August 3, 2020

ADDENDUM NO. 1 TO SPECIFICATION NO. 1414W
Wells 65, 66 & 204 Drilling and Testing

This addendum to the specifications is for the purpose of adding, clarifying, or deleting certain information to the construction drawings and project specifications as follows:

NOTICE INVITING BID

REVISE NIB-7 as follows:

NIB-7. **Contract Time.** No bid or bid security may be withdrawn for seventy-five (75) calendar days after the date bids are received. The successful bidder shall, within seven (7) calendar days after the District mails a notice of acceptance of bid, return the signed agreement and bonds, and attend the pre-construction conference at the District office. The contract period shall commence seven (7) calendar days from the date of the Notice-of-Acceptance-of-Proposal. The Contractor shall complete all work, including testing, within three hundred thirty (330) calendar days subject to additional requirements specified in special conditions.
REVISE Schedule A - Well 65 bid item 3 and 4 as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Unit</th>
<th>Description</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
</table>
| 3    | 1   | LS   | Mobilize/demobilize temporary water treatment system including booster pump, bag filter system, granular activated carbon filter system, ion exchange filter system, temporary discharge piping and structures, and other conveyance lines, and other preparatory work (at the District’s Option). Assume maximum discharge of 500 - 1,500 gallons per minute (gpm), the constituents of concern are perchlorate, nitrate, and volatile organic compounds (VOCs), and the target discharge levels are outlined in SC-39:  
  - Nitrate-N: 5.2 milligrams per liter (mg/L)  
  - VOCs: Tetrachloroethene (PCE): 5.0 micrograms per liter (μg/L)  
  - Perchlorate: 6.0 - 4.0 μg/L Title 22 Drinking Water maximum contaminant level | Lump $   | Sum $   |

| 4    | 1   | LS   | Retain California Certified Environmental Testing Laboratory for testing of soil cuttings (if required) and effluent water generated prior to disposal and discharge, respectively. If required, composite soil samples from the drill cuttings stockpile will be tested prior to disposal for TPH by EPA 8015B, VOCs by EPA 8260B, Title 22 metals by EPA 6010B/7471A. Groundwater samples will be tested prior to discharge to comply with the District’s NPDES Permit (Section 00066 - H) including analysis of VOCs by EPA 8260B, perchlorate and nitrate by EPA 300.0, at a minimum monthly weekly thereafter for the duration of the project, and once prior to end of discharge. | Lump $   | Sum $   |
REVISE Schedule B- Well 66 bid item 3 and 4 as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Unit</th>
<th>Description</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
</table>
| 3    | 1   | LS   | Mobilize/demobilize temporary water treatment system including booster pump, bag filter system, granular activated carbon filter system, ion exchange filter system, temporary discharge piping and structures, and other conveyance lines, and other preparatory work (at the District’s Option). Assume maximum discharge of 500 1,500 gallons per minute (gpm), the constituents of concern are perchlorate, nitrate, and volatile organic compounds (VOCs), and the target discharge levels are outlined in SC-39:  
  - Nitrate-N: 5.2 milligrams per liter (mg/L)  
  - VOCs: Tetrachloroethene (PCE): 5.0 micrograms per liter (μg/L)  
  - Perchlorate: 6.0 4.0 μg/L  
  - Title 22 Drinking Water maximum contaminant level (words) | $             |       |
| 4    | 1   | LS   | Retain California Certified Environmental Testing Laboratory for testing of soil cuttings (if required) and effluent water generated prior to disposal and discharge, respectively. If required, composite soil samples from the drill cuttings stockpile will be tested prior to disposal for TPH by EPA 8015B, VOCs by EPA 8260B, Title 22 metals by EPA 6010B/7471A. Groundwater samples will be tested prior to discharge to comply with the District’s NPDES Permit (Section 00066 – H) including analysis of VOCs by EPA 8260B, perchlorate and nitrate by EPA 300.0, at a minimum monthly weekly thereafter for the duration of the project, and once prior to end of discharge. | $             |       |
THE BIDDING SHEETS HAVE BEEN UPDATED AND ARE INCLUDED IN THE REVISED PROPOSAL PACKAGED MADE A PART OF THIS ADDENDUM. FAILURE TO SUBMIT THE REVISED PROPOSAL PACKAGE “MAY” DEEM YOUR BID NON-RESPONSIVE

SECTION H

ADD City of Perris Encroachment Permit, attached hereto.

REPLACE NPDES No. CAG998001 in its entirety with attached.

SPECIAL CONDITIONS

SC-02. Scope of Work.
REVISE SC-02, paragraph 1 as follows:

Under these Specifications the Contractor shall perform all work required to provide the District with three (3) new fully developed and tested municipal supply water wells in accordance with these specifications and the contract drawings. These wells shall be constructed in the following sequence: Well 65, Well 204, and Well 66. In addition, the sewer and manhole connections detailed in Drawings D59932-D59935 shall be completed prior to the start of well drilling/construction at Well 204 Site.

REPLACE SC-31 in its entirety and replace with the following:

Contractor may utilize available land at the well site(s) for storage of materials and equipment. Contractor shall coordinate the location of the material and equipment storage area with the District’s Construction Inspector.

Contractor has the option to secure their own storage yard for materials and equipment. However, if private or public property is used, the Contractor must obtain written permission from affected property owners and/or agencies in advance of moving said material or equipment onto offsite property. A copy of the letter from the private owner granting permission shall be submitted to the District prior to use of the site. The District will not approve the use of any property unless it can be considered “previously disturbed” in accordance with CEQA guidelines.

The Contractor shall be responsible for providing all security measures necessary to secure the stored materials or equipment and to protect the construction area regardless of whether it is stored on District property or Contractor acquired property. The District is not responsible for items lost, damaged or stolen from the secured site or for injuries to the public due to unsafe or unsecured conditions.
SC-39. **Onsite Settling Tanks/Ponds and Points of Water Discharge.**

REVISE SC-39, WELLS 65 and 66, paragraphs 3, 4, and 6 as follows:

Prior to discharge, all water produced from the site shall be clarified and treated as needed to meet the applicable requirements of Order No. R8-2015-0004 R8-2020-0006 Waste Discharge Requirements for discharges to surface waters that pose an insignificant threat to water quality NPDES No. CAG998001 (Section H – Permits). Discharge water treatment will include reduction in total suspended solids through a series of settling tanks and filter bag system, granular activated carbon treatment to reduce dissolved volatile organic compounds (VOCs) concentration, followed by ion exchange for reduction of dissolved nitrate and perchlorate concentrations. Contractor shall include all disinfection/treatment in the bid.

Discharge water will comply with the appropriate concentrations for the constituents of concern (COCs) prescribed by the Regional Water Quality Control Board. Discharge water will be treated to comply with Order No. R8-2015-0004 R8-2020-0006, NPDES No. CAG998001 limits as well as the following standards prior to release into the points of discharge:

- Nitrate-N: 5.2 milligrams per liter (mg/L)
- Volatile Organic Compounds (VOCs): Tetrachloroethene (PCE): 5.0 micrograms per liter (µg/L)
- Perchlorate: 6.0 4.0 µg/L Title 22 Drinking Water MCL

Water samples will be collected at the end of the treatment system for laboratory testing prior to discharge. The water samples will be analyzed on a 24-hour turn-around-time for the above constituents of concern. Contractor will provide District with laboratory results and discharge will require EMWD’s prior authorization. Discharge limits are detailed in Order No. R8-2015-0004 R8-2020-0006, NPDES No. CAG998001 (Section H –Permits). Discharge during rain events will require EMWD’s prior authorization.

SC-45. **Air Monitoring in the Workers Breathing Zone.**

ADD SC-45, as follows:

The Contractor shall perform air monitoring in the workers breathing zone and implement corresponding health and safety mitigation response actions for exceedance of air quality limits. The constituents of concern are outlined in SC-38. The Project Specific Health and Safety Plan will identify air quality monitoring measures in the worker’s breathing zone, air quality action limits, and corresponding health and safety mitigation response actions for exceedance of air quality limits. The Contractor shall document air monitoring measurements in a daily field log at a minimum of 30 minute increments during active drilling and at a minimum of hourly increments during all other activities, and shall be provided to the District daily. The Contractor shall include the cost for performing air monitoring in the workers breathing zone in Line Item No. 3 for Schedule A, B, and C Bidding Sheets.

**SECTION P – CONTRACT DRAWINGS**

REPLACE Construction Drawings in its entirety, attached hereto.
DETAILED PROVISIONS

Section 02734 (Custom), Water Well Drilling, Casing And Testing Wells 65 And 66

REVISE Part 1.03, WELL CONSTRUCTION SUMMARY, D. as follows

1.03 WELL CONSTRUCTION SUMMARY

D. Provide adequate temporary tanks and filter bags for settlement of solids and reduction of turbidity, Granular Activated Carbon (GAC) and Ion exchange filter systems for reduction of volatile organic compounds (VOCs), nitrate and perchlorate from all well development and testing water prior to release to the point of discharge. Retain California Certified Environmental Testing Laboratory for testing of soil cuttings (if required) and effluent water generated prior to disposal and discharge, respectively. If required, soil samples will be tested prior to disposal for TPH by EPA 8015B, VOCs by EPA 8260B, Title 22 metals by EPA 6010B/7471A.

Water samples will be tested prior to discharge for the constituents outlined in the NPDES permit (Section H) as well as for VOCs by EPA 8260B, perchlorate and nitrate by EPA 300.0, at a minimum monthly weekly thereafter for the duration of the project, and once prior to end of discharge.

MANDATORY PRE BID WALK THROUGH

A mandatory pre-bid walk-through meeting was conducted on 7/20/2020 @ 9:00 a.m., by appointment only.

NOTE: Refer to EMWDs website to obtain the Pre Bid Walk-Through Sign-In Sheet.

QUESTIONS & ANSWERS

Best Drilling and Pump, Inc.

Q1. Will GAC system be required for mechanical and pump development? Bid item says to assume max 500 GPM. Pump Testing specifies 500-1500GPM. Higher flow rates will require more systems put in line to handle the higher capacity.

A1. – The treatment train will be utilized during mechanical and pumping development. The booster pump utilized for transferring water from the settling tanks to the water treatment system, the water treatment system, and discharge pipeline should be sized to convey and treat the estimated maximum pump testing production rate.

The permanent construction easement west of the Well 65 site may be used to store additional settling tanks. The Well 66 site may also be utilized to store additional settling tanks.
Q2. Can wells 65 and 66 be drilled one after the other to reduce costs on GAC system?

A2. The wells will be drilled in the following sequence (1) Well 65, (2) Well 204, (3) Well 66.

Q3. Is Soil classification for hazardous Non-RCRA?

A3. Based on the available laboratory water quality data from boreholes in the areas of Wells 65/66 and 204, the anticipated waste classification for the soil cuttings is Non-RCRA. Based on water quality laboratory test results generated during the isolated aquifer zone testing for these wells, laboratory testing may be required to confirm soil cutting waste profile assumption.

Q4. Can a line item be added for hauling hazardous fluid by the gallon. Initial muddy water from zone sampling, well construction and mechanical development won’t be able to go through a GAC Filter system. If mud needs to be hauled off for hazardous reasons, a typical tanker can haul 4,500 Gallons.

A4. There may be additional settling tanks utilized during initial phases of well development. The additional settling tanks would be used to decant drilling fluid, remove separated water for on-site treatment and discharge, and the accumulated soils may be added to the soil cuttings stock pile. The permanent construction easement west of the Well 65 site may be used to store additional settling tanks. The Well 66 site can also be utilized to store additional settling tanks.

Q5. Interpretation of Section 2.07, part 3, item C4; no water may be discharged until all zone samples have been analyzed. If this is correct approximately 8-10 tanks may be required to avoid shutdown and ensure completion of project in a timely manner. Please confirm no water may be discharged until review of all zone sampling is complete.

A5. Each isolated aquifer zone will be sampled separately for water quality prior to discharge. Laboratory samples shall be analyzed on a 24-hour turnaround time in order to obtain water quality results in a timely manner prior to discharge. The permanent construction easement west of Well 65 site and Well 66 site may be utilized to store additional holding tanks in order to store the water before and/or after treatment prior to discharge.

Q6. Lab Confirmed TAT for VOC’s, perchlorate, and Nitrate in a best case scenario is 2-3 days. Spec calls for 24 hours. Will water need to be contained and sampled and reviewed before discharge of mechanical and pump development water?

A6. Please request turn-around-time from additional laboratories. Water shall be contained until laboratory test results are available.
Q7. Will Tier 4 Equipment be required for all equipment on site?

A7. Current AQMD Off Road Compression – Ignition Diesel Standards Final Tier 4 requirements will apply for equipment on site.

Q8. Will EMWD fence off area for SBKR and other biological requirements prior to Notice to Proceed?

A8. Wells 65 and 66 are within a larger fenced off development area. Well 204 is within a fenced off parcel. These areas have been maintained to minimize biological activity within the proposed well sites.

Q9. Can contract time extend to 360 days?

A9. The contract duration will be extended to 330 days.

**Layne Granite Company**

Q1. *Will you provide the complete Lab analysis report used for the NPDES permit (your De Minimis)?*

A1. The NPDES permit requires that the following constituents are sampled prior to discharge into the storm drain:
<table>
<thead>
<tr>
<th>Constituent</th>
<th>Maximum Daily Concentration Limit</th>
<th>Minimum Sampling Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>570 mg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Total Inorganic Nitrogen (TIN)</td>
<td>5.2 mg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbon (TPH)</td>
<td>0.1 mg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Total Residual Chlorine</td>
<td>0.1 mg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>75 mg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Sulfides</td>
<td>0.4 mg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>pH</td>
<td>Within 6.5 and 8.5 pH Units</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>No visible sign of oil and grease</td>
<td>Lab Analysis Not Required.</td>
</tr>
<tr>
<td>Perchlorate</td>
<td>4.0 µg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Tetrachloroethylene (PCE)</td>
<td>5.0 µg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>Trichloroethylene (TCE)</td>
<td>5.0 µg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
<tr>
<td>1,2-Dibromo-3-chloropropane (DBCP)</td>
<td>0.2 µg/L</td>
<td>During the first 30-minutes of each discharge then weekly, thereafter.</td>
</tr>
</tbody>
</table>

**Notes:**
gpd – gallons per day
mg/L – milligrams per liter
µg/L – micrograms per liter

Q2. Is their compensation for hard drilling conditions (if encountered), if the drilling Mud is in compliance of the Specifications?

A2. Please utilize your past project experience in the vicinity of new wells to estimate anticipated drilling conditions. Estimated drilling production rate should factor in contractors drilling experience in Moreno Valley and City of Perris. There is no compensation for hard drilling.
Q3. The Temporary Water Treatment System that may be required on all three wells – depending on the what chemicals are in the water and the concentration levels; the media can last anywhere from a day to a week. This is an unknown & therefore makes bidding the media as a lump sum not good for Contractor or EMWD. *Can you pull it out and make it a separate line item with a value of each (vessel – removal, disposal & refill)?* Lump Sum Line would be the mob / demob, booster pump, discharge piping, Media Vessels, conveyance lines, 1st supply of media in the vessels, and 1st disposal & other preparatory work.

A3. Historical analytical data of existing well in the vicinity of the proposed wells is included below. Contractor should use this information to appropriately estimate treatment system sizing and media change out intervals.

**Wells 65/66:**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Average Concentration</th>
<th>Maximum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate</td>
<td>15 mg/L</td>
<td>30 mg/L</td>
</tr>
<tr>
<td>Perchlorate</td>
<td>9 µg/L</td>
<td>13 µg/L</td>
</tr>
<tr>
<td>VOCs: Tetrachloroethylene</td>
<td>6 µg/L</td>
<td>10 µg/L</td>
</tr>
</tbody>
</table>

**Well 204:**

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Average Concentration</th>
<th>Maximum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate</td>
<td>5 mg/L</td>
<td>20 mg/L</td>
</tr>
<tr>
<td>Perchlorate</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>VOCs: Tetrachloroethylene</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

**Notes for 65/66 and 204:**

* The method used for sampling was airlift pumping which may have volatilized the VOCs, thereby giving a Non-Detect result.

ND – non detect
mg/L – milligrams per liter
µg/L – milligrams per liter
VOCs – volatile organic compounds

Q4. 02734-27 (B)6 – *Can you make the option of using a submersible pump to pump the isolated aquifer zone, on a separate line item?* Since the isolated zone sampling is a lump sum price; it is not right to have option items included, it will cost District more money, and also cause contractors to price differently depending on how much risk they are will to take on guessing how many zones will be used with submersible pump.

A4. Submersible pump shall be used for collecting water quality samples for laboratory testing. VOCs may be prematurely removed from the water if air-lift pumping is utilized for water sample collection. Air-lift pumping may be used for clearing out formation prior to water sample collection. Please bid items based on the maximum number of zone tests that is anticipated at each Well.
Q5. Can an additional 30 calendar days be added to projection duration?

A5. Contract duration will be extended to 330 days.

Eastern Municipal Water District

Paul B. Jones II, P.E.
General Manager

PDJ:RG:ld:ae

ATTACHMENTS:
Proposal Package
City of Perris Encroachment Permit
NPDES NO. CAG998001
Construction Drawings