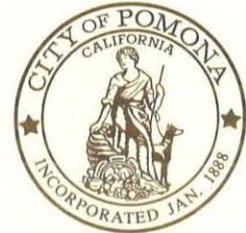


THE CITY OF  
**POMONA**

Public Works Department



December 22, 2014

TO: All Bidders

**RE: ADDENDUM NO. 1 FOR Groundwater Well - Evaluation and Rehabilitation,  
Project No 595-95066**

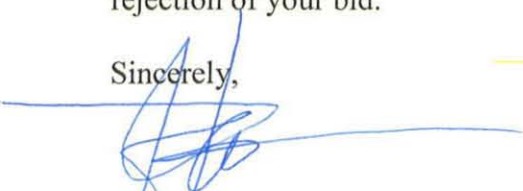
**Bid Opening: 11:00 am on January 7, 2014 (Wednesday)**

The attached Addendum (11 pages) revises the Contract Documents:

**“Groundwater Well - Evaluation and Rehabilitation, Project No 595-95066”**

Please incorporate the revision in your bid document and return the acknowledgment of the Addendum 1 of the Proposal. Failure to acknowledge receipt of this Addendum may result in rejection of your bid.

Sincerely,



Timotheus Hampton, PE  
Senior Water Resources Engineer

Attachments

cc: File

**ADDENDUM NO. 1**

**CITY OF POMONA  
PUBLIC WORKS DEPARTMENT**

**“GROUNDWATER WELL - EVALUATION AND REHABILITATION, PROJECT NO 595-95066”**

The following change shall be made part of the Contract Document for:

**“GROUNDWATER WELL - EVALUATION AND REHABILITATION, PROJECT NO 595-95066”**

The Bidder shall acknowledge the Confirmation of Receipt of Addendum No. 1 for the subject project.

**CONTRACT SPECIFICATIONS:**

1. Pages C-2 to C-4 of the Contract Documents are revised as attached.
2. SECTION 01010 SUMMARY OF WORK of the Contract Documents are revised as attached.

\*\*\*\*\*END ADDENDUM NO. 1 \*\*\*\*\*

**PROPOSAL  
FOR  
GROUNDWATER WELL - EVALUATION AND REHABILITATION,  
PROJECT NO 595-95066**

In compliance with the annexed "Notice Inviting Sealed Bids", the undersigned hereby proposes and agrees to perform all the work and improvements therein described, and to furnish all labor and materials, equipment and incident insurance necessary therefore in accordance with the specifications therefore, known as **Groundwater Well - Evaluation and Rehabilitation, Project No 595-95066**, which are on file in the office of the City Engineer of the City of Pomona. The undersigned agrees to perform the work and improvements therein mentioned to the satisfaction of and under the supervision of the City Engineer of the City of Pomona, duly appointed for said work in the matter of the construction and installation of **Groundwater Well - Evaluation and Rehabilitation, Project No 595-95066**, as designated on the specifications known as **Groundwater Well - Evaluation and Rehabilitation, Project No 595-95066** on file in the office of the City Engineer of the City of Pomona, and further agrees to enter into a contract therefore in the time, form and manner provided by law at the following prices.

**Each line item bid shall contain all costs and expenses for the work described in the same numbered bid item in the Technical Provisions of the Contract Documents.**

**AWARD OF CONTRACT:** Contractor bids received will be compared based upon the lowest combined Sum Total of the Project Base Bids plus the Additive Alternates. The construction contract if awarded will, at the discretion of the City Council, include all three project Base Bids, and may include one or more Additive Alternates, as funds are available. Submittals not including all bid unit prices for all Additive Alternates will be deemed non-responsive. The Contract, if awarded, will be awarded to the lowest responsible and responsive bidder whose proposal complies with the requirements of these specifications. The award, if made, will be made within **ninety (90) calendar days** after the opening of the proposals, provided that the award may be made after said period if the successful bidder shall not have given the City written notice of the withdrawal of his bid.

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**BASE BID – GROUNDWATER WELL - EVALUATION AND REHABILITATION,  
PROJECT NO 595-95066**

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ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1.	MOBILIZATION AND DEMOBILIZATION	1	<b>LS</b>	\$	\$
2.	OPEN BOTTOM AIRLIFT	12	<b>Day</b>	\$	\$
3.	BRUSH AND AIR LIFT WELL	12	<b>Day</b>	\$	\$

**BASE BID – GROUNDWATER WELL - EVALUATION AND REHABILITATION,  
PROJECT NO 595-95066**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
4.	VIDEO INSPECTION	18	EA	\$ _____	\$ _____
5.	WELL EVALUATION	1	LS	\$57,500	\$57,500
6.	SURFACE TANKS AND DISCHARGE LINES	6	EA	\$ _____	\$ _____
7.	INSTALL STEEL PATCH	3	EA	\$ _____	\$ _____
8.	CASING INSPECTION THICKNESS MEASUREMENT (CITM)	2	EA	_____	_____
9.	SPINNER (FLOWMETER)	2	EA	_____	_____
10.	WELL REHABILITATION - Mechanical®	5	EA	\$ _____	\$ _____
11.	WELL REHABILITATION - Chemical Treatment (Equipment & Labor)	1	EA	_____	_____
12.	WELL REHABILITATION - Chemical Treatment (Chemicals)	1	EA	_____	_____
13.	DUAL-SWAB PUMP SETUP	6	EA	\$ _____	\$ _____
14.	DUAL-SWAB PUMPING	12	Day	\$ _____	\$ _____
15.	INSTALL AND REMOVE TEST PUMP	6	EA	\$ _____	\$ _____
16.	OPERATE TEST PUMP & COLLECT DATA	360	Hrs	\$ _____	\$ _____

<b>BASE BID AMOUNT:</b>	\$ _____
<b>BASE BID AMOUNT IN WORDS:</b>	

**ADDITIVE ALTERNATE #1 – GROUNDWATER WELL - EVALUATION AND REHABILITATION, PROJECT NO 595-95066**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1.	ADDITION WELL (16.67% of Bid Items #2, 3, 4, 6, 13, 14, 15 &16)	1	LS	\$ _____	\$ _____

**ADDITIVE ALTERNATE #1 – GROUNDWATER WELL - EVALUATION AND REHABILITATION, PROJECT NO 595-95066**

ITEM DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL PRICE
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<b>ADDITIVE ALTERNATE#1 AMOUNT:</b>	\$ _____
<b>ADDITIVE ALTERNATE#1 AMOUNT IN WORDS:</b>	

**ADDITIVE ALTERNATE #2 – GROUNDWATER WELL - EVALUATION AND REHABILITATION, PROJECT NO 595-95066**

ITEM DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL PRICE
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1. ADDITION WELL (16.67% of Bid Items #2, 3, 4, 6, 13, 14, 15 &16)	1	LS \$	\$
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<b>ADDITIVE ALTERNATE#2 AMOUNT:</b>	\$ _____
<b>ADDITIVE ALTERNATE#2 AMOUNT IN WORDS:</b>	

<b>TOTAL BID AMOUNT (BASE BID PLUS ADDITIVE ALTERNATIVE #1 PLUS ADDITIVE ALTERNATIVE #2):</b>	\$ _____
<b>TOTAL BID AMOUNT IN WORDS:</b>	

## SECTION 01010 – SUMMARY OF WORK

### PART 1 – GENERAL

#### 1.1 WORK OF THIS CONTRACT

The work to be performed under this Contract shall consist of furnishing all tools, equipment, materials, and furnishing all labor, transportation services, fuel, power, water, and communications, and performing all work and related operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. The work shall be complete and all work, materials, and services not expressly specified or shown in the Contract Documents which may be necessary for the complete and proper installation, construction or operation of the work shall be provided by the CONTRACTOR as though originally so indicated at no increase in cost to the CITY.

#### 1.2 PROJECT DESCRIPTION

The Project consists of the evaluation and rehabilitation of six (6) to eight (8) groundwater wells. Refer to the bid schedule and bid item descriptions for additional work descriptions.

#### 1.3 BID ITEM DESCRIPTIONS

In addition to the bid items described in the Standard Specifications, the following bid item descriptions shall apply to the Bid Schedules.

##### 1.3.1 MOBILIZATION, DEMOBILIZATION, AND PERMITS (LUMP SUM)

Payment for mobilization, demobilization, and permits shall be made at the contract lump sum price. The Contract Price shall include, but is not limited to the following principal items: obtaining and complying with all permits and insurance; mobilizing labor force, equipment and construction facilities; providing on-site sanitary facilities; posting OSHA requirements and establishing safety programs; cleanup and site restoration; including removal and disposal upon project completion. Including the cleanup of any oils or fluids spilled on the City's property that occurred during the project.

##### 1.3.2 OPEN BOTTOM AIRLIFT (UNIT PRICE)

Payment for open bottom airlift shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall use the open bottom airlift method to remove material from the bottom of the well as near to its original depth (as listed on the driller's log) as practical. Upon completion of this operation, the contractor shall confirm the actual depth and demonstrate that the bottom of the well is clear of all sand, mud and other foreign materials to the satisfaction of the Engineer.

##### 1.3.3 BRUSH AND BAIL WELL (UNIT PRICE)

Payment for brush and bail shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

## SECTION 01010 – SUMMARY OF WORK

The CONTRACTOR shall mechanically clean the interior of the well casing by means of a circular wire brush assembly designed specifically for that application. A Spudder rig must be utilized. Based on the CONTRACTOR's own assessment of the casing condition, CONTRACTOR shall make its own determination as to the size and type of brush to be used (steel or poly) to achieve the most effective cleaning. The CONTRACTOR shall brush the well casing for a period of approximately ten (10) minutes per 20 foot interval from the historical water surface elevation to total well depth. The brush shall move up and down throughout each interval, a minimum of four (4) times. After the brush has moved through the 585-foot zone, the CONTRACTOR shall inject 300# of sulfamic acid and 75# of rock salt during this operation to improve brushing.

### 1.3.4 DOWNHOLE VIDEO INSPECTION (UNIT PRICE)

Payment for downhole video inspection shall be made at the contract fixed price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall perform a video inspection of the well casing using Dual Viewing Inspection Color Camera. All video inspections shall be recorded in DVD format.

The Contractor shall provide Color image on DVD in real time with a comprehensive video report including selected captured images of the well. All original DVDs, log sheets, and reports shall be submitted to the Engineer and will become property of the City.

The City shall be notified 2-days prior to any video being performed as the City would like to observe the video work performed. The CONTRACTOR shall provide the City with one copy of the video on a CD ROM or DVD on the day of the survey and two additional copies within 7 calendar days of completion at each well.

The CONTRACTOR will provide qualified personnel and equipment (subCONTRACTORS to be approved by City of Pomona) to run a downhole video survey from land surface to the total depth of the well.

The downhole camera shall be solid state and have a resolution of at least 450 horizontal lines, color capability, and come equipped with a minimum 3.5 mm wide angle lens (100o) and a 1.8 fixed iris. The camera housing should be stainless steel, waterproof and rated at 1,650 feet or greater maximum working depth. The camera should be supplied with sufficient cable and a sufficient light source as well as a winch, footage counter, tripod and mounting head. The footage counter shall be accurate and calibrated prior to arrival at the site.

### 1.3.5 SPINNER - FLOWMETER (UNIT PRICE)

Payment for Spinner - flowmeter shall be made at the contract fixed price. The Contract Price shall include, but is not limited to the following principal items:

Measurement of the vertical fluid velocity in a well, determination of the production profile of the pumping well over the entire perforated interval, location of confining zones and calculation of fluid velocity between zones.

## SECTION 01010 – SUMMARY OF WORK

### 1.3.6 WELL ASSESSMENT (FIXED PRICE)

Payment for Well Assessment shall be made at the contract fixed price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall request Statement of Qualifications (SOQ) from three Groundwater Well Evaluation and Rehabilitation Specialist (Specialist). The Contractor in consultation with the City shall select a Specialist.

The CONTRACTOR shall meet with the City to review the video and findings, and make written recommendations for the next stage of work.

### 1.3.7 INSTALL STEEL PATCH (UNIT PRICE)

Payment for install steel patch shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall design and install a steel patch. The patch shall be at least five (5) feet in length. Longmire Swaging Inc., Lemoore, CA is the approved vendor for this work. The CONTRACTOR must submit to the City all request for substitution of an alternative vendor.

### 1.3.8 SURFACE TANKS AND DISCHARGE LINES (UNIT PRICE)

Payment for surface tanks and discharge lines shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall install a surface storage tank to promote the settlement of solids removed from each well and all required discharge lines to convey water to the gutter adjacent to each site. Discharge water shall not be allowed to overtop of the curb.

### 1.3.9 WELL REHABILITATION - Mechanical (UNIT PRICE)

Payment for well rehabilitation - mechanical shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall rehabilitate the well using AirBurst® technology or City approval equal. **Note: If Contractor plans to use an alternative mechanical treatment process; a detailed description of the process and three (3) reference potable production wells projects where the Contractor was used in the last five (5) years shall be included with bid submittal.**

### 1.3.10 WELL REHABILITATION – Chemical Treatment (Equipment & Labor) (UNIT PRICE)

Payment for well rehabilitation – Chemical Treatment shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

Utilizing a loose fitting single or double disc surge block, surge **Solution A** throughout the perforated sections of the well for a minimum of 8 hours. Allow the solution to

SUMMARY OF WORK



**SECTION 01010 – SUMMARY OF WORK**

remain downhole overnight at a depressed pH (below 3).

The agitation should utilize loose fitting surge block (swab) to disrupt and dislodge biological growth and mineral scale within the inner well column and induce fluid movement throughout the perforated zones. The utilized tool should complement the well’s inner diameter (20-in.) in size, allowing sufficient material to contact the well structure without compromising the well structure, the liner, or the zones where the casing protrudes into the well.

The next day, surge the well a second 6 hour period, focusing efforts on the perforated zones where fouling was reported heaviest. Based on a targeted treatment volume of 11,750 gallons, this treatment should incorporate **Solution B**.

Once surging is complete, thoroughly pump the well until the pH has returned to normal (6.5 or greater), conductivity has returned to normal (approximately 500 µm) and the well is pumping clear. The removed solution should be collected and neutralized above ground and disposed of according to local and state regulations.

Following removal of the cleaning solution, pumping tests are recommended to verify the design discharge rate and pump setting for the well.

1.3.11 WELL REHABILITATION – Chemical Treatment (Chemicals) (UNIT PRICE)

<b>Solution A</b>	
Chemical	Volume (gallons)
Phosphoric Acid (75% strength)	165
Nu-Well 310 bioacid dispersant	80
Nu-Well 400 nonionic surfactant	3
Potable Water for blending	2500

<b>Solution B</b>	
Chemical	Volume (gallons)
Phosphoric Acid (75% strength)	585
Nu-Well 310 bioacid dispersant	309
Nu-Well 400 nonionic surfactant	10
Potable Water for blending	2500

1.3.12 DUAL-SWAB PUMP SETUP (UNIT PRICE)

Payment for dual-swab pump setup shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall install a 5-foot dual swab pump. A dual swab pump shall be used due to the deep static water level and the need to provide adequate velocity through the upper well perforations. The dual swab pump shall be capable of producing, at minimum, 250-gpm throughout the entire screened interval of the well.

1.3.13 DUAL-SWAB PUMPING (UNIT PRICE)

SUMMARY OF WORK

## SECTION 01010 – SUMMARY OF WORK

Payment for dual-swab pumping shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The CONTRACTOR shall perform dual-swab pumping for all well casing perforated intervals. Initially, the dual-swab tool will be inserted into the well and set at the top 10 feet of the screened zone. Airlift pumping will occur at the maximum rate of 250-gpm for a period of approximately 40 minutes. The dual-swab pumping equipment will be raised and lowered throughout the entire screened zone

### 1.3.14 INSTALL AND REMOVE TEST PUMP (UNIT PRICE)

Payment for install and remove test pump shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The contractor shall install a test pump (pump design parameters and depth shall be determined in consultation with the City and the Specialist). The Contractor shall provide all equipment, electrical panel, conduit, steel discharge line, control valves, meters (calibrated, dial indicator not greater than 2,000 gpm and totalizer), Rossum sand tester, water level sounder, and ancillary equipment necessary to perform the work. The motor/variable speed drive shall be compatible with the incoming Edison amperage rating within the City's MCC so as not to cause damage to the City's conductors or MCC. The pump shall be equipped with a water-lubed line shafts.

### 1.3.15 OPERATE TEST PUMP & COLLECT DATA (UNIT PRICE)

Payment for operate test pump & collect Data shall be made at the contract unit price. The Contract Price shall include, but is not limited to the following principal items:

The contractor shall collect operation and production data; and well sand production. Test Pump operation will consist of development by pumping and surging, step-drawdown, and constant rate testing. Results of the test pump shall be graphed and summarized and include recommendations for design and sustainable operation of the permanent pumping equipment.

### 1.3.16 CASING INSPECTION THICKNESS MEASUREMENT (CITM) (UNIT PRICE)

Payment for CITM shall be made at the contract unit price. The contract price shall include, but is not limited to the following principal items:

The Contractor shall use the "Remote Eddy-Current" (REC) method to determine the integrity of wellbore casings.

### 1.3.17 ADDITIVE ALTERNATIVE #1 (LUMP SUM)

Payment for additive alternative #1 shall be made at the contract lump sum price and shall include, but is not limited to the following principal items:

The Contractor shall rehabilitate an additional well using the methods described under Bid Items #2, 3, 4, 6, 12, 13, 14 & 15.

**SECTION 01010 – SUMMARY OF WORK**

1.3.18 ADDATIVE ALTERNATIVE #2 (LUM SUM)

Payment for additive alternative #1 shall be made at the contract lump sum price and shall include, but is not limited to the following principal items:

The Contractor shall rehabilitate an additional well using the methods described under Bid Items ##2, 3, 4, 6, 12, 13, 14 &15.

**END OF SECTION**

PLEASE FILL OUT ACKNOWLEDGMENT AND RETURN THE RECEIPT EITHER BY  
FAX TO 909-620-2222 OR EMAIL TO TIM\_HAMPTON@CI.POMONA.CA.US

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## CONFIRMATION OF RECEIPT OF ADDENDUM

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**PROJECT:** GROUNDWATER WELL - EVALUATION AND REHABILITATION

TO: All Bidders

RE: Receipt of Addendum

This is to verify receipt of Addendum No. 1, for "Groundwater Well - Evaluation and Rehabilitation, Project No 595-95066". By signing this document, you acknowledge receipt of addenda.

We appreciate your cooperation and consideration of a bid submittal for this project.

Timotheus Hampton, P.E.  
Senior Water Resources Engineer

*RETURN TO Tim Hampton, Project Manager*

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### ACKNOWLEDGMENT

I have read the above request from the City of Pomona and by signing, I hereby acknowledge receipt of Addendum No. 1, for "**Groundwater Well - Evaluation and Rehabilitation, Project No 595-95066**". Total pages: 11 (excluding the confirmation sheet).

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Company: \_\_\_\_\_  
Date received \_\_\_\_\_

PLEASE FILL OUT ACKNOWLEDGMENT AND RETURN THE RECEIPT EITHER BY  
FAX TO 909-620-2222 OR EMAIL TO TIM\_HAMPTON@CI.POMONA.CA.US