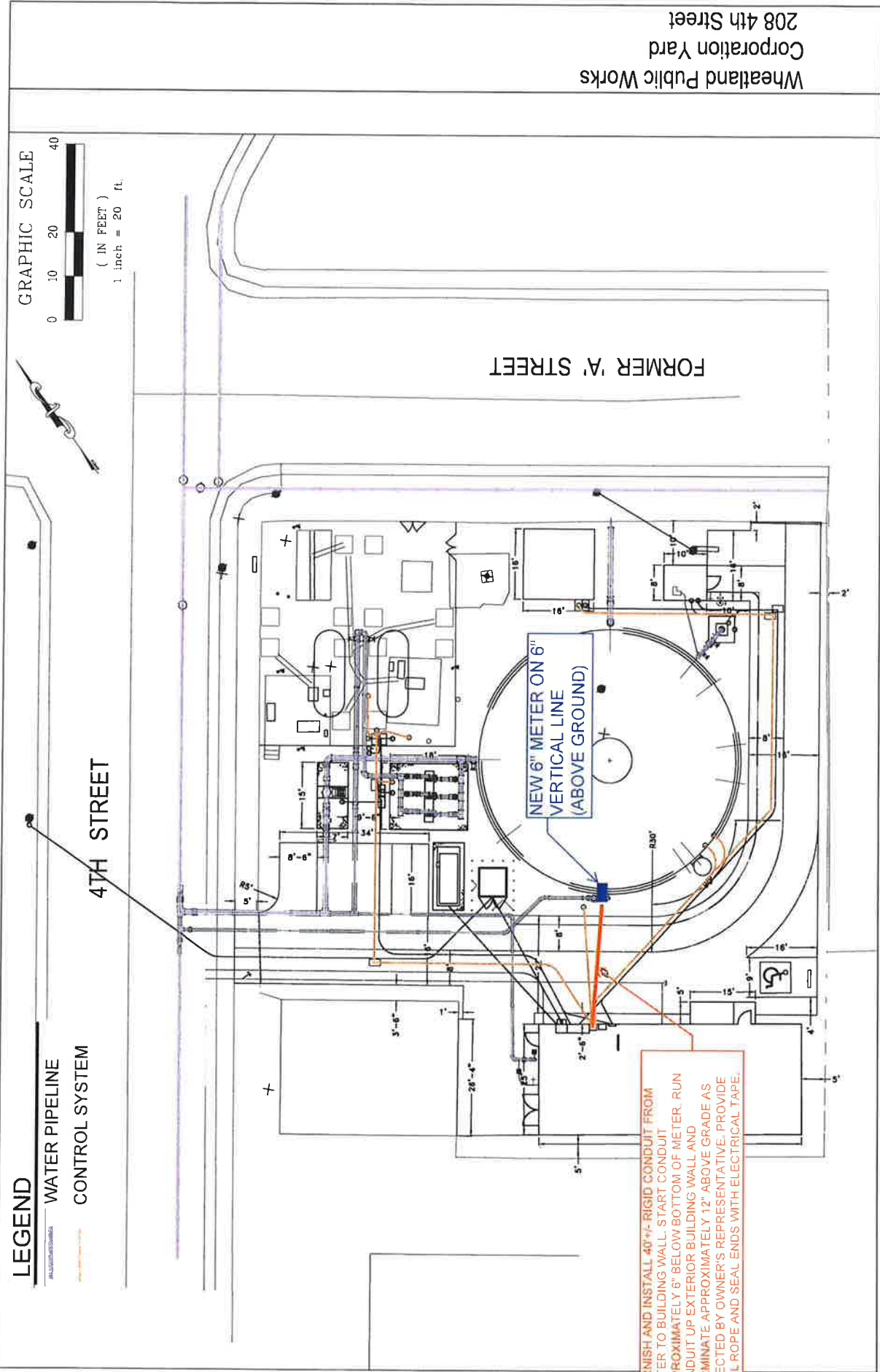
CONTROL SYSTEM

4TH STREET

FORMER 'A' STREET

NEW 6" METER ON 6" VERTICAL LINE (ABOVE GROUND)

FURNISH AND INSTALL 40'± RIGID CONDUIT FROM METER TO BUILDING WALL. START CONDUIT APPROXIMATELY 6" BELOW BOTTOM OF METER. RUN CONDUIT UP EXTERIOR BUILDING WALL AND TERMINATE APPROXIMATELY 12" ABOVE GRADE AS DIRECTED BY OWNER'S REPRESENTATIVE. PROVIDE PULL ROPE AND SEAL ENDS WITH ELECTRICAL TAPE.

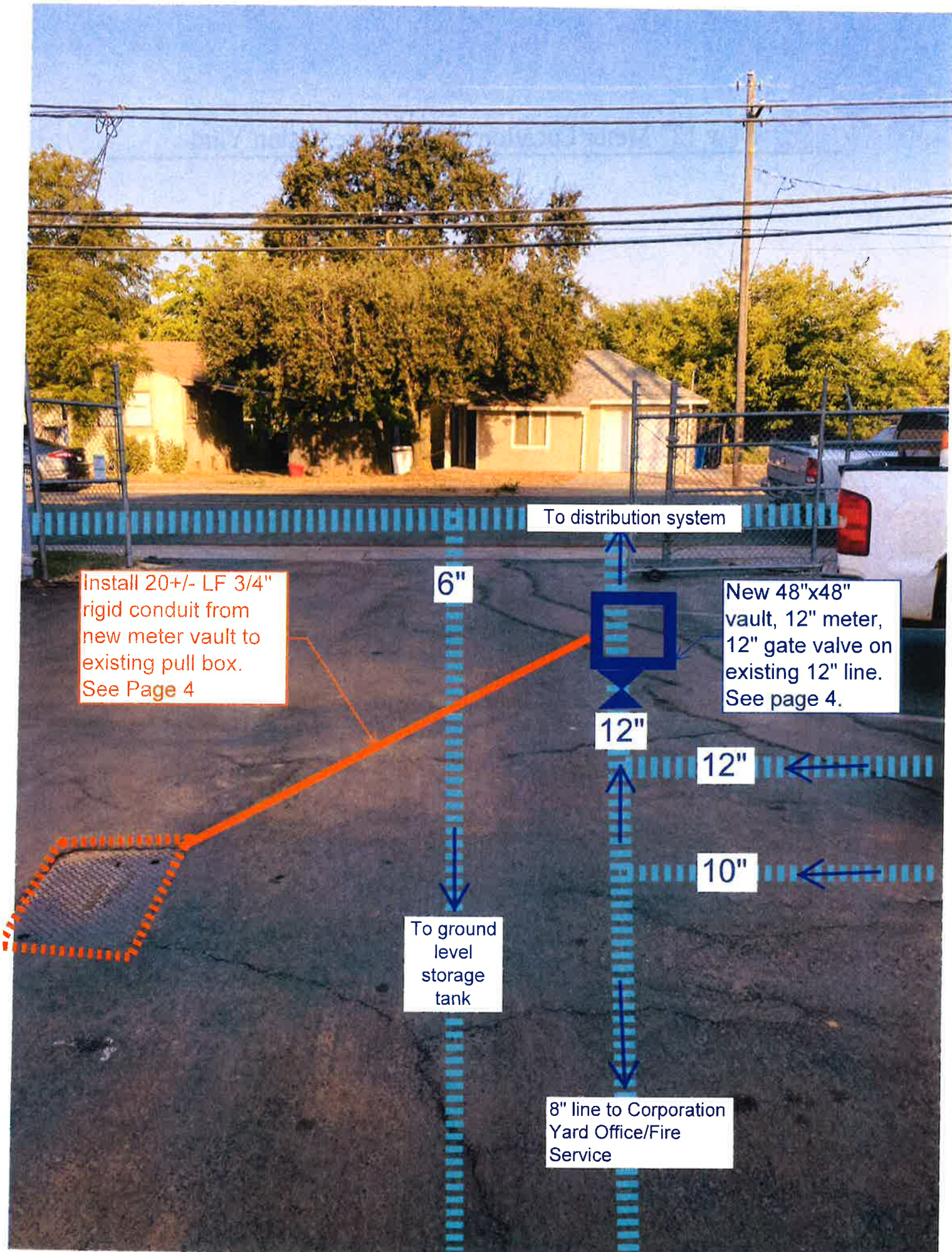


# Appendix H

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## New 12-inch Supply Meter Installation

## New 12" Meter Location at City Corporation Yard



To distribution system

6"

Install 20+/- LF 3/4" rigid conduit from new meter vault to existing pull box. See Page 4

New 48"x48" vault, 12" meter, 12" gate valve on existing 12" line. See page 4.

12"

12"

10"

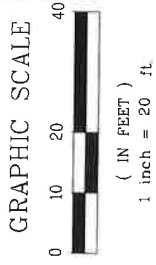
To ground level storage tank

8" line to Corporation Yard Office/Fire Service

# LEGEND

WATER PIPELINE

CONTROL SYSTEM



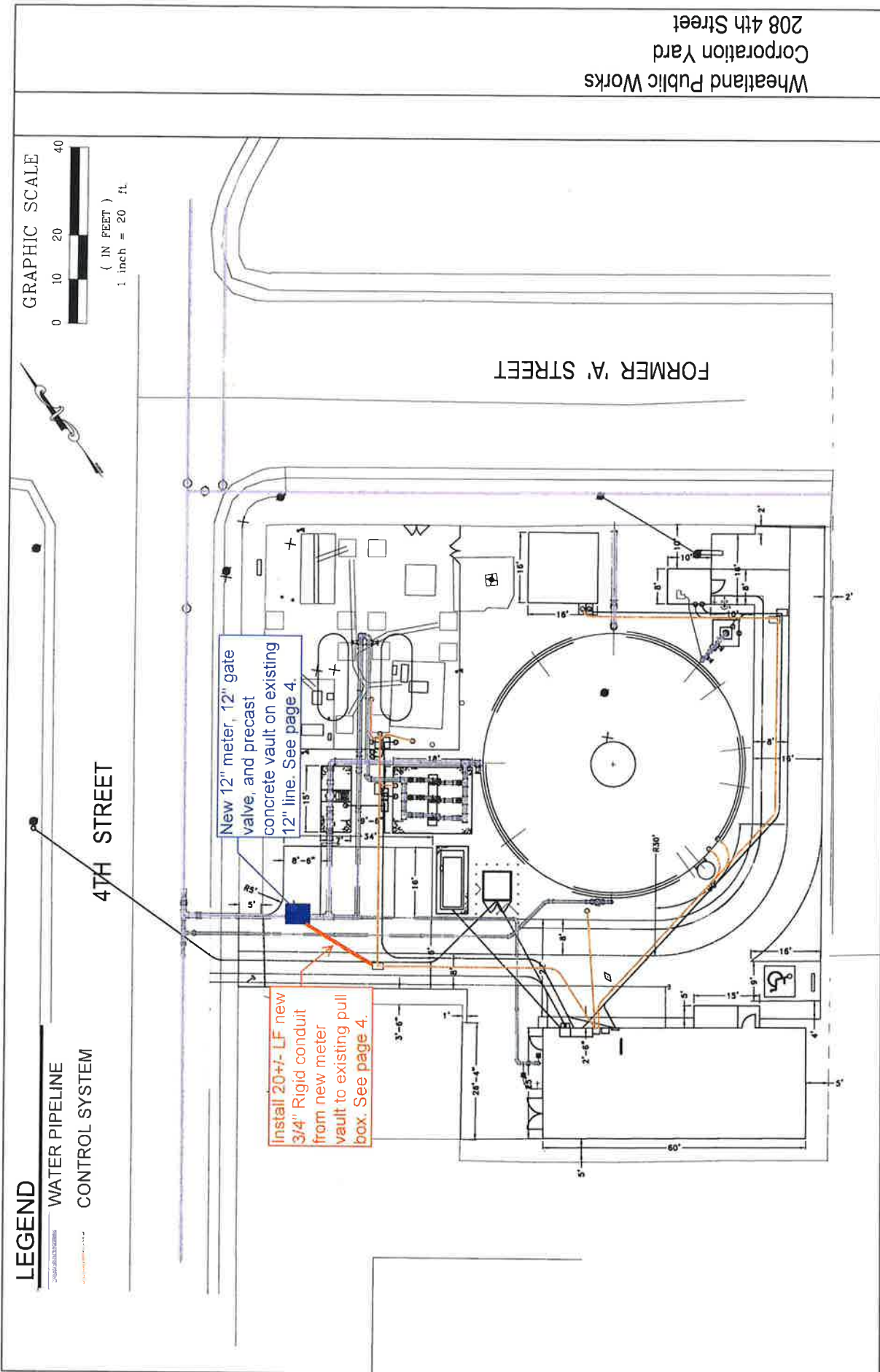
4TH STREET

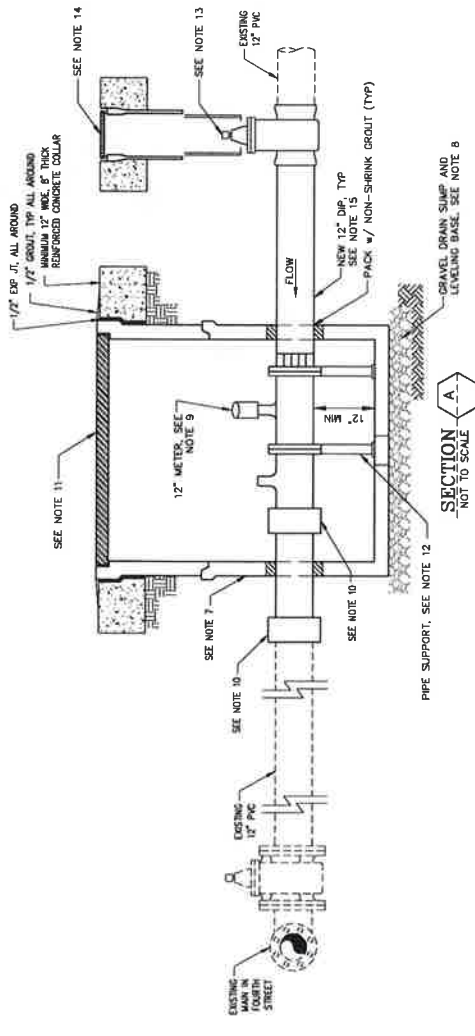
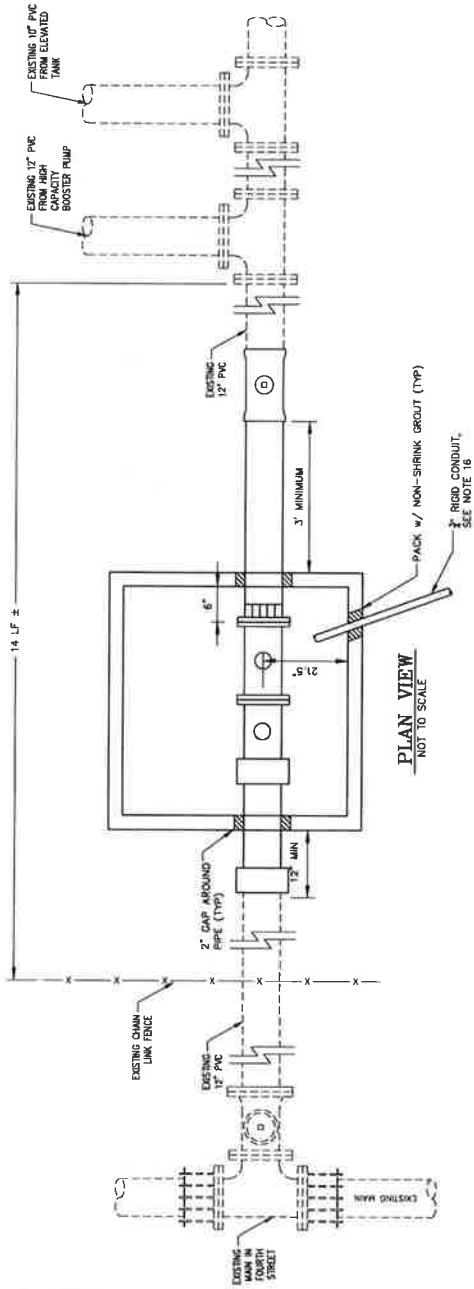
FORMER V. STREET

New 12" meter, 12" gate valve, and precast concrete vault on existing 12" line. See page 4.

Install 20'-7" LF new 3/4" Rigid conduit from new meter vault to existing pull box. See page 4.

Wheatland Public Works  
Corporation Yard  
208 4th Street





1. ALL MATERIALS AND WORK SHALL CONFORM TO CITY OF WHEATLAND STANDARDS EXCEPT WHERE CONTRACT DOCUMENTS DIFFER FROM CITY STANDARDS.
2. CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL MATERIALS AND EQUIPMENT.
3. CONTRACTOR SHALL COORDINATE WORK AT CITY CORPORATION YARD WITH CITY TO MINIMIZE INTERFERENCE WITH CITY OPERATIONS.
4. WATER MAIN MAY BE TAKEN OUT OF SERVICE FOR NO MORE THAN TWO (2) HOURS. IF SHUTDOWN LONGER THAN TWO (2) HOURS IS REQUIRED TO COMPLETE THE WORK, CONTRACTOR SHALL BYPASS PIPING. CONTRACTOR SHALL SUBMIT WRITTEN BYPASS PLAN TO THE CITY FOR APPROVAL AT LEAST SEVEN (7) DAYS PRIOR TO SCHEDULED SHUTDOWN. ALL COSTS FOR BYPASS PLAN, BYPASS PIPING AND ASSOCIATED WORK SHALL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE PRICE PAID FOR THE VARIOUS ITEMS OF WORK AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED THEREFOR.
5. EXCAVATION, TRENCHING, BACKFILL, AND SURFACE RESTORATION SHALL CONFORM TO THE REQUIREMENTS OF CALTRANS STANDARD SPECIFICATIONS.
6. CONTRACTOR SHALL DISINFECT NEW MAIN AFTER CONSTRUCTION, FLUSHING, AND PRESSURE TESTING PER AWWA C651.
7. PROVIDE PRECAST CONCRETE VAULT WITH RISERS, TRAFFIC RATED, 48"x48" INTERIOR DIMENSIONS. DEPTH AS NEEDED TO PROVIDE CLEARANCES NOTED. JENSEN PRECAST PART NO. 400001635 OR APPROVED EQUAL AND RISERS AS NEEDED.
8. PROVIDE ¾" CRUSHED ROCK.
9. INSTALL MUELLER 12" HBMAG METER, FLANGED COUPLING ADAPTER UPSTREAM, AND FLGXPPE SPOOL FITTING WITH TEST PORT DOWNSTREAM. SEE SPECIAL CONDITIONS SECTION 10-4.06.
10. STEEL OR CAST IRON TRANSITION COUPLING, NITRILE GASKETS, FUSION BONDED COATING, 316 STAINLESS STEEL HARDWARE, SMITH BLAIR MODEL 413 OR EQUAL.
11. PROVIDE 48"x48" HATCH CAST INTO VAULT, LOAD LEVEL 4. GALVANIZED STEEL CONSTRUCTION WITH ZINC PLATED STEEL HARDWARE, DIAMOND PLATE SURFACE, TORSION BAR LIFT ASSISTANCE, WITH GASKETED SEAL.
12. PROVIDE TWO (2) 2" ADJUSTABLE PIPE SUPPORTS WITH FLOOR FLANGE AND FLANGE SADDLE, GALVANIZED.
13. PROVIDE 12" RESILIENT WEDGE GATE VALVE, AWWA C509, WITH MECHANICAL JOINT ENDS, FUSION BONDED INTERIOR AND EXTERIOR COATING.
14. PROVIDE VALVE BOX AND COVER IN ACCORDANCE WITH CITY STANDARD DETAIL W-11.
15. CLASS 350 DUCTILE IRON PIPE, CEMENT LINING, ASPHALTIC COATING, TRENCH BEDDING, AND BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF CITY STANDARD DETAIL ST-3.
16. PROVIDE APPROX 20 LF OF ¾" RIGID CONDUIT FROM NEW VAULT TO PULL BOX. PROVIDE PULL ROPE. GROUT PENETRATIONS INTO STRUCTURES. SEAL ENDS OF CONDUIT WITH ELECTRICAL TAPE.

**WHEATLAND AMI WATER METER PROJECT**  
**12" WATER METER INSTALLATION**  
**AT CITY CORPORATION YARD**

**Coastland Civil Engineering, Inc.**  
 11641 Blocker Dr., Ste 170, Auburn, CA 95603  
 530.886.9925



# **Appendix I**

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## Special Wage Determination

**PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR  
OF INDUSTRIAL RELATIONS PURSUANT TO CALIFORNIA LABOR CODE  
PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773, & 1773.1**

**Issue Date:** September 21, 2020

**Determination:** S-2020-46

**Craft:** Meter Technician

**Reference:** 61-1245-50

**Project:** This prevailing wage determination is being issued pursuant to a request received on September 4, 2020 from the City of Wheatland for an Advanced Metering Infrastructure Project in Yuba County. This wage determination applies only to the project for which it was requested. If this contract is modified or extended, a new determination will be required.

**Wage Rates:**

<u>Classification(s)</u>	<u>Basic Straight-Time Hourly Rate</u>
Meter Technician Level I (0-12 Months) <sup>a</sup>	\$28.35*
Meter Technician Level II (12-24 Months) <sup>a</sup>	\$33.70*
Meter Technician Level III (Over 24 Months) <sup>a</sup>	\$44.02*

**Employer Payments: (Labor Code Section 1773.1)**

**Meter Technician Level I (0-12 Months)**

Health & Welfare	\$6.25 per hour worked
Vacation/Holiday	\$0.87 per hour worked

**Meter Technician Level II (12-24 Months)**

Health & Welfare	\$6.25 per hour worked
Vacation/Holiday	\$1.71 per hour worked

**Meter Technician Level III (Over 24 Months)**

Health & Welfare	\$6.25 per hour worked
Vacation/Holiday	\$3.11 per hour worked

**Straight Time hours:**

Eight (8) hours per day, five (5) consecutive days, Monday through Saturday, consisting of forty (40) hours per week.

**Overtime:**

One and one-half times (1½X) the basic straight-time hourly rate is paid for work in excess of eight (8) hours per day, or forty (40) hours any one week. In the event employees are unable to work due to inclement weather conditions, holiday observance, or other circumstances beyond the control of the employer, Saturday may be used as a make-up day and paid at the straight time hourly rate if time lost of five (5) hours or more was incurred. Double (2X) the basic-straight time hourly rate is paid for all hours worked on Sundays and Holidays.

**Recognized Holidays:**

New Year's Day, Good Friday, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Day after Thanksgiving, and Christmas Day.

**Travel and Subsistence:**

In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. Travel and/or subsistence requirements for each craft, classification or type of worker may be obtained from the Prevailing Wage Unit at (415) 703-4774.

<sup>a</sup> Based on length of service with the employer.

\*The rates are in effect throughout the duration of the project.