



**Orange County Sanitation District  
OPERATIONS COMMITTEE  
Regular Meeting Agenda  
Wednesday, December 4, 2019 - 5:00 PM  
Board Room  
Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433**

**ACCOMMODATIONS FOR THE DISABLED:** Meeting Rooms are wheelchair accessible. If you require any special disability related accommodations, please contact the Orange County Sanitation District Clerk of the Board's office at (714) 593-7433 at least 72 hours prior to the scheduled meeting. Requests must specify the nature of the disability and the type of accommodation requested.

**AGENDA POSTING:** In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted outside the main gate of the Sanitation District's Administration Building located at 10844 Ellis Avenue, Fountain Valley, California, and on the Sanitation District's website at [www.ocsd.com](http://www.ocsd.com) not less than 72 hours prior to the meeting date and time above. All public records relating to each agenda item, including any public records distributed less than 72 hours prior to the meeting to all, or a majority of the Board of Directors, are available for public inspection in the office of the Clerk of the Board.

**AGENDA DESCRIPTION:** The agenda provides a brief general description of each item of business to be considered or discussed. The recommended action does not indicate what action will be taken. The Board of Directors may take any action which is deemed appropriate.

**MEETING AUDIO:** An audio recording of this meeting is available within 24 hours after adjournment of the meeting. Please contact the Clerk of the Board's office at (714) 593-7433 to request the audio file.

**NOTICE TO DIRECTORS:** To place items on the agenda for a Committee or Board Meeting, the item must be submitted in writing to the Clerk of the Board: Kelly A. Lore, MMC, (714) 593-7433 / [klore@ocsd.com](mailto:klore@ocsd.com) at least 14 days before the meeting.

**FOR ANY QUESTIONS ON THE AGENDA, BOARD MEMBERS MAY CONTACT STAFF AT:**

General Manager: Jim Herberg, [jherberg@ocsd.com](mailto:jherberg@ocsd.com) / (714) 593-7300  
Asst. General Manager: Lorenzo Tyner, [lttyner@ocsd.com](mailto:lttyner@ocsd.com) / (714) 593-7550  
Asst. General Manager: Rob Thompson, [rthompson@ocsd.com](mailto:rthompson@ocsd.com) / (714) 593-7310  
Director of Human Resources: Celia Chandler, [cchandler@ocsd.com](mailto:cchandler@ocsd.com) / (714) 593-7202  
Director of Engineering: Kathy Millea, [kmillea@ocsd.com](mailto:kmillea@ocsd.com) / (714) 593-7365  
Director of Environmental Services: Lan Wiborg, [lwiborg@ocsd.com](mailto:lwiborg@ocsd.com) / (714) 593-7450

**CALL TO ORDER****PLEDGE OF ALLEGIANCE****DECLARATION OF QUORUM:****PUBLIC COMMENTS:**

*If you wish to address the Committee on any item, please complete a Speaker's Form (located at the table outside of the Board Room) and submit it to the Clerk of the Board or notify the Clerk of the Board the item number on which you wish to speak. Speakers will be recognized by the Chairperson and are requested to limit comments to three minutes.*

**REPORTS:**

*The Committee Chairperson and the General Manager may present verbal reports on miscellaneous matters of general interest to the Directors. These reports are for information only and require no action by the Directors.*

**CONSENT CALENDAR:**

*Consent Calendar Items are considered to be routine and will be enacted, by the Committee, after one motion, without discussion. Any items withdrawn from the Consent Calendar for separate discussion will be considered in the regular order of business.*

**1. APPROVAL OF MINUTES****[2019-770](#)****RECOMMENDATION:**

Approve Minutes of the Regular Meeting of the Operations Committee held November 6, 2019.

**Originator:** Kelly Lore

**Attachments:** [Agenda Report](#)  
[11-06-2019 Operations Committee Minutes](#)

**2. CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2, PROJECT NO. SC17-03****[2019-663](#)****RECOMMENDATION:**

- A. Receive and file Bid Tabulation and Recommendation for CenGen Oil Filters Platform at Plant No. 1 and Plant No. 2, Project No. SC17-03;
- B. Award a Construction Contract to Houalla Enterprises, Ltd., dba Metro Builders & Engineers Group, Ltd., for CenGen Oil Filters Platform at Plant No. 1 and Plant No. 2, Project No. SC17-03, for an amount not to exceed \$134,480; and

- C. Approve a contingency of \$13,448 (10%).

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)  
[SC17-03 Construction Contract Agreement Package](#)

**3. PROTEIN MATRIX DEMONSTRATION STUDY AT PLANT NO. 1, PROJECT NO. RE18-02** **[2019-724](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Ratify the prior Sole Source Purchases to Protein Matrix LLC for the procurement of Protein Matrix Compound PM-4 for Protein Matrix Demonstration Study at Plant No. 1, Project No. RE 18-02, for a total amount of \$148,500; and
- B. Approve a Sole Source Purchase Order to Protein Matrix LLC for the procurement of Protein Matrix Compound PM-4 for Protein Matrix Demonstration Study at Plant No. 1, Project No. RE18-02, for a total amount not to exceed \$150,000.

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)

**4. AWARD OF CORROSION MANAGEMENT SUPPORT SERVICES, SPECIFICATION NO. CS-2019-1071BD** **[2019-739](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Consultant Services Agreement with Corrpro Companies, Inc. for Corrosion Management Support Services, Specification No. CS-2019-1071BD, for the period of January 1, 2020 through December 31, 2020, for a total annual amount not to exceed \$600,000, with four (4) one-year renewal options; and
- B. Approve an annual contingency of \$60,000 (10%).

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)  
[CS-2019-1071BD DRAFT PROFESSIONAL CONSULTANT SERVICES AGREEMENT](#)

**5. 480 VOLT CABLE REPLACEMENT AT PLANT NO. 2 HEADWORKS, PROJECT NO. MP-509** **[2019-706](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Receive and file Bid Tabulation and Recommendation for 480 Volt Cable

Replacement at Plant No. 2 Headworks, Project No. MP-509;

- B. Award a Construction Contract to Mass. Electric Construction Co. for 480 Volt Cable Replacement at Plant No. 2, Project No. MP-509, for a total amount not to exceed \$434,327; and
- C. Approve a contingency of \$86,865 (20%).

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)  
[MP-509 Contract Agreement](#)

**6. ACTIVATED SLUDGE PLANT CLARIFIER INLET GATE REPLACEMENT AT PLANT NO. 2, PROJECT NO. MP-638** [2019-621](#)

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Receive and file Bid Tabulation and Recommendation for Activated Sludge Plant Clarifier Inlet Gate Replacement at Plant No. 2, Project No. MP-638;
- B. Award a Construction Contract to Innovative Construction Solutions for Activated Sludge Plant Clarifier Inlet Gate Replacement at Plant No. 2, Project No. MP-638, for a total amount not to exceed \$658,300; and
- C. Approve a contingency of \$65,830 (10%).

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)  
[MP-638 Contract Agreement](#)

**7. PLANT NO. 1 EMERGENCY GENERATOR BREAKER PURCHASE, PROJECT NO. MP-641** [2019-671](#)

RECOMMENDATION:

- A. Approve a purchase order contract to Romac Supply Co., Inc. for the purchase of ten critical circuit breakers for Plant No.1 Project No. MP-641 per Specification No. E-2019-1091BD-R (Rebid), for a total amount not to exceed \$102,326, plus applicable sales tax; and
- B. Approve a contingency of \$5,117 (5%).

**Originator:** Rob Thompson

**Attachments:** [Agenda Report](#)

**NON-CONSENT:****8. AGREEMENT FOR THE PURCHASE OF LIQUID CATIONIC POLYMER, SPECIFICATION NO. C-2019-1087BD [2019-544](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Chemical Supplier Agreement with Polydyne, Inc. for the purchase of Cationic Polymer, Specification No. C-2019-1087BD, for the period beginning February 1, 2020 through January 31, 2021 for a unit price of \$2.548 per active pound plus freight and applicable sales tax, for a total estimated annual amount of \$3,866,280 with four (4) one-year renewal options; and
- B. Approve an annual unit price contingency of 15%.

**Originator:** Rob Thompson

**Attachments:** [Agenda Report](#)  
[C-2019-1087BD FINAL CHEMICAL SUPPLIER AGREEMENT](#)

**9. SEAL BEACH PUMP STATION REPLACEMENT, PROJECT NO. 3-67 [2019-626](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Design Services Agreement with Lee & Ro, Inc. to provide engineering services for Seal Beach Pump Station Replacement, Project No. 3-67, for an amount not to exceed \$5,947,850; and
- B. Approve a contingency of \$594,785 (10%).

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)  
[3-67 Professional Design Services Agreement Package](#)

**10. WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT, PROJECT NO. 3-62 [2019-624](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Construction Services Agreement with Stantec Consulting, Inc. to provide construction support services for Westminster Boulevard Force Main Replacement, Project No. 3-62, for a total amount not to exceed \$1,183,000; and
- B. Approve a contingency of \$118,300 (10%).

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)  
[3-62 Professional Construction Services Agreement](#)

**11. WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT, PROJECT NO. 3-62** **[2019-625](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Receive and file Bid Tabulation and Recommendation for Westminster Boulevard Force Main Replacement, Project No. 3-62;
- B. Award a Construction Contract to Teichert Energy & Utilities Group, Inc. for Westminster Boulevard Force Main Replacement, Project No. 3-62, for a total amount not to exceed \$27,743,000; and
- C. Approve a contingency of \$2,774,300.

**Originator:** Kathy Millea

**Attachments:** [Agenda Report](#)  
[3-62 Contract Agreement Package](#)

**INFORMATION ITEMS:**

**12. ORANGE COUNTY SANITATION DISTRICT'S PROCUREMENT PROCESS** **[2019-647](#)**

RECOMMENDATION:

Information Item.

**Originator:** Lorenzo Tyner

**Attachments:** [Agenda Report](#)

**13. ORANGE COUNTY SANITATION DISTRICT - ENVIRONMENTAL SERVICES** **[2019-646](#)**

RECOMMENDATION:

Information Item.

**Originator:** Lan Wiborg

**Attachments:** [Agenda Report](#)

**DEPARTMENT HEAD REPORTS:****OTHER BUSINESS AND COMMUNICATIONS OR SUPPLEMENTAL AGENDA ITEMS, IF ANY:****BOARD OF DIRECTORS INITIATED ITEMS FOR A FUTURE MEETING:**

At this time Committee members may request staff to place an item on a future agenda.

**ADJOURNMENT:**

The next Operations Committee meeting is scheduled for Wednesday, February 5, 2020 at 5:00 p.m.



# Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

## OPERATIONS COMMITTEE

### Agenda Report

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**File #:** 2019-770

**Agenda Date:** 12/4/2019

**Agenda Item No:** 1.

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**FROM:** James D. Herberg, General Manager  
Originator: Kelly A. Lore, Clerk of the Board

**SUBJECT:**

#### APPROVAL OF MINUTES

#### GENERAL MANAGER'S RECOMMENDATION

#### RECOMMENDATION:

Approve Minutes of the Regular Meeting of the Operations Committee held November 6, 2019.

#### BACKGROUND

In accordance with the Board of Directors Rules of Procedure, an accurate record of each meeting will be provided to the Directors for subsequent approval at the following meeting.

#### RELEVANT STANDARDS

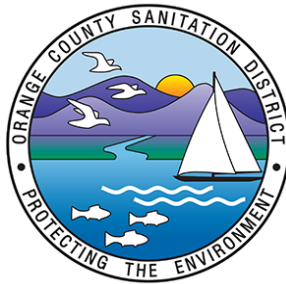
- Resolution No. OCSD 19-19

#### ATTACHMENT

*The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Minutes of the Operations Committee meeting held November 6, 2019





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## **CALL TO ORDER**

A regular meeting of the Operations Committee was called to order by Committee Chair Bob Collacott on Wednesday, November 6, 2019 at 5:01 p.m. in the Administration Building. Director Massa-Lavitt led the Flag Salute.

## **DECLARATION OF QUORUM:**

A quorum was declared present, as follows:

**Present:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Absent:** Phil Hawkins and Steve Jones

**Staff Present:** Jim Herberg, General Manager; Rob Thompson, Assistant General Manager; Lorenzo Tyner, Assistant General Manager; Celia Chandler, Director of Human Resources; Kathy Millea, Director of Engineering; Lan Wiborg, Director of Environmental Services; Kelly Lore, Clerk of the Board; Jennifer Cabral; Raul Cuellar; Don Cutler; Mike Dorman; Dean Fisher; Al Garcia; Hardat Khublall; Cortney Light; Jeff Mohr; Riaz Moinuddin; Adam Nazaroff; Nasrin Nasrollahi; Victoria Pilko; Tyler Ramirez; Don Stokes; and Eros Yong.

**Others Present:** Brad Hogin, General Counsel; Bob Ooten, Alternate Director (CMSD); Dan Bunce, Brown and Caldwell; and Austin Mejia, Supervisor Chaffee's office.

## **PUBLIC COMMENTS:**

None.

## **REPORTS:**

Chair Collacott announced that a revised agenda and late communication was provided to the Directors. He reminded the Committee of the upcoming GWRs Final Expansion Groundbreaking event on November 8, 2019 at noon. He also reminded the Committee of the upcoming holiday schedule for Board meetings.

Mr. Herberg did not provide a report.

**CONSENT CALENDAR:****1. APPROVAL OF MINUTES****[2019-641](#)****Originator:** Kelly Lore

MOVED, SECONDED, AND DULY CARRIED TO:

Approve Minutes of the Regular Meeting of the Operations Committee held October 2, 2019.

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**2. QUARTERLY ODOR COMPLAINT REPORT****[2019-528](#)****Originator:** Rob Thompson

MOVED, SECONDED, AND DULY CARRIED TO:

Receive and file the Fiscal Year 2019/20 First Quarter Odor Complaint Report.

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**3. ANNUAL LANDSCAPE MAINTENANCE SERVICES CONTRACT****[2019-672](#)****Originator:** Rob Thompson

MOVED, SECONDED, AND DULY CARRIED TO:

A. Award a Service Contract to Tropical Plaza Nursery, Inc., for landscape maintenance services per Specification No. S-2019-1100BD, for the period of January 1, 2020 through December 31, 2020, for a total annual amount not to exceed \$152,420, with four one-year renewal options; and

B. Approve an annual contingency of \$15,242 (10%).

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**4. PURCHASE OF THIRTY-SIX ELECTRIC CARTS**

[2019-676](#)

**Originator:** Rob Thompson

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

A. Award a Purchase Order to Southwest Material Handling for the purchase of 36 electric carts using US Communities Cooperative Contract EV2024-01 for a total amount not to exceed \$684,506; and

B. Approve a contingency of \$34,226 (5%)

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**5. LABORATORY BOILER BURNER REPLACEMENT AT PLANT NO. 1, PROJECT NO. MP-485**

[2019-653](#)

**Originator:** Kathy Millea

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

A. Receive and file Bid Tabulation and Recommendation for Laboratory Boiler Burner Replacement at Plant No. 1, Project No. MP-485;

B. Award a contract agreement to ODC Engineering & Technology for Laboratory Boiler Burner Replacement at Plant No. 1, Project No. MP-485, for an amount not to exceed \$283,000; and

C. Approve a contingency of \$28,300 (10%).

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**6. UNINTERRUPTIBLE POWER SUPPLY IMPROVEMENTS AT PLANT NO. 1, PROJECT NO. P1-132** [2019-552](#)

**Originator:** Kathy Millea

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

- A. Approve a Professional Design Services Agreement with Tetra Tech, Inc. to provide engineering services for Uninterruptible Power Supply Improvements at Plant No. 1, Project No. P1-132, for an amount not to exceed \$784,680; and
- B. Approve a contingency of \$78,468 (10%).

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**7. CAPITAL IMPROVEMENT PROGRAM CONTRACT PERFORMANCE REPORT** [2019-668](#)

**Originator:** Kathy Millea

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

Receive and file the Capital Improvement Program Contract Performance Report for the period ending September 30, 2019.

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**NON-CONSENT:**

**8. PLANT NO. 2 MAIN SEWAGE PUMPS, VARIABLE FREQUENCY DRIVE, 10 YEAR PREVENTATIVE MAINTENANCE** [2019-535](#)

**Originator:** Rob Thompson

Assistant General Manager Rob Thompson introduced Engineering Manager Riaz Moinuddin who provided a brief introduction to and information regarding Item No. 8.

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

- A. Approve Sole Source Purchase Order Contract with OneSource Distributors for performing the 10-year manufacturer recommended Preventative Maintenance (PM) on all seven of Plant No. 2 Main Sewage Pump Variable Frequency Drives for an amount not to exceed \$438,751, which includes the purchase of the full scope of supply, freight, and taxes; and
- B. Approve a contingency of \$43,876 (10%).

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**9. PLANT NO. 2 MAIN SEWAGE PUMPS MOTOR OVERHAUL** [2019-553](#)

**Originator:** Rob Thompson

Engineering Manager Riaz Moinuddin provided a brief introduction to and information regarding Item No. 9.

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

- A. Award a service contract to R.A. Reed Electric Company to provide Plant No. 2 Main Sewage Pump Motor Overhaul, Specification No. S-2019-1089BD, for a total amount not to exceed \$430,680; and
- B. Approve a contingency of \$43,068 (10%).

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**10. CARBON CANYON PIPELINE SAG REPAIRS, PROJECT NO. FE17-01** [2019-515](#)

**Originator:** Kathy Millea

Director of Engineering Kathy Millea introduced CIP Project Manager Hardat Khublall who provided a PowerPoint presentation regarding the project.

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

- A. Receive and file Bid Tabulation and Recommendation for Carbon Canyon Pipeline Sag Repairs, Project No. FE17-01;
- B. Reject low bid from Creative Home Corporation (CHI Construction) as non-responsive;
- C. Award a construction contract to Mike Prlich and Sons, Inc. for Carbon Canyon Pipeline Sag Repairs, Project No. FE17-01, for a total amount not to exceed \$510,000; and
- D. Approve a contingency amount of \$51,000 (10%).

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

**11. PRIMARY SEDIMENTATION BASINS NO. 6-31 RELIABILITY IMPROVEMENTS AT PLANT NO. 1, PROJECT NO. P1-133** [2019-521](#)

**Originator:** Kathy Millea

Director of Engineering Kathy Millea introduced CIP Project Manager Victoria Pilko who provided a PowerPoint presentation.

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

A. Approve a Professional Design Services Agreement with Carollo Engineers, Inc. to provide engineering services for Primary Sedimentation Basins No. 6-31 Reliability Improvements at Plant No. 1, Project No. P1-133, for an amount not to exceed \$1,219,667; and

B. Approve a contingency of \$121,967 (10%).

**Ayes:** Robert Collacott, Mariellen Yarc, Brad Avery, Allan Bernstein, Doug Chaffee, Lucille Kring, Sandra Massa-Lavitt, Tim Shaw, Jesus Silva, Fred Smith, David Shawver and John Withers

**Noes:** None

**Absent:** Phil Hawkins and Steve Jones

**Abstentions:** None

### **INFORMATION ITEMS:**

#### **12. CLIMATE RESILIENCY STUDY, PROJECT NO. SP-152**

[2019-682](#)

**Originator:** Kathy Millea

Director of Engineering Kathy Millea introduced Senior Engineer Nasrin Nasrollahi who provided an informative PowerPoint presentation on the Climate Resiliency Study including: Greenhouse Gas Emission Goals, climate science and forces, flooding and extreme heat, flow events, sea level rise, tsunami runup elevations, and recommendations to protect the treatment plants.

NO ACTION TAKEN AS ITEM WAS AN:

Information Item.

### **DEPARTMENT HEAD REPORTS:**

#### **CLOSED SESSION:**

None.

#### **OTHER BUSINESS AND COMMUNICATIONS OR SUPPLEMENTAL AGENDA ITEMS, IF ANY:**

Board Chair Shawver thanked staff for the evening's presentations.

#### **BOARD OF DIRECTORS INITIATED ITEMS FOR A FUTURE MEETING:**

None.

**ADJOURNMENT:**

Chair Collacott declared the meeting adjourned at 5:49 p.m. to the meeting to be held on Wednesday, December 4, 2019 at 5:00 p.m.

Submitted by:

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Kelly A. Lore, MMC  
Clerk of the Board





## Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

### OPERATIONS COMMITTEE

#### Agenda Report

---

**File #:** 2019-663

**Agenda Date:** 12/4/2019

**Agenda Item No:** 2.

---

**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2, PROJECT NO. SC17-03**

**GENERAL MANAGER'S RECOMMENDATION**

**RECOMMENDATION:**

- A. Receive and file Bid Tabulation and Recommendation for CenGen Oil Filters Platform at Plant No. 1 and Plant No. 2, Project No. SC17-03;
- B. Award a Construction Contract to Houalla Enterprises, Ltd., dba Metro Builders & Engineers Group, Ltd., for CenGen Oil Filters Platform at Plant No. 1 and Plant No. 2, Project No. SC17-03, for an amount not to exceed \$134,480; and
- C. Approve a contingency of \$13,448 (10%).

**BACKGROUND**

There are three Central Generation engines at Plant No. 1 and five at Plant No. 2. The oil lubrication system for each of the engines includes two 30-inch diameter canister filters. Replacing the filters requires lifting the five-foot tall filters from the top of the canisters, which are approximately seven feet above the floor. Access is both difficult and awkward, requiring personal protective fall prevention equipment.

**RELEVANT STANDARDS**

- Comply with California Public Contract Code Section 20103.8: Award construction to lowest responsive, responsible bidder
- Maintain a proactive asset management program
- Provide a safe and collegial workplace

**PROBLEM**

Since the canister filters are located above piping, staff cannot use a ladder or scaffolding to access the top of the canisters to replace the filters.

**PROPOSED SOLUTION**

Award a construction contract for CenGen Oil Filters Platform at Plant No. 1 and Plant No. 2, Project No. SC17-03. This project will provide for work platforms to more safely access and replace the filters.

**TIMING CONCERNS**

Delaying the work will extend the period when the filters are more difficult to access.

**RAMIFICATIONS OF NOT TAKING ACTION**

Replacing the filters would continue to require staff to access the top of the canisters with cumbersome personal protective equipment rather than an engineered access platform.

**PRIOR COMMITTEE/BOARD ACTIONS**

N/A

**ADDITIONAL INFORMATION**

The Orange County Sanitation District (Sanitation District) advertised Project No. SC17-03 for bids on September 4, 2019 and five sealed bids were received on October 15, 2019. A summary of the bid opening follows:

Engineer's Estimate	\$ 129,000
<u>Bidder</u>	<u>Amount of Bid</u>
Metro Builders & Engineers Group, Ltd.	\$ 134,479.22
J. R. Filanc Construction	\$ 179,611.00
MMC, Inc.	\$ 254,000.00
RAM Mechanical	\$ 268,644.00
Innovative Construction Solutions	\$ 350,000.00

The bids were evaluated in accordance with the Sanitation District's policies and procedures. A notice was sent to all bidders on November 7, 2019 informing them of the intent of Sanitation District staff to recommend award of the Construction Contract to Houalla Enterprises, Ltd. dba Metro Builders & Engineers Group, Ltd.

Staff recommends awarding a construction contract to the lowest responsive bidder, Metro Builders & Engineers Group, Ltd., for a total amount not to exceed \$134,480.

**CEQA**

This project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations Sections 15301 because the project involves repairs, replacement, and/or minor alteration of the existing facilities involving no expansion of use or capacity. A Notice of Exemption

will be filed with the OC Clerk-Recorder after the Sanitation District's Board of Directors approval of the CenGen Oil Filters Platform at Plant No. 1 and Plant No. 2, Project No. SC17-03.

### **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This recommendation will be funded under the Operations & Maintenance Capital Program, Project No. M-SM-CAP (FY 2019-20 Budget Update, Appendix A, Page A-8). The budget is sufficient for the recommended action.

### **ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Construction Contract

SS:dm:sa:gc

**PART A**  
**CONTRACT AGREEMENT**

# TABLE OF CONTENTS

## CONTRACT AGREEMENT

SECTION – 1	GENERAL CONDITIONS .....	1
SECTION – 2	MATERIALS AND LABOR.....	4
SECTION – 3	PROJECT .....	4
SECTION – 4	PLANS AND SPECIFICATONS .....	5
SECTION – 5	TIME OF COMMENCEMENT AND COMPLETION .....	5
SECTION – 6	TIME IS OF THE ESSENCE .....	5
SECTION – 7	EXCUSABLE DELAYS .....	6
SECTION – 8	EXTRA WORK.....	6
SECTION – 9	CHANGES IN PROJECT.....	7
SECTION – 10	LIQUIDATED DAMAGES FOR DELAY .....	7
SECTION – 11	CONTRACT PRICE AND METHOD OF PAYMENT .....	7
SECTION – 12	SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS .....	9
SECTION – 13	COMPLETION .....	10
SECTION – 14	CONTRACTOR'S EMPLOYEES COMPENSATION.....	10
SECTION – 15	SURETY BONDS .....	12
SECTION – 16	INSURANCE.....	13
SECTION – 17	RISK AND INDEMNIFICATION.....	21
SECTION – 18	TERMINATION .....	21
SECTION – 19	WARRANTY .....	22
SECTION – 20	ASSIGNMENT .....	22
SECTION – 21	RESOLUTION OF DISPUTES .....	23
SECTION – 22	SAFETY & HEALTH .....	23
SECTION – 23	NOTICES.....	24

CONTRACT AGREEMENT  
ORANGE COUNTY SANITATION DISTRICT

**PROJECT NO. SC17-03**

**CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2**

THIS AGREEMENT is made and entered into, to be effective, this December 4, 2019, by and between Houalla Enterprises, Ltd. dba Metro Builders & Engineers Group, Ltd., hereinafter referred to as "CONTRACTOR" and the Orange County Sanitation District, hereinafter referred to as "OCSD".

WITNESSETH

That for and in consideration of the promises and agreements hereinafter made and exchanged, OCSD and CONTRACTOR agree as follows:

**SECTION – 1      GENERAL CONDITIONS**

CONTRACTOR certifies and agrees that all the terms, conditions and obligations of the Contract Documents as hereinafter defined, the location of the job site, and the conditions under which the Work is to be performed have been thoroughly reviewed, and enters into this Contract based upon CONTRACTOR's investigation of all such matters and is in no way relying upon any opinions or representations of OCSD. It is agreed that this Contract represents the entire agreement. It is further agreed that the Contract Documents are each incorporated into this Contract by reference, with the same force and effect as if the same were set forth at length herein, and that CONTRACTOR and its Subcontractors, if any, will be and are bound by any and all of said Contract Documents insofar as they relate in any part or in any way, directly or indirectly, to the Work covered by this Contract.

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CONFORMED

C-CA-072619  
PROJECT NO. SC17-03  
CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2

A. Contract Documents Order of Precedence

“Contract Documents” refers to those documents identified in the definition of “Contract Documents” in the General Conditions – Definitions.

1. In the event of a conflict between one Contract Document and any of the other Contract Documents, the provisions in the document highest in precedence shall be controlling. The order of precedence of the Contract Documents is as follows:
  - a. Supplemental Agreements – the last in time being the first in precedence
  - b. Addenda issued prior to opening of Bids – the last in time being the first in precedence
  - c. Contract Agreement
  - d. Permits and other regulatory requirements
  - e. Special Provisions
  - f. General Conditions (GC)
  - g. Notice Inviting Bids and Instruction to Bidders
  - h. Geotechnical Baseline Report (GBR), if attached as a Contract Document
  - i. Plans and Specifications – in these documents the order of precedence shall be:
    - i. Specifications (Divisions 01-17)
    - ii. Plans
    - iii. General Requirements (GR)
    - iv. Standard Drawings and Typical Details
  - j. CONTRACTOR's Bid
2. In the event of a conflict between terms within an individual Contract Document, the conflict shall be resolved by applying the following principles as appears applicable:
  - a. Figured dimensions on the Contract Documents shall govern. Dimensions not specified shall be as directed by the ENGINEER. Details not shown or

specified shall be the same as similar parts that are shown or specified, or as directed. Full-size details shall take precedence over scale Drawings as to shape and details of construction. Specifications shall govern as to material and workmanship.

- b. The Contract Documents calling for the higher quality material or workmanship shall prevail. Materials or Work described in words, which so applied, have a well known technical or trade meaning shall be deemed to refer to such recognized standards. In the event of any discrepancy between any Drawings and the figures thereon, the figures shall be taken as correct.
- c. Scale Drawings, full-size details, and Specifications are intended to be fully complementary and to agree. Should any discrepancy between Contract Documents come to the CONTRACTOR's attention, or should an error occur in the efforts of others, which affect the Work, the CONTRACTOR shall notify the ENGINEER, in writing, at once. In the event any doubts or questions arise with respect to the true meaning of the Contract Documents, reference shall be made to the ENGINEER whose written decision shall be final. If the CONTRACTOR proceeds with the Work affected without written instructions from the ENGINEER, the CONTRACTOR shall be fully responsible for any resultant damage or defect.
- d. Anything mentioned in the Specifications and not indicated in the Plans, or indicated in the Plans and not mentioned in the Specifications, shall be of like effect as if indicated and mentioned in both. In case of discrepancy in the Plans or Specifications, the matter shall be immediately submitted to OCSD's ENGINEER, without whose decision CONTRACTOR shall not adjust said



discrepancy save only at CONTRACTOR's own risk and expense. The decision of the ENGINEER shall be final.

In all matters relating to the acceptability of material, machinery or plant equipment; classifications of material or Work; the proper execution, progress or sequence of the Work; and quantities interpretation of the Contract Documents, the decision of the ENGINEER shall be final and binding, and shall be a condition precedent to any payment under the Contract, unless otherwise ordered by the Board of Directors.

**B. Definitions**

Capitalized terms used in this Contract are defined in the General Conditions, Definitions. Additional terms may be defined in the Special Provisions.

**SECTION – 2 MATERIALS AND LABOR**

CONTRACTOR shall furnish, under the conditions expressed in the Plans and Specifications, at CONTRACTOR'S own expense, all labor and materials necessary, except such as are mentioned in the Specifications to be furnished by OCSD, to construct and complete the Project, in good workmanlike and substantial order. If CONTRACTOR fails to pay for labor or materials when due, OCSD may settle such claims by making demand upon the Surety to this Contract. In the event of the failure or refusal of the Surety to satisfy said claims, OCSD may settle them directly and deduct the amount of payments from the Contract Price and any amounts due to CONTRACTOR. In the event OCSD receives a stop payment notice from any laborer or material supplier alleging non-payment by CONTRACTOR, OCSD shall be entitled to deduct all of its costs and expenses incurred relating thereto, including but not limited to administrative and legal fees.

**SECTION – 3 PROJECT**

The Project is described as:

**PROJECT NO. SC17-03**

**CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2**

#### **SECTION – 4 PLANS AND SPECIFICATONS**

The Work to be done is shown in a set of Plans and Specifications entitled:

##### **PROJECT NO. SC17-03**

##### **CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2**

Said Plans and Specifications and any revision, amendments and addenda thereto are attached hereto and incorporated herein as part of this Contract and referred to by reference.

#### **SECTION – 5 TIME OF COMMENCEMENT AND COMPLETION**

CONTRACTOR agrees to commence the Project within 15 calendar days from the date set forth in the "Notice to Proceed" sent by OCSD, unless otherwise specified therein and shall diligently prosecute the Work to completion within two hundred ten (210) calendar days from the date of the "Notice to Proceed" issued by OCSD, excluding delays caused or authorized by OCSD as set forth in Sections 7, 8, and 9 hereof, and applicable provisions in the General Conditions.

The time for completion includes zero (0) calendar days determined by OCSD likely to be inclement weather when CONTRACTOR will be unable to work.

#### **SECTION – 6 TIME IS OF THE ESSENCE**

Time is of the essence of this Contract. As required by the Contract Documents, CONTRACTOR shall prepare and obtain approval of all shop drawings, details and samples, and do all other things necessary and incidental to the prosecution of CONTRACTOR's Work in conformance with an approved construction progress schedule. CONTRACTOR shall coordinate the Work covered by this Contract with that of all other contractors, subcontractors and of OCSD, in a manner that will facilitate the efficient completion of the entire Work and accomplish the required milestone(s), if any, by the applicable deadline(s) in accordance with Section 5 herein. OCSD shall have the right to assert complete control of the premises on which the Work is to be performed and shall have the right to decide the time or order in which

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CONFORMED

C-CA-072619  
PROJECT NO. SC17-03  
CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2

the various portions of the Work shall be installed or the priority of the work of subcontractors, and, in general, all matters representing the timely and orderly conduct of the Work of CONTRACTOR on the premises.

#### **SECTION – 7      EXCUSABLE DELAYS**

CONTRACTOR shall only be excused for any delay in the prosecution or completion of the Project as specifically provided in General Conditions, “Extensions for Delay”, and the General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”. Extensions of time and extra compensation arising from such excusable delays will be determined in accordance with the General Conditions, “Extension of Time for Delay” and “Contract Price Adjustments and Payments”, and extensions of time and extra compensation as a result of incurring undisclosed utilities will be determined in accordance with General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”. OCSD’s decision will be conclusive on all parties to this Contract.

#### **SECTION – 8      EXTRA WORK**

The Contract Price as set forth in Section 11, includes compensation for all Work performed by CONTRACTOR, unless CONTRACTOR obtains a Change Order signed by a designated representative of OCSD specifying the exact nature of the Extra Work and the amount of extra compensation to be paid all as more particularly set forth in Section 9 hereof and the General Conditions, “Request for Change (Changes at CONTRACTOR’s Request)”, “OWNER Initiated Changes”, and “Contract Price Adjustments and Payments”.

In the event a Change Order is issued by OCSD pursuant to the Contract Documents, OCSD shall extend the time fixed in Section 5 for completion of the Project by the number of days, if any, reasonably required for CONTRACTOR to perform the Extra Work, as determined by OCSD’s ENGINEER. The decision of the ENGINEER shall be final.

## **SECTION – 9      CHANGES IN PROJECT**

OCSD may at any time, without notice to any Surety, by Change Order, make any changes in the Work within the general scope of the Contract Document, including but not limited to changes:

1. In the Specifications (including Drawings and designs);
2. In the time, method or manner of performance of the Work;
3. In OCSD-furnished facilities, equipment, materials, services or site; or
4. Directing acceleration in the performance of the Work.

No change of period of performance or Contract Price, or any other change in the Contract Documents, shall be binding until the Contract is modified by a fully executed Change Order.

All Change Orders shall be issued in accordance with the requirements set forth in the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and "OWNER Initiated Changes".

## **SECTION – 10      LIQUIDATED DAMAGES FOR DELAY**

Liquidated Damages shall be payable in the amounts and upon the occurrence of such events or failure to meet such requirements or deadlines as provided in the Special Provisions, "Liquidated Damages."

## **SECTION – 11      CONTRACT PRICE AND METHOD OF PAYMENT**

- A. OCSD agrees to pay and the CONTRACTOR agrees to accept as full consideration for the faithful performance of this Contract, subject to any additions or deductions as provided in approved Change Orders, the sum of One Hundred Thirty-Four Thousand Four Hundred Seventy-Nine Dollars and Twenty-Two Cents (\$134,479.22) as itemized on the Attached Exhibit "A".

Upon satisfaction of the conditions precedent to payment set forth in the General Requirements, Additional General Requirements and General Conditions (including but not limited to Sections entitled "Mobilization Payment Requirements" and "Payment Itemized Breakdown of Contract Lump Sum Prices"), there shall be paid to the CONTRACTOR an initial Net Progress Payment for mobilization. OCSD shall issue at the commencement of the job a schedule which shows:

1. A minimum of one payment to be made to the CONTRACTOR for each successive four (4) week period as the Work progresses, and
2. The due dates for the CONTRACTOR to submit requests for payment to meet the payment schedule.

After the initial Net Progress Payment, and provided the CONTRACTOR submits the request for payment prior to the end of the day required to meet the payment schedule, the CONTRACTOR shall be paid a Net Progress Payment on the corresponding monthly payment date set forth in the schedule.

Payments shall be made on demands drawn in the manner required by law, accompanied by a certificate signed by the ENGINEER, stating that the Work for which payment is demanded has been performed in accordance with the terms of the Contract Documents, and that the amount stated in the certificate is due under the terms of the Contract.

Payment applications shall also be accompanied with all documentation, records, and releases as required by the Contract, Exhibit A, Schedule of Prices, and General Conditions, "Payment for Work – General". The Total amount of Progress Payments shall not exceed the actual value of the Work completed as certified by OCSD's ENGINEER.

The processing of payments shall not be considered as an acceptance of any part of the Work.

B. As used in this Section, the following defined terms shall have the following meanings:

1. **“Net Progress Payment”** means a sum equal to the Progress Payment less the Retention Amount and other qualified deductions (Liquidated Damages, stop payment notices, etc.).
2. **“Progress Payment”** means a sum equal to:
  - a. the value of the actual Work completed since the commencement of the Work as determined by OCSD;
  - b. plus the value of material suitably stored at the worksite, treatment plant or approved storage yards subject to or under the control of OCSD since the commencement of the Work as determined by OCSD;
  - c. less all previous Net Progress Payments;
  - d. less all amounts of previously qualified deductions;
  - e. less all amounts previously retained as Retention Amounts.
3. **“Retention Amount”** for each Progress Payment means the percentage of each Progress Payment to be retained by OCSD to assure satisfactory completion of the Contract. The amount to be retained from each Progress Payment shall be determined as provided in the General Conditions –“Retained Funds; Substitution of Securities.”

## **SECTION – 12 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS**

Pursuant to Public Contract Code Section 22300 et seq., the CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.”

## **SECTION – 13    COMPLETION**

Final Completion and Final Acceptance shall occur at the time and in the manner specified in the General Conditions, “Final Acceptance and Final Completion”, “Final Payment” and Exhibit A - Schedule of Prices.

Upon receipt of all documentation, records, and releases as required by the Contract from the CONTRACTOR, OCSD shall proceed with the Final Acceptance as specified in General Conditions.

## **SECTION – 14    CONTRACTOR’S EMPLOYEES COMPENSATION**

### **A.    Davis-Bacon Act:**

CONTRACTOR will pay and will require all Subcontractors to pay all employees on said Project a salary or wage at least equal to the prevailing rate of per diem wages as determined by the Secretary of Labor in accordance with the Davis-Bacon Act for each craft or type of worker needed to perform the Contract. The provisions of the Davis-Bacon Act shall apply only if the Contract is in excess of Two Thousand Dollars (\$2,000.00) and when twenty-five percent (25%) or more of the Contract is funded by federal assistance. If the aforesaid conditions are met, a copy of the provisions of the Davis-Bacon Act to be complied with are incorporated herein as a part of this Contract and referred to by reference.

### **B.    General Prevailing Rate:**

OCSD has been advised by the State of California Director of Industrial Relations of its determination of the general prevailing rate of per diem wages and the general prevailing rate for legal holiday and overtime Work in the locality in which the Work is to be performed for each craft or type of Work needed to execute this Contract, and copies of the same are on file in the Office of the ENGINEER of OCSD. The CONTRACTOR

agrees that not less than said prevailing rates shall be paid to workers employed on this public works Contract as required by Labor Code Section 1774 of the State of California. Per California Labor Code 1773.2, OCSD will have on file copies of the prevailing rate of per diem wages at its principal office and at each job site, which shall be made available to any interested party upon request.

C. Forfeiture for Violation:

CONTRACTOR shall, as a penalty to OCSD, forfeit Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid (either by the CONTRACTOR or any Subcontractor under it) less than the prevailing rate of per diem wages as set by the Director of Industrial Relations, in accordance with Sections 1770-1780 of the California Labor Code for the Work provided for in this Contract, all in accordance with Section 1775 of the Labor Code of the State of California.

D. Apprentices:

Sections 1777.5, 1777.6, 1777.7 of the Labor Code of the State of California, regarding the employment of apprentices are applicable to this Contract and the CONTRACTOR shall comply therewith if the prime contract involves Thirty Thousand Dollars (\$30,000.00) or more.

E. Workday:

In the performance of this Contract, not more than eight (8) hours shall constitute a day's work, and the CONTRACTOR shall not require more than eight (8) hours of labor in a day from any person employed by him hereunder except as provided in paragraph (B) above. CONTRACTOR shall conform to Article 3, Chapter 1, Part 7 (Section 1810 et seq.) of the Labor Code of the State of California and shall forfeit to OCSD as a penalty, the sum of Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by CONTRACTOR or any Subcontractor for each calendar day during which any worker is



required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one week in violation of said Article. CONTRACTOR shall keep an accurate record showing the name and actual hours worked each calendar day and each calendar week by each worker employed by CONTRACTOR in connection with the Project.

F. Registration; Record of Wages; Inspection:

CONTRACTOR shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the Work is subject to compliance monitoring by the California Department of Industrial Relations. CONTRACTOR shall maintain accurate payroll records and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.

CONTRACTOR shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulations Section 16461(e).

**SECTION – 15 SURETY BONDS**

CONTRACTOR shall, before entering upon the performance of this Contract, furnish Bonds approved by OCSD's General Counsel – one in the amount of one hundred percent (100%) of the Contract amount, to guarantee the faithful performance of the Work, and the other in the amount of one hundred percent (100%) of the Contract amount to guarantee payment of all claims for labor and materials furnished. As changes to the Contract occur via approved Change Orders, the CONTRACTOR shall assure that the amounts of the Bonds are adjusted to maintain 100% of the Contract Price. This Contract shall not become effective until such Bonds are supplied to and approved by OCSD. Bonds must be issued by a Surety authorized by the State Insurance Commissioner to do business in California. The Performance Bond shall remain in full force and effect through the warranty period, as specified in Section 19 below. All

Bonds required to be submitted relating to this Contract must comply with California Code of Civil Procedure Section 995.630. Each Bond shall be executed in the name of the Surety insurer under penalty of perjury, or the fact of execution of each Bond shall be duly acknowledged before an officer authorized to take and certify acknowledgments, and either one of the following conditions shall be satisfied:

- A. A copy of the transcript or record of the unrevoked appointment, power of attorney, by-laws, or other instrument, duly certified by the proper authority and attested by the seal of the insurer entitling or authorizing the person who executed the Bond to do so for and on behalf of the insurer, is on file in the Office of the County Clerk of the County of Orange; or
- B. A copy of a valid power of attorney is attached to the Bond.

## **SECTION – 16 INSURANCE**

CONTRACTOR shall purchase and maintain, for the duration of the Contract, 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, and the results of that Work by CONTRACTOR, its agents, representatives, employees, or Subcontractors, in amounts equal to the requirements set forth below. CONTRACTOR shall not commence Work under this Contract until all insurance required under this Section is obtained in a form acceptable to OCSD, nor shall CONTRACTOR allow any Subcontractor to commence Work on a subcontract until all insurance required of the Subcontractor has been obtained. CONTRACTOR shall maintain all of the foregoing insurance coverages in force through the point at which the Work under this Contract is fully completed and accepted by OCSD pursuant to the provisions of the General Conditions, "Final Acceptance and Final Completion". Furthermore, CONTRACTOR shall maintain all of the foregoing insurance coverages in full force and effect throughout the warranty period, commencing on the date of Final Acceptance. The requirement for carrying the foregoing insurance shall not derogate from the provisions for indemnification of OCSD by

CONTRACTOR under Section 17 of this Contract. Notwithstanding nor diminishing the obligations of CONTRACTOR with respect to the foregoing, CONTRACTOR shall subscribe for and maintain in full force and effect during the life of this Contract, inclusive of all changes to the Contract Documents made in accordance with the provisions of the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and/or "OWNER Initiated Changes", the following insurance in amounts not less than the amounts specified. OCSD reserves the right to amend the required limits of insurance commensurate with the CONTRACTOR's risk at any time during the course of the Project. No vehicles may enter OCSD premises/worksite without possessing the required insurance coverage.

CONTRACTOR's insurance shall also comply with all insurance requirements prescribed by agencies from whom permits shall be obtained for the Work and any other third parties from whom third party agreements are necessary to perform the Work (collectively, the "Third Parties"), The Special Provisions may list such requirements and sample forms and requirements from such Third Parties may be included in an attachment to the General Requirements. CONTRACTOR bears the responsibility to discover and comply with all requirements of Third Parties, including meeting specific insurance requirements, that are necessary for the complete performance of the Work. To the extent there is a conflict between the Third Parties' insurance requirements and those set forth by OCSD herein, the requirement(s) providing the more protective coverage for both OCSD and the Third Parties shall control and be purchased and maintained by CONTRACTOR.

A. Limits of Insurance

1. General Liability: Two Million Dollars (\$2,000,000) per occurrence and a general aggregate limit of Two Million Dollars (\$2,000,000) for bodily injury, personal injury and property damage. Coverage shall include each of the following:
  - a. Premises-Operations.

- b. Products and Completed Operations, with limits of at least Two Million Dollars (\$2,000,000) per occurrence and a general aggregate limit of Two Million Dollars (\$2,000,000) which shall be in effect at all times during the warranty period set forth in the Warranty section herein, and as set forth in the General Conditions, "Warranty (CONTRACTOR's Guarantee)", plus any additional extension or continuation of time to said warranty period that may be required or authorized by said provisions.
- c. Broad Form Property Damage, expressly including damage arising out of explosion, collapse, or underground damage.
- d. Contractual Liability, expressly including the indemnity provisions assumed under this Contract.
- e. Separation of Insured Clause, providing that coverage applies separately to each insured, except with respect to the limits of liability.
- f. Independent CONTRACTOR's Liability.

To the extent first dollar coverage, including defense of any claim, is not available to OCSD or any other additional insured because of any SIR, deductible, or any other form of self-insurance, CONTRACTOR is obligated to assume responsibility of insurer until the deductible, SIR or other condition of insurer assuming its defense and/or indemnity has been satisfied.

CONTRACTOR shall be responsible to pay any deductible or SIR.

- g. If a crane will be used, the General Liability insurance will be endorsed to add Riggers Liability coverage or its equivalent to cover the usage of the crane and exposures with regard to the crane operators, riggers and others involved in using the crane.

- h. If divers will be used, the General Liability insurance will be endorsed to cover marine liability or its equivalent to cover the usage of divers.
2. Automobile Liability: The CONTRACTOR shall maintain a policy of Automobile Liability Insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limits of liability coverage:
- Either (1) a combined single limit of One Million Dollars (\$1,000,000) and a general aggregate limit of One Million Dollars (\$1,000,000) for bodily injury, personal injury and property damage;
- Or alternatively, (2) One Million Dollars (\$1,000,000) per person for bodily injury and One Million Dollars (\$1,000,000) per accident for property damage.
3. Umbrella Excess Liability: The minimum limits of general liability and automobile liability insurance required, as set forth above, shall be provided for either in a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automobile liability.
4. Drone Liability Insurance: If a drone will be used, drone liability insurance must be maintained by CONTRACTOR in the amount of One Million Dollars (\$1,000,000) in a form acceptable by OCSD.
5. Worker's Compensation/Employer's Liability: CONTRACTOR shall provide such Worker's Compensation Insurance as required by the Labor Code of the State of California, including employer's liability with a minimum limit of One Million Dollars (\$1,000,000) per accident for bodily injury or disease. If an exposure to Jones Act

liability may exist, the insurance required herein shall include coverage with regard to Jones Act claims.

Where permitted by law, CONTRACTOR hereby waives all rights of recovery by subrogation because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason against OCSD, its or their officers, agents, or employees, and any other contractor or subcontractor performing Work or rendering services on behalf of OCSD in connection with the planning, development and construction of the Project. In all its insurance coverages related to the Work, CONTRACTOR shall include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against OCSD, its or their officers, agents, or employees, or any other contractor or subcontractor performing Work or rendering services at the Project. Where permitted by law, CONTRACTOR shall require similar written express waivers and insurance clauses from each of its Subcontractors of every tier. A waiver of subrogation shall be effective as to any individual or entity, even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium, directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

6. Limits are Minimums: If CONTRACTOR maintains higher limits than the minimums shown in this Section, OCSD requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR.

B. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by OCSD. At the option of OCSD, either: the Insurer shall reduce or eliminate such deductibles or self-

insured retentions as respects OCSD, its Directors, officers, agents, CONSULTANTS, and employees; or CONTRACTOR shall provide a financial guarantee satisfactory to OCSD guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

C. Other Insurance Provisions

1. Each such policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to contain, the following provisions:
  - a. OCSD, its Directors, officers, agents, CONSULTANTS, and employees, and all public agencies from whom permits will be obtained, and their Directors, officers, agents, and employees are hereby declared to be additional insureds under the terms of this policy, but only with respect to the operations of CONTRACTOR at or from any of the sites of OCSD in connection with this Contract, or acts and omissions of the additional insured in connection with its general supervision or inspection of said operations related to this Contract.
  - b. Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by OCSD shall be excess only and not contributing with insurance provided under this policy.
2. Each insurance policy required herein shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, and that coverage shall not be cancelled for non-payment of premium except after ten (10) days prior written notice by certified mail, return receipt requested. Should there be changes in coverage or an increase in deductible or SIR amounts, CONTRACTOR undertakes to procure a manuscript endorsement from its insurer giving 30 days prior notice of such an event to OCSD, or to have its insurance broker/agent send to OCSD a certified letter describing the

changes in coverage and any increase in deductible or SIR amounts. The certified letter must be sent Attention: Risk Management and shall be received not less than twenty (20) days prior to the effective date of the change(s). The letter must be signed by a Director or Officer of the broker/agent and must be on company letterhead, and may be sent via e-mail in pdf format.

3. Coverage shall not extend to any indemnity coverage for the active negligence of any additional insured in any case where an agreement to indemnify the additional insured would be invalid under California Civil Code Section 2782(b).
4. If required by a public agency from whom permit(s) will be obtained, each policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to specify by name the public agency and its legislative members, officers, agents, CONSULTANTS, and employees, to be additional insureds.

D. Acceptability of Insurers

Insurers must have an "A-", or better, Policyholder's Rating, and a Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best Rating Guide. OCSD recognizes that State Compensation Insurance Fund has withdrawn from participation in the A.M. Best Rating Guide process. Nevertheless, OCSD will accept State Compensation Insurance Fund for the required policy of worker's compensation insurance, subject to OCSD's option, at any time during the term of this Contract, to require a change in insurer upon twenty (20) days written notice. Further, OCSD will require CONTRACTOR to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONTRACTOR by OCSD or its agent.



E. Verification of Coverage

CONTRACTOR shall furnish OCSD with original certificates and mandatory endorsements affecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by OCSD before Work commences. OCSD reserves the right to require complete, certified copies of all required insurance policies, including endorsements, affecting the coverage required by these Specifications at any time.

F. Subcontractors

CONTRACTOR shall be responsible to establish insurance requirements for any Subcontractors hired by CONTRACTOR. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subcontractor's operations and work. OCSD and any public agency issuing permits for the Project must be named as "Additional Insured" on any General Liability or Automobile Liability policy obtained by a Subcontractor. The CONTRACTOR must obtain copies and maintain current versions of all Subcontractors' policies, Certificate of Liability and mandatory endorsements effecting coverage. Upon request, CONTRACTOR must furnish OCSD with the above referenced required documents.

G. Required Forms and Endorsements

1. Required ACORD Form

a. Certificate of Liability Form 25

2. Required Insurance Services Office, Inc. Endorsements (when alternative forms are shown, they are listed in order of preference)

In the event any of the following forms are cancelled by Insurance Services Office, Inc. (ISO), or are updated, the ISO replacement form or equivalent must be supplied.

a. Commercial General Liability Form CG-0001 10 01

- b. Additional Insured Including Products-Completed Operations      Form CG-2010 10 01 **and**  
Form CG-2037 10 01
  - c. Waiver of Transfer of Rights of Recovery Against Others to Us/  
Waiver of Subrogation      Form CG-2404 11 85; **or**  
Form CG-2404 10 93
- 3. Required State Compensation Insurance Fund Endorsements
  - a. Waiver of Subrogation      Endorsement No. 2570
  - b. Cancellation Notice      Endorsement No. 2065
- 4. Additional Required Endorsements
  - a. Notice of Policy Termination      Manuscript Endorsement

## **SECTION – 17    RISK AND INDEMNIFICATION**

All Work covered by this Contract done at the site of construction or in preparing or delivering materials to the site shall be at the risk of CONTRACTOR alone. CONTRACTOR shall save, indemnify, defend, and keep OCSD and others harmless as more specifically set forth in General Conditions, "General Indemnification".

## **SECTION – 18    TERMINATION**

This Contract may be terminated in whole or in part in writing by OCSD in the event of substantial failure by the CONTRACTOR to fulfill its obligations under this Agreement, or it may be terminated by OCSD for its convenience provided that such termination is effectuated in a manner and upon such conditions set forth more particularly in General Conditions, "Termination for Default" and/or "Termination for Convenience", provided that no termination may be effected unless proper notice is provided to CONTRACTOR at the time and in the manner provided in said General Conditions. If termination for default or convenience is effected by OCSD, an equitable adjustment in the price provided for in this Contract shall be made at the time and in the manner provided in the General Conditions, "Termination for Default" and "Termination for Convenience".

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CONFORMED

C-CA-072619  
PROJECT NO. SC17-03

CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2

## **SECTION – 19    WARRANTY**

The CONTRACTOR agrees to perform all Work under this Contract in accordance with the Contract Documents, including OCSD's designs, Drawings and Specifications.

The CONTRACTOR guarantees for a period of at least one (1) year from the date of Final Acceptance of the Work, pursuant to the General Conditions, "Final Acceptance and Final Completion" that the completed Work is free from all defects due to faulty materials, equipment or workmanship and that it shall promptly make whatever adjustments or corrections which may be necessary to cure any defects, including repairs of any damage to other parts of the system resulting from such defects. OCSD shall promptly give notice to the CONTRACTOR of observed defects. In the event that the CONTRACTOR fails to make adjustments, repairs, corrections or other work made necessary by such defects, OCSD may do so and charge the CONTRACTOR the cost incurred. The CONTRACTOR's warranty shall continue as to any corrected deficiency until the later of (1) the remainder of the original one-year warranty period; or (2) one year after acceptance by OCSD of the corrected Work. The Performance Bond and the Payment Bond shall remain in full force and effect through the guarantee period.

The CONTRACTOR's obligations under this clause are in addition to the CONTRACTOR's other express or implied assurances under this Contract, including but not limited to specific manufacturer or other extended warranties specified in the Plans and Specifications, or state law and in no way diminish any other rights that OCSD may have against the CONTRACTOR for faulty materials, equipment or Work.

## **SECTION – 20    ASSIGNMENT**

No assignment by the CONTRACTOR of this Contract or any part hereof, or of funds to be received hereunder, will be recognized by OCSD unless such assignment has had prior written approval and consent of OCSD and the Surety.

## **SECTION – 21    RESOLUTION OF DISPUTES**

OCSD and the CONTRACTOR shall comply with the provisions of California Public Contract Code Section 20104 et. seq., regarding resolution of construction claims for any Claims which arise between the CONTRACTOR and OCSD, as well as all applicable dispute and Claims provisions as set forth in the General Conditions and as otherwise required by law.

## **SECTION – 22    SAFETY & HEALTH**

CONTRACTOR shall comply with all applicable safety and health requirements mandated by federal, state, city and/or public agency codes, permits, ordinances, regulations, and laws, as well as these Contract Documents, including but not limited to the General Requirements, Section entitled "Safety" and Exhibit B OCSD Safety Standards.

## **SECTION – 23    NOTICES**

Any notice required or permitted under this Contract shall be sent by certified mail, return receipt requested, at the address set forth below. Any party whose address changes shall notify the other party in writing.

TO OCSD:                      Orange County Sanitation District  
                                     10844 Ellis Avenue  
                                     Fountain Valley, California 92708-7018  
                                     Attn: Clerk of the Board

Copy to:                      Orange County Sanitation District  
                                     10844 Ellis Avenue  
                                     Fountain Valley, California 92708-7018  
                                     Attn: Construction Manager

Bradley R. Hogin, Esquire  
Woodruff, Spradlin & Smart  
555 Anton Boulevard  
Suite 1200  
Costa Mesa, California 92626

TO CONTRACTOR:           Houalla Enterprises, Ltd. dba Metro Builders &  
                                     Engineers Group, Ltd.  
                                     2610 Avon Street  
                                     Newport Beach, CA 92663

Copy to:                      Fouad Houalla, President  
                                     Houalla Enterprises, Ltd. dba Metro Builders &  
                                     Engineers Group, Ltd.  
                                     2610 Avon Street  
                                     Newport Beach, CA 92663

IN WITNESS WHEREOF, the parties hereto have executed this Contract Agreement as the date first hereinabove written.

CONTRACTOR: Houalla Enterprises, Ltd. dba Metro Builders & Engineers Group, Ltd.  
2610 Avon Street  
Newport Beach, CA 92663

By \_\_\_\_\_

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

Its \_\_\_\_\_

CONTRACTOR's State License No. 597589 (Expiration Date – 7/31/2020)

OCSD: Orange County Sanitation District

By \_\_\_\_\_

Robert Collacott  
Chair, Operations Committee

By \_\_\_\_\_

Kelly A. Lore  
Clerk of the Board

By \_\_\_\_\_

Ruth Zintzun  
Purchasing & Contracts Manager

CONFORMED

C-CA-072619  
PROJECT NO. SC17-03  
CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2

**EXHIBIT A**  
**SCHEDULE OF PRICES**

**TABLE OF CONTENTS**  
**EXHIBIT A**  
**SCHEDULE OF PRICES**

EXA-1 BASIS OF COMPENSATION..... 1

EXA-2 PROGRESS PAYMENTS ..... 1

EXA-3 RETENTION AND ESCROW ACCOUNTS..... 1

EXA-4 STOP PAYMENT NOTICE..... 3

EXA-5 PAYMENT TO SUBCONTRACTORS ..... 3

EXA-6 PAYMENT OF TAXES ..... 3

EXA-7 FINAL PAYMENT ..... 4

EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT ... 5

ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT ..... 7

ATTACHMENT 2 – SCHEDULE OF PRICES..... 8



# **EXHIBIT A**

## **SCHEDULE OF PRICES**

### **EXA-1 BASIS OF COMPENSATION**

CONTRACTOR will be paid the Contract Price according to the Schedule of Prices, and all other applicable terms and conditions of the Contract Documents.

### **EXA-2 PROGRESS PAYMENTS**

Progress payments will be made in accordance with all applicable terms and conditions of the Contract Documents, including, but not limited to:

1. Contract Agreement – Section 11 – “Contract Price and Method of Payment;”
2. General Conditions – “Payment – General”;
3. General Conditions – “Payment – Applications for Payment”;
4. General Conditions – “Payment – Mobilization Payment Requirements;”
5. General Conditions – “Payment – Itemized Breakdown of Contract Lump Sum Prices”;
6. General Conditions – “Contract Price Adjustments and Payments”;
7. General Conditions – “Suspension of Payments”;
8. General Conditions – “OCSD’s Right to Withhold Certain Amounts and Make Application Thereof”; and
9. General Conditions – “Final Payment.”

### **EXA-3 RETENTION AND ESCROW ACCOUNTS**

#### **A. Retention:**

OCSD shall retain a percentage of each progress payment to assure satisfactory completion of the Work. The amount to be retained from each progress payment shall be determined as provided in General Conditions – “Retained Funds; Substitution of Securities”. In all contracts between CONTRACTOR and its Subcontractors and/or Suppliers, the retention may not exceed the percentage specified in the Contract Documents.

B. Substitution of Securities:

CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.” Payment of Escrow Agent:

In lieu of substitution of securities as provided above, the CONTRACTOR may request and OCSD shall make payment of retention earned directly to the escrow agent at the expense of the CONTRACTOR. At the expense of the CONTRACTOR, the CONTRACTOR may direct the investment of the payments into securities consistent with Government Code §16430 and the CONTRACTOR shall receive the interest earned on the investments upon the same terms provided for in this article for securities deposited by the CONTRACTOR. Upon satisfactory completion of the Contract, the CONTRACTOR shall receive from the escrow agent all securities, interest and payments received by the escrow agent from OCSD, pursuant to the terms of this article. The CONTRACTOR shall pay to each Subcontractor, not later than twenty (20) calendar days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to ensure the performance of the Subcontractor. The escrow agreement used by the escrow agent pursuant to this article shall be substantially similar to the form set forth in §22300 of the California Public Contract Code.

C. Release of Retention:

Upon Final Acceptance of the Work, the CONTRACTOR shall submit an invoice for release of retention in accordance with the terms of the Contract.

D. Additional Deductibles:

In addition to the retentions described above, OCSD may deduct from each progress payment any or all of the following:

1. Liquidated Damages that have occurred as of the date of the application for progress payment;
2. Deductions from previous progress payments already paid, due to OCSD's discovery of deficiencies in the Work or non-compliance with the Specifications or any other requirement of the Contract;
3. Sums expended by OCSD in performing any of the CONTRACTOR'S obligations under the Contract that the CONTRACTOR has failed to perform, and;
4. Other sums that OCSD is entitled to recover from the CONTRACTOR under the terms of the Contract, including without limitation insurance deductibles and assessments.

The failure of OCSD to deduct any of the above-identified sums from a progress payment shall not constitute a waiver of OCSD's right to such sums or to deduct them from a later progress payment.

#### **EXA-4 STOP PAYMENT NOTICE**

In addition to other amounts properly withheld under this article or under other provisions of the Contract, OCSD shall retain from progress payments otherwise due the CONTRACTOR an amount equal to one hundred twenty-five percent (125%) of the amount claimed under any stop payment notice under Civil Code §9350 et. seq. or other lien filed against the CONTRACTOR for labor, materials, supplies, equipment, and any other thing of value claimed to have been furnished to and/or incorporated into the Work; or for any other alleged contribution thereto. In addition to the foregoing and in accordance with Civil Code §9358 OCSD may also satisfy its duty to withhold funds for stop payment notices by refusing to release funds held in escrow pursuant to public receipt of a release of stop payment notice executed by a stop payment notice claimant, a stop payment notice release bond, an order of a court of competent jurisdiction, or other evidence satisfactory to OCSD that the CONTRACTOR has resolved such claim by settlement.

#### **EXA-5 PAYMENT TO SUBCONTRACTORS**

##### **Requirements**

1. The CONTRACTOR shall pay all Subcontractors for and on account of Work performed by such Subcontractors, not later than seven (7) days after receipt of each progress payment as required by the California Business and Professions Code §7108.5. Such payments to Subcontractors shall be based on the measurements and estimates made pursuant to article progress payments provided herein.
2. Except as specifically provided by law, the CONTRACTOR shall pay all Subcontractors any and all retention due and owing for and on account of Work performed by such Subcontractors not later than seven (7) days after CONTRACTOR'S receipt of said retention proceeds from OCSD as required by the California Public Contract Code §7107.

#### **EXA-6 PAYMENT OF TAXES**

Unless otherwise specifically provided in this Contract, the Contract Price includes full compensation to the CONTRACTOR for all taxes. The CONTRACTOR shall pay all federal, state, and local taxes, and duties applicable to and assessable against any Work, including but not limited to retail sales and use, transportation, export, import, business, and special taxes. The CONTRACTOR shall ascertain and pay the taxes when due. The CONTRACTOR will maintain auditable records, subject to OCSD reviews, confirming that tax payments are current at all times.

## **EXA-7 FINAL PAYMENT**

After Final Acceptance of the Work, as more particularly set forth in the General Conditions, "Final Acceptance and Final Completion", and after Resolution of the Board authorizing final payment and satisfaction of the requirements as more particularly set forth in General Conditions – "Final Payment", a final payment will be made as follows:

1. Prior to Final Acceptance, the CONTRACTOR shall prepare and submit an application for Final Payment to OCSD, including:
  - a. The proposed total amount due the CONTRACTOR, segregated by items on the payment schedule, amendments, Change Orders, and other bases for payment;
  - b. Deductions for prior progress payments;
  - c. Amounts retained;
  - d. A conditional waiver and release on final payment for each Subcontractor (per Civil Code Section 8136);
  - e. A conditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8136);
  - f. List of Claims the CONTRACTOR intends to file at that time or a statement that no Claims will be filed,
  - g. List of pending unsettled claims, stating claimed amounts, and copies of any and all complaints and/or demands for arbitration received by the CONTRACTOR; and
  - h. For each and every claim that resulted in litigation or arbitration which the CONTRACTOR has settled, a conformed copy of the Request for Dismissal with prejudice or other satisfactory evidence the arbitration is resolved.
2. The application for Final Payment shall include complete and legally effective releases or waivers of liens and stop payment notices satisfactory to OCSD, arising out of or filed in connection with the Work. Prior progress payments shall be subject to correction in OCSD's review of the application for Final Payment. Claims filed with the application for Final Payment must be otherwise timely under the Contract and applicable law.
3. Within a reasonable time, OCSD will review the CONTRACTOR'S application for Final Payment. Any recommended changes or corrections will then be forwarded to the CONTRACTOR. Within ten (10) calendar days after receipt of recommended changes from OCSD, the CONTRACTOR will make the changes, or list Claims that will be filed as a result of the changes, and shall submit the revised application for Final Payment. Upon

acceptance by OCSD, the revised application for Final Payment will become the approved application for Final Payment.

4. If no Claims have been filed with the initial or any revised application for Final Payment, and no Claims remain unsettled within thirty-five (35) calendar days after Final Acceptance of the Work by OCSD, and agreements are reached on all issues regarding the application for Final Payment, OCSD, in exchange for an executed release, satisfactory in form and substance to OCSD, will pay the entire sum found due on the approved application for Final Payment, including the amount, if any, allowed on settled Claims.
5. The release from the CONTRACTOR shall be from any and all Claims arising under the Contract, except for Claims that with the concurrence of OCSD are specifically reserved, and shall release and waive all unreserved Claims against OCSD and its officers, directors, employees and authorized representatives. The release shall be accompanied by a certification by the CONTRACTOR that:
  - a. It has resolved all Subcontractors, Suppliers and other Claims that are related to the settled Claims included in the Final Payment;
  - b. It has no reason to believe that any party has a valid claim against the CONTRACTOR or OCSD which has not been communicated in writing by the CONTRACTOR to OCSD as of the date of the certificate;
  - c. All warranties are in full force and effect, and;
  - d. The releases and the warranties shall survive Final Payment.
6. If any claims remain open, OCSD may make Final Payment subject to resolution of those claims. OCSD may withhold from the Final Payment an amount not to exceed one hundred fifty percent (150%) of the sum of the amounts of the open claims, and one hundred twenty-five percent (125%) of the amounts of open stop payment notices referred to in article entitled stop payment notices herein.
7. The CONTRACTOR shall provide an unconditional waiver and release on final payment from each Subcontractor and Supplier providing Work under the Contract (per Civil Code Section 8138) and an unconditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8138) within thirty (30) days of receipt of Final Payment.

#### **EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT**

Notwithstanding OCSD's acceptance of the application for Final Payment and irrespective of whether it is before or after Final Payment has been made, OCSD shall not be precluded from subsequently showing that:

1. The true and correct amount payable for the Work is different from that previously accepted;

2. The previously-accepted Work did not in fact conform to the Contract requirements, or;
3. A previous payment or portion thereof for Work was improperly made.

OCSD also shall not be stopped from demanding and recovering damages from the CONTRACTOR, as appropriate, under any of the foregoing circumstances as permitted under the Contract or applicable law.

## ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT

I hereby certify under penalty of perjury as follows:

That the claim for payment is in all respects true, correct; that the services mentioned herein were actually rendered and/or supplies delivered to OCSD in accordance with the Contract.

I understand that it is a violation of both the federal and California False Claims Acts to knowingly present or cause to be presented to OCSD a false claim for payment or approval.

A claim includes a demand or request for money. It is also a violation of the False Claims Acts to knowingly make use of a false record or statement to get a false claim paid. The term "knowingly" includes either actual knowledge of the information, deliberate ignorance of the truth or falsity of the information, or reckless disregard for the truth or falsity of the information. Proof of specific intent to defraud is not necessary under the False Claims Acts. I understand that the penalties under the Federal False Claims Act and State of California False Claims Act are non-exclusive, and are in addition to any other remedies which OCSD may have either under contract or law.

I hereby further certify, to the best of my knowledge and belief, that:

1. The amounts requested are only for performance in accordance with the Specifications, terms, and conditions of the Contract;
2. Payments to Subcontractors and Suppliers have been made from previous payments received under the Contract, and timely payments will be made from the proceeds of the payment covered by this certification;
3. This request for progress payments does not include any amounts which the prime CONTRACTOR intends to withhold or retain from a Subcontractor or Supplier in accordance with the terms and conditions of the subcontract; and
4. This certification is not to be construed as Final Acceptance of a Subcontractor's performance.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

CONFORMED

C-EXA-080414  
PROJECT NO. SC17-03  
CENGEN OIL FILTERS PLATFORM AT PLANT NO. 1 AND PLANT NO. 2

## **ATTACHMENT 2 – SCHEDULE OF PRICES**

See next pages from the Bid Submittal Forms (Metro Builders & Engineers Group, Ltd.)

BF-14 Schedule of Prices, Pages 1-2



Bid Submitted By: Metro Builders & Engineers Group, Ltd.  
(Name of Firm)

**BF-14 SCHEDULE OF PRICES**

**INSTRUCTIONS**

**A. General**

For Unit Prices, it is understood that the following quantities are approximate only and are solely for the purpose of estimating the comparison of Bids, and that the actual value of Work will be computed based upon the actual quantities in the completed Work, whether they be more or less than those shown. CONTRACTOR's compensation for the Work under the Contract Documents will be computed based upon the lump sum amount of the Contract at time of award, plus any additional or deleted costs approved by OCSD via approved Change Orders, pursuant to the Contract Documents.

Bidder shall separately price and accurately reflect costs associated with each line item, leaving no blanks. Any and all modifications to the Bid must be initialed by an authorized representative of the Bidder in accordance with the Instructions to Bidders, Preparation of Bid.

Bidders are reminded of Instruction to Bidders, Discrepancy in Bid Items, which, in summary, provides that the total price for each item shall be based on the Unit Price listed for each item multiplied by the quantity; and the correct Total Price for each item shall be totaled to determine the Total Amount of Bid.

All applicable costs including overhead and profit shall be reflected in the respective unit costs and the TOTAL AMOUNT OF BID. The Bid price shall include all costs to complete the Work, including profit, overhead, etc., unless otherwise specified in the Contract Documents. All applicable sales taxes, state and/or federal, and any other special taxes, patent rights or royalties shall be included in the prices quoted in this Bid.

**B. Basis of Award**

AWARD OF THE CONTRACT WILL BE MADE ON THE BASIS OF THE LOWEST RESPONSIVE AND RESPONSIBLE BID.

**Note 1:** Base Bid. Includes all costs necessary to furnish all labor, materials, equipment and services for the construction of the Project per the Contract Documents.

Bid Submitted By: Metro Builders & Engineers Group, Ltd.  
(Name of Firm)

**EXHIBIT A**  
**SCHEDULE OF PRICES**

BASE BID ITEMS (Refer to Note 1 in the Instructions):

Item No.	Description	Unit of Measurement	Approx Qty	Unit Price	Extended Price
1.	Furnish all labor, materials, equipment, and services necessary for the completion of the Contract Work of <b>Project No. SC17-03, CenGen Oil Filters Platform at Plant No. 1 and Plant No. 2</b> , as described in Division 01, Section 01155, and in conformance with the Contract Documents, for a lump sum price of ...	Lump Sum	1		= \$ 134,479.22
<b>TOTAL AMOUNT OF BID (BASIS OF AWARD)</b>					<b>\$ 134,479.22</b>



OPERATIONS COMMITTEE

Agenda Report

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**File #:** 2019-724

**Agenda Date:** 12/4/2019

**Agenda Item No:** 3.

---

**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**PROTEIN MATRIX DEMONSTRATION STUDY AT PLANT NO. 1, PROJECT NO. RE18-02**

**GENERAL MANAGER'S RECOMMENDATION**

**RECOMMENDATION:** Recommend to the Board of Directors to:

- A. Ratify the prior Sole Source Purchases to Protein Matrix LLC for the procurement of Protein Matrix Compound PM-4 for Protein Matrix Demonstration Study at Plant No. 1, Project No. RE 18-02, for a total amount of \$148,500; and
- B. Approve a Sole Source Purchase Order to Protein Matrix LLC for the procurement of Protein Matrix Compound PM-4 for Protein Matrix Demonstration Study at Plant No. 1, Project No. RE18-02, for a total amount not to exceed \$150,000.

**BACKGROUND**

The Board-approved budget for the capital improvement program includes a master budget for the Research Program, Project No. M-RESEARCH. Research projects are used to demonstrate technologies, equipment, configurations, and control strategies to improve operational efficiency, reduce costs, improve safety, or fill important information gaps. The results support operations and maintenance and provide information needed for future planning and design work.

Two deliveries of the product have been sole source purchased to date as reported to the Board of Directors in November 2019, Agenda Item No. 15, General Manager Approved Purchases. In July 2019, \$74,250 in Protein Matrix Compound PM-4 was purchased. In September 2019, an additional \$74,250 of the same chemical was purchased to continue testing. Since the two prior purchases total more than the General Manager's purchasing authority of \$100,000, staff is seeking Board ratification of \$148,500 in addition to the proposed \$150,000 purchase.

**RELEVANT STANDARDS**

- 24/7/365 treatment plant reliability
- Comply with OCSD Policy - Purchasing Ordinance No. OCSD-52, Section 1.07.A Sole Source Procurement

**PROBLEM**

Fats, oils, and grease present in raw wastewater accumulate in flow channels, flow distribution structures, and primary clarifiers requiring significant operational and maintenance efforts for removal and significant wear and tear on the equipment.

**PROPOSED SOLUTION**

Protein Matrix Demonstration Study at Plant No. 1, Project No. RE18-02, was created to evaluate whether a particular proprietary product has the potential to reduce the accumulation of fats, oil, and grease. This product was chosen for testing because it is the only identified product on the market that claims to modify fats, oils, and grease so that they cannot reform. This product, manufactured by Protein Matrix, LLC, can be easily fed into the Headworks facilities using existing unused storage or feed equipment.

The testing has demonstrated a notable reduction of accumulation in the primary clarifiers where most of the problems have been experienced. Staff proposes purchasing enough additional product to identify the optimum dosage. When the optimum dosage is determined, a conclusion can be made about whether the product is a cost-effective solution.

**TIMING CONCERNS**

Delaying this work would extend the time to determine if this is a viable solution for the accumulation of fats, oils, and grease in plant facilities.

**RAMIFICATIONS OF NOT TAKING ACTION**

Not approving this request will prevent the research study from optimizing the dosage of Protein Matrix to determine if this is a viable solution. Since the cost of this material, optimizing the dosage is important to prepare a representative life cycle analysis. Furthermore, implementing the permanent addition of this chemical will require an accurate estimate of dosing for determining operational costs and budgets.

**CEQA**

N/A

**FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted (Fiscal Year 2019-20 Budget Update, Appendix A, Page A-9, Line Item: Research Program, M-RESEARCH), and the budget is sufficient for the recommended action.

**ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

N/A



# Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

## OPERATIONS COMMITTEE

### Agenda Report

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**File #:** 2019-739

**Agenda Date:** 12/4/2019

**Agenda Item No:** 4.

---

**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**AWARD OF CORROSION MANAGEMENT SUPPORT SERVICES, SPECIFICATION NO. CS-2019-1071BD**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Consultant Services Agreement with Corrpro Companies, Inc. for Corrosion Management Support Services, Specification No. CS-2019-1071BD, for the period of January 1, 2020 through December 31, 2020, for a total annual amount not to exceed \$600,000, with four (4) one-year renewal options; and
- B. Approve an annual contingency of \$60,000 (10%).

**BACKGROUND**

The Orange County Sanitation District (Sanitation District) owns, maintains, and operates nearly \$11 billion of assets in its collections system, Reclamation Plant No. 1 in Fountain Valley, and Treatment Plant No. 2 in Huntington Beach. To ensure that our facilities are reliable, an Asset Management Program is in place to proactively assess and track the condition and performance of critical assets and develop targeted maintenance and capital investment strategies.

Condition and corrosion assessments provide an accurate understanding of the condition of the assets, identify deficiencies that need to be addressed, and provide a timeline of when the recommended mitigations need to be completed. This agreement will provide corrosion and condition assessment staffing to perform condition and corrosion assessments and prepare assessment and recommendation reports.

**RELEVANT STANDARDS**

- Sustain 1, 5, 20-year planning horizons
- Maintain and adhere to appropriate internal planning documents - Strategic Plan
- Maintain a proactive asset management program

**PROBLEM**

The Sanitation District has a need for consulting support to conduct corrosion and condition assessment of assets.

**PROPOSED SOLUTION**

Solicit and contract for Professional Consultant Services for corrosion and condition assessment.

**TIMING CONCERNS**

The previous contract for Corrosion Management support expired on June 30, 2019. Further delay of the new contract will prevent the use of these services to support the Asset Management Program.

**RAMIFICATIONS OF NOT TAKING ACTION**

Without the condition and corrosion management support, Sanitation District staff would not have accurate condition and corrosion information on assets and will be less able to develop maintenance and capital investment strategies.

**PRIOR COMMITTEE/BOARD ACTIONS**

N/A

**ADDITIONAL INFORMATION**Staff Evaluation of Proposals

A Request for Proposal for Corrosion Management Support Services was advertised on September 11, 2019. The following evaluation criterion were described in the Request for Proposals and used to determine the most qualified firm.

CRITERION	WEIGHT
Qualifications & Experience of Firm	30%
Proposed Staffing & Project Organization	40%
Interviews	30%

On October 3, 2019, a non-mandatory pre-proposal meeting was conducted, and two firms attended.

One proposal was received on October 24, 2019 from Corrpro Companies. It was evaluated in accordance with the evaluation process set forth in Sanitation District's Purchasing Ordinance No. OCSD-52 by a pre-selected evaluation team consisting of the following Sanitation District staff: Engineering Manager, Maintenance Manager, Chief Plant Operator, Senior Engineer, and Engineer.

A representative from the Purchasing Division also participated in the evaluation process as a non-voting member.

Following scoring by the evaluation team, it was determined that the information provided in the proposal was sufficient to determine the qualifications of the firm and proposed staffing. As a result, no interview was conducted, and Corrpro Companies was selected as a qualified Consultant based on the scoring shown below (out of 70 possible points).

<b>Firm</b>	<b>Qualifications of Firm (Max 30)</b>	<b>Proposed Staffing (Max 40)</b>	<b>Interviews (Max N/A)</b>	<b>Total Score (Max 70)</b>
Corrpro Companies	27.6	35.6	N/A	63.2

Corrpro Companies is qualified based on the firm's qualifications and experience in the field of corrosion control and engineering and the proposed team's experience with the Sanitation District and other agencies and facilities conducting similar work.

#### Negotiations:

Staff conducted negotiations with Corrpro Companies on November 14, 2019 clarifying scope of work, assumptions, and contract multipliers.

Staff has reviewed the proposed positions, rates, and terms and believes that the proposed fee is fair and reasonable. Contract profit is 9%, which is consistent with the Sanitation District's standard professional agreements.

#### **CEQA**

This is not a project as defined by the California Environmental Quality Act (CEQA); therefore, CEQA does not apply.

#### **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This recommendation would be funded under the Professional/Contractual Services line item for the Engineering Department (Budget Update Fiscal Year 2019-20, Page 45), and the available funding is sufficient for the action.

#### **ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Professional Consultant Services Agreement

EY:sa

**PROFESSIONAL CONSULTANT SERVICES AGREEMENT**  
**Corrosion Management Staffing Support Services**  
**Specification No. CS-2019-1071BD**

**THIS AGREEMENT** is made and entered into as of the date fully executed below, by and between Orange County Sanitation District, with a principal place of business at 10844 Ellis Avenue, Fountain Valley, CA 92708 (hereinafter referred to as "OCSD") and [REDACTED] with a principal place of business at [REDACTED] (hereinafter referred to as "Consultant") collectively referred to as the "Parties".

**WITNESSETH**

**WHEREAS**, based on Consultant's expertise and experience, OCSD desires to temporarily engage Consultant to provide Corrosion Management Staffing Support Services "Services" as described in Exhibit "A"; and

**WHEREAS**, Consultant submitted its Proposal, dated [REDACTED]; and

**WHEREAS**, on [REDACTED], the Board of Directors of OCSD, by minute order, authorized execution of this Agreement between OCSD and Consultant; and

**WHEREAS**, OCSD has chosen Consultant to conduct Services in accordance with Ordinance No. OCSD-52; and

**NOW, THEREFORE**, in consideration of the mutual promises and mutual benefits exchanged between the Parties, the Parties mutually agree as follows:

**1. Introduction**

1.1 This Agreement and all exhibits hereto (called the "Agreement") is made by OCSD and the Consultant. The terms and conditions herein exclusively govern the purchase of Services as described in Exhibit "A".

1.2 Exhibits to this Agreement are incorporated by reference and made a part of this Agreement as though fully set forth at length herein.

Exhibit "A"	Scope of Work
Exhibit "B"	Proposal
Exhibit "C"	Acknowledgement of Insurance Requirements
Exhibit "D"	OCSD Safety Standards
Exhibit "E"	Human Resources Policies
Exhibit "F"	Allowable Direct Costs

1.3 In the event of any conflict or inconsistency between the provisions of this Agreement and any of the provisions of the exhibits hereto, the provisions of this Agreement shall in all respects govern and control.

1.4 This Agreement may not be modified, changed, or supplemented, nor may any obligations hereunder be waived or extensions of time for performance granted, except by written instrument signed by both Parties.

1.5 The various headings in this Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Agreement or any section or provision hereof.



- 1.6 The term “days”, when used in the Agreement, shall mean calendar days, unless otherwise noted as workdays.
- 1.7 The term “workday”. Workdays are defined as all days that are not Saturday, Sunday, or OCSD observed holidays. Meetings with OCSD staff shall be scheduled from Monday through Thursday between the hours of 8 a.m. and 4 p.m. (exception is Operations staff who maintain plant operations 24/7 and work a rotated 12-hour shift) and shall conform to OCSD work schedules. OCSD review periods shall not include OCSD observed holidays.
- 1.8 OCSD holidays (non-working days) are as follows: New Year’s Day, Lincoln’s Birthday, Presidents’ Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, and Christmas Day.
- 1.9 Work Hours: The work required under this Agreement may include normal business hours, evenings, and weekends. OCSD will not pay for travel time.
- 1.10 Consultant shall provide OCSD with all required premiums and/or overtime work at no charge beyond the total amount of the Agreement.
- 1.11 Except as expressly provided otherwise, OCSD accepts no liability for any expenses, losses, or action incurred or undertaken by Consultant as a result of work performed in anticipation of purchases of said Services by OCSD.
2. **Scope of Work** Subject to the terms of this Agreement, Consultant shall perform the Services identified in Exhibit “A”. Consultant warrants that all of its Services shall be performed in a competent, professional, and satisfactory manner.
3. **Modifications to Scope of Work** Requests for modifications to the Scope of Work hereunder can be made by OCSD at any time. All modifications must be made in writing and signed by both Parties. A review of the time required for the modification will be made by OCSD and Consultant and the Agreement period adjusted accordingly.
4. **Compensation**
- 4.1 Compensation to be paid by OCSD to Consultant for the Services provided under this Agreement shall be a total amount not to exceed [REDACTED] Dollars (\$[REDACTED].00).
- 4.2 As a portion of the total compensation to be paid to Consultant, OCSD shall pay to Consultant a sum equal to the burdened salaries (salaries plus benefits, overhead, and profit per Exhibit “B”) actually paid by Consultant charged on an hourly-rate basis and paid to the personnel of Consultant not to exceed the maximum hourly rates per Exhibit “B-1”. Upon request of OCSD, Consultant shall provide OCSD with certified payroll records of all employees’ work that is charged to this Agreement.
- 4.3 “Field Staff” are defined as staff on-site at OCSD facilities assigned by Consultant, working at OCSD’s facilities for an assigned period exceeding thirty (30) continuous calendar days. The overhead rates for Field Staff are included in Exhibit “B”.
- 4.4 “Home Office Staff” are defined as staff assigned by Consultant, supporting the assigned work, either by working at Consultant’s or subconsultant’s offices or at OCSD’s site for periods less than thirty (30) continuous calendar days. The overhead rates for Home Office Staff are included in Exhibit “B”.

- 4.5 Profit for Consultant and subconsultants shall be nine percent (9%). Amendments shall be governed by the same maximum profit percentage. As a portion of the total compensation to be paid to Consultant and subconsultants, OCSD shall pay profit for all services rendered by Consultant and subconsultants for this Agreement.
- 4.6 For all subconsultants, Consultant may pay to subconsultants total compensation on an hourly-rate basis per Exhibit "B" and as specified in the Exhibit "A". OCSD shall pay to Consultant the actual costs of subconsultants, without markup.
- 4.7 For purposes of adjusting the maximum hourly rates agreed to by the Parties in Exhibit "B-1" for Consultant employees and any subconsultant employees performing services under this Agreement shall be adjusted annually based on the Consumer Price Index (CPI) of Los Angeles-Long Beach-Anaheim, California as of September of each year. This rate is from the United States Department of Labor Bureau of Labor Statistics. The annual salary figures used in calculating hourly rates shall not otherwise be adjusted, regardless of whether any Consultant employees may have received a salary increase from Consultant that exceeds the increase in CPI. The annual adjustments shall not exceed three percent (3%). The first hourly rate escalation will occur January 1, 2021.
- 4.8 OCSD will reimburse the Consultant for reasonable travel and business expenses as described in this section and further described in Exhibit "F" - Allowable Direct Costs to this Agreement. The reimbursement of the above mentioned expenses will be based on an "accountable plan" as considered by U.S. Internal Revenue Service (IRS). The plan includes a combination of reimbursements based upon receipts and a "per diem" component approved by IRS. The most recent schedule of the per diem rates utilized by OCSD can be found on the U.S. General Services Administration (GSA) website at <http://www.gsa.gov/portal/category/104711#>.

The Consultant shall be responsible for the most economical and practical means or management of reimbursable costs inclusive, but not limited to, travel, lodging and meals arrangements. OCSD shall apply the most economic and practical method of reimbursement which may include reimbursements based upon receipts and/or "per diem" as deemed the most practical.

Consultant shall be responsible for returning to OCSD any excess reimbursements after the reimbursement has been paid by OCSD.

Travel and travel arrangements – Any travel involving airfare, overnight stays or multiple day attendance must be approved by OCSD in advance.

Local travel is considered travel by the Consultant within the OCSD geographical area which includes Orange, Los Angeles, Ventura, San Bernardino, Riverside, San Diego, Imperial and Kern Counties. Automobile mileage is reimbursable if Consultant is required to utilize personal vehicles for local travel.

Lodging – Overnight stays will not be approved by OCSD for local travel. However, under certain circumstances overnight stay may be allowed at the discretion of OCSD based on reasonableness of meeting schedules and the amount of time required for travel by the Consultant. Such determination will be made on a case-by-case basis and at the discretion of OCSD.

Travel Meals – Per-diem rates as approved by the IRS shall be utilized for travel meals reimbursements. Per Diem rates shall be applied to meals that are appropriate for travel times. Receipts are not required for the approved meals.

Additional details related to the reimbursement of the allowable direct costs are provided in Exhibit “F” to this Agreement.

OCSD shall also pay to Consultant actual costs for equipment rentals, leases or purchases with prior approval of OCSD.

OCSD will not pay per diem for Field Staff nor will it pay for any relocation of staff to be assigned under this Agreement.

**5. California Department of Industrial Relations (DIR) Registration and Record of Wages**

- 5.1 To the extent Consultant’s employees and/or subconsultants who will perform work for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq, Consultant and subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the work is subject to compliance monitoring and enforcement by the DIR.
- 5.2 The Consultant and subconsultants shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776, and shall submit payroll records to the Labor Commissioner pursuant to Labor Code 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.
- 5.3 Pursuant to Labor Code Section 1776, the Consultant and subconsultants shall furnish a copy of all certified payroll records to OCSD and/or general public upon request, provided the public request is made through OCSD, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement of the Department of Industrial Relations.
- 5.4 The Consultant and subconsultants shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulation Section 16461(e).

**6. Payment and Invoicing**

- 6.1 OCSD shall pay, net thirty (30) days, upon receipt and approval, by OCSD’s Project Manager or designee, of itemized invoices submitted monthly for Services rendered as required in Exhibit “A”. OCSD, at its sole discretion, shall be the determining party as to whether the Services have been satisfactorily completed.
- 6.2 Invoices shall be emailed by Consultant to OCSD Accounts Payable at [APStaff@OCSD.com](mailto:APStaff@OCSD.com) and “INVOICE” with the Purchase Order Number and Specification No. CS-2019-1071BD shall be referenced in the subject line.

- 7. Audit Rights** Consultant agrees that, during the term of this Agreement and for a period of three (3) years after its termination, OCSD shall have access to and the right to examine any directly pertinent books, documents, and records of Consultant relating to the invoices submitted by Consultant pursuant to this Agreement.

8. **Commencement and Term** The Services provided under this Agreement shall be for the period of one (1) year commencing on January 1, 2020 and continuing through December 31, 2020.
9. **Renewals**
- 9.1 OCSD may exercise the option to renew this Agreement for up to four (4) one-year periods based upon the criteria set forth in Exhibit "A", under the terms and conditions contained herein. OCSD shall make no obligation to renew nor give reason if it elects not to renew.
- 9.2 This Agreement may be renewed by OCSD Purchase Order.
10. **Extensions** The term of this Agreement may be extended only by written instrument signed by both Parties.
11. **Performance** Time is of the essence in the performance of the provisions hereof.
12. **Termination**
- 12.1 OCSD reserves the right to terminate this Agreement for its convenience, with or without cause, in whole or in part, at any time, by written notice from OCSD. Upon receipt of a termination notice, Consultant shall immediately discontinue all work under this Agreement (unless the notice directs otherwise). OCSD shall thereafter, within thirty (30) days, pay Consultant for work performed (cost and fee) to the date of termination. Consultant expressly waives any claim to receive anticipated profits to be earned during the uncompleted portion of this Agreement. Such notice of termination shall terminate this Agreement and release OCSD from any further fee, cost or claim hereunder by Consultant other than for work performed to the date of termination.
- 12.2 OCSD reserves the right to terminate this Agreement immediately upon OCSD's determination that Consultant is not complying with the Scope of Work requirements, if the level of service is inadequate, or any other default of this Agreement.
- 12.3 OCSD may also immediately terminate for default of this Agreement in whole or in part by written notice to Consultant:
- if Consultant becomes insolvent or files a petition under the Bankruptcy Act; or
  - if Consultant sells its business; or
  - if Consultant breaches any of the terms of this Agreement; or
  - if total amount of compensation exceeds the amount authorized under this Agreement.
- 12.4 All OCSD property in the possession or control of Consultant shall be returned by Consultant to OCSD on demand, or at the termination of this Agreement, whichever occurs first.
13. **Indemnification and Hold Harmless Provision** Consultant shall assume all responsibility for damages to property and/or injuries to persons, including accidental death, which may arise out of or be caused by Consultant's services under this Agreement, or by its subconsultant(s) or by anyone directly or indirectly employed by Consultant, and whether such damage or injury shall accrue or be discovered before or after the termination of the Agreement. Except as to the sole active negligence of or willful misconduct of OCSD, Consultant shall indemnify, protect, defend and hold harmless OCSD, its elected and appointed officials, officers, agents and employees, from and against any and all claims, liabilities, damages or expenses of any nature, including attorneys' fees: (a) for injury to or death of any person or damage to property or interference with the use of property, arising

out of or in connection with Consultant's performance under the Agreement, and/or (b) on account of use of any copyrighted or uncopyrighted material, composition, or process, or any patented or unpatented invention, article or appliance, furnished or used under the Agreement, and/or (c) on account of any goods and services provided under this Agreement. This indemnification provision shall apply to any acts or omissions, willful misconduct, or negligent misconduct, whether active or passive, on the part of Consultant or anyone employed by or working under Consultant. To the maximum extent permitted by law, Consultant's duty to defend shall apply whether or not such claims, allegations, lawsuits, or proceedings have merit or are meritless, or which involve claims or allegations that any of the parties to be defended were actively, passively, or concurrently negligent, or which otherwise assert that the parties to be defended are responsible, in whole or in part, for any loss, damage, or injury. Consultant agrees to provide this defense immediately upon written notice from OCSD, and with well qualified, adequately insured, and experienced legal counsel acceptable to OCSD. This section shall survive the expiration or early termination of the Agreement.

- 14. Insurance** Consultant and all subconsultants shall purchase and maintain, throughout the life of this Agreement and any periods of warranty or extensions, insurance in amounts equal to the requirements set forth in the signed Acknowledgement of Insurance Requirements, Exhibit "C". Consultant shall not commence work under this Agreement until all required insurance is obtained in a form acceptable to OCSD, nor shall Consultant allow any subconsultant to commence service pursuant to a subcontract until all insurance required of the subconsultant has been obtained. Failure to maintain required insurance coverage shall result in termination of this Agreement.
- 15. Key Personnel** Personnel, as provided in Exhibit "B", are considered "key" to the work under this Agreement and will be available for the term of the Agreement. No person designated as key under this Agreement shall be removed or replaced without prior written consent of OCSD. If OCSD requests Consultant to remove a person designated as key under this Agreement, Consultant agrees to do so immediately regardless of the reason, or the lack of reason, for OCSD's request. Consultant shall assign only competent personnel to perform Services pursuant to this Agreement.
- 16. Confidentiality and Non-Disclosure**
- 16.1 Consultant acknowledges that in performing the Services hereunder, OCSD may have to disclose to Consultant orally and in writing certain confidential information that OCSD considers proprietary and has developed at great expense and effort.
- 16.2 Consultant agrees to maintain in confidence and not disclose to any person, firm, or corporation, without OCSD's prior written consent, any trade secret or confidential information, knowledge or data relating to the products, process, or operation of OCSD.
- 16.3 Consultant further agrees to maintain in confidence and not to disclose to any person, firm, or corporation any data, information, technology, or material developed or obtained by Consultant during the term of this Agreement.
- 16.4 Consultant agrees as follows:
- To use the confidential information only for the purposes described herein; to not reproduce the confidential information; to hold in confidence and protect the confidential information from dissemination to and use by anyone not a party to this Agreement; and to not use the confidential information to benefit itself or others.

- To restrict access to the confidential information to its Consultant or personnel of Consultant who (1) have a need to have such access and (2) have been advised of and have agreed in writing to treat such information in accordance with the terms of this Agreement.
- To return all confidential information in Consultant's possession upon termination of this Agreement or upon OCSD's request, whichever occurs first.
- To hold in confidence information and materials, if any, developed pursuant to the Services hereunder.

16.5 The provisions of this section shall survive termination or expiration of this Agreement and shall continue for so long as the material remains confidential.

**17. Ownership of Documents** All drawings, specifications, reports, records, documents, memoranda, correspondence, computations, and other materials prepared by Consultant, its employees, subconsultants, and agents in the performance of this Agreement shall be the property of OCSD and shall be promptly delivered to OCSD upon request of OCSD's Project Manager or designee, or upon the termination of this Agreement, and Consultant shall have no claim for further employment or additional compensation as a result of the exercise by OCSD of its full rights of ownership of the documents and materials hereunder. Any use of such completed documents for other projects and/or use of incomplete documents without specific written authorization by the Consultant will be at OCSD's sole risk and without liability to Consultant. Consultant shall ensure that all its subconsultants shall provide for assignment to OCSD of any documents or materials prepared by them.

**18. Ownership of Intellectual Property**

18.1 Consultant agrees that all designs, plans, reports, specifications, drawings, schematics, prototypes, models, inventions, and all other information and items made during the course of this Agreement and arising from the Services (hereinafter referred to as "New Developments") shall be and are assigned to OCSD as its sole and exclusive property.

18.2 Consultant agrees to promptly disclose to OCSD all such New Developments. Upon OCSD's request, Consultant agrees to assist OCSD, at OCSD's expense, to obtain patents or copyrights for such New Developments, including the disclosure of all pertinent information and data with respect thereto, the execution of all applications, specifications, assignments, and all other instruments and papers which OCSD shall deem necessary to apply for and to assign or convey to OCSD, its successors and assigns, the sole and exclusive right, title and interest in such New Developments. Consultant agrees to obtain or has obtained written assurances from its employees and contract personnel of their agreement to the terms hereof with regard to New Developments and confidential information.

18.3 Consultant warrants that Consultant has good title to any New Developments, and the right to assign New Developments to OCSD free of any proprietary rights of any other party or any other encumbrance whatever.

18.4 The originals of all computations, drawings, designs, graphics, studies, reports, manuals, photographs, videotapes, data, computer files, and other documents prepared or caused to be prepared by Consultant or its subconsultants in connection with these Services shall be delivered to and shall become the exclusive property of OCSD. OCSD may utilize these documents for OCSD applications on other projects or extensions of this project, at its own risk.

**19. No Solicitation of Employees**

19.1 Consultant agrees that it shall not, during the term of this Agreement and for a period of one (1) year immediately following termination of this Agreement, or any extension hereof, call on, solicit, or take away any of the employees whom Consultant became aware of as a result of Consultant's Services to OCSD.

19.2 Consultant acknowledges that OCSD's employees are critical to its business and OCSD expends significant resources to hire, employ, and train employees. Should Consultant employ or otherwise engage OCSD's employees during the term of this Agreement and for a period of one (1) year following termination of this Agreement, Consultant will pay OCSD fifty percent (50%) of the former employee's most recent annual salary earned at OCSD to accurately reflect the reasonable value of OCSD's time and costs. This payment is in addition to any other rights and remedies OCSD may have at law.

**20. Independent Contractor Capacity**

20.1 The relationship of Consultant to OCSD is that of an independent contractor and nothing herein shall be construed as creating an employment or agency relationship.

20.2 Consultant shall act independently and not as an officer or employee of OCSD. OCSD assumes no liability for Consultant's action and performance, nor assumes responsibility for taxes, funds, payments or other commitments, implied or expressed, by or for Consultant.

20.3 Consultant shall not be considered an agent of OCSD for any purpose whatsoever, nor shall Consultant have the right to, and shall not, commit OCSD to any agreement, contract or undertaking. Consultant shall not use OCSD's name in its promotional material or for any advertising or publicity purposes without expressed written consent.

20.4 Consultant shall not be entitled to any benefits accorded to those individuals listed on OCSD's payroll as regular employees including, without limitation, worker's compensation, disability insurance, vacation, holiday or sick pay. Consultant shall be responsible for providing, at Consultant's expense, disability, worker's compensation or other insurance as well as licenses and permits usual or necessary for conducting the Services hereunder.

20.5 Consultant shall be obligated to pay any and all applicable Federal, State and local payroll and other taxes incurred as a result of fees hereunder. Consultant hereby indemnifies OCSD for any claims, losses, costs, fees, liabilities, damages or penalties suffered by OCSD arising out of Consultant's breach of this provision.

20.6 Consultant shall not be eligible to join or participate in any benefit plans offered to those individuals listed on OCSD's payroll as regular employees. Consultant shall remain ineligible for such benefits or participation in such benefit plans even if a court later decides that OCSD misclassified Consultant for tax purposes.

**21. Licenses, Permits** Consultant represents and warrants to OCSD that it has obtained all licenses, permits, qualification and approvals of whatever nature that are legally required to engage in this work. Any and all fees required by Federal, State, County, City and/or municipal laws, codes and/or tariffs that pertain to work performed under the terms of this Agreement will be paid by Consultant.

**22. Consultant's Representations** In the performance of duties under this Agreement, Consultant shall adhere to the highest fiduciary standards, ethical practices and standards of care and competence for their trade/profession. Consultant agrees to comply with all applicable Federal, State and local laws and regulations.

23. **Familiarity with Work** By executing this Agreement, Consultant warrants that: 1) it has investigated the work to be performed; 2) it has investigated the site of the work and is aware of all conditions there; and 3) it understands the facilities, difficulties and restrictions of the work under this Agreement. Should Consultant discover any latent or unknown conditions materially differing from those inherent in the work or as represented by OCSD, it shall immediately inform OCSD of this and shall not proceed, except at Consultant's risk, until written instructions are received from OCSD.
24. **Right to Review Services, Facilities, and Records**
- 24.1 OCSD reserves the right to review any portion of the Services performed by Consultant under this Agreement, and Consultant agrees to cooperate to the fullest extent possible.
- 24.2 Consultant shall furnish to OCSD such reports, statistical data, and other information pertaining to Consultant's Services as shall be reasonably required by OCSD to carry out its rights and responsibilities under its agreements with its bondholders or noteholders and any other agreement relating to the development of the project(s) and in connection with the issuance of its official statements and other prospectuses with respect to the offering, sale, and issuance of its bonds and other obligations.
- 24.3 The right of OCSD to review or approve drawings, specifications, procedures, instructions, reports, test results, calculations, schedules, or other data that are developed by Consultant shall not relieve Consultant of any obligation set forth herein.
25. **Force Majeure** Neither party shall be liable for delays caused by accident, flood, acts of God, fire, labor trouble, war, acts of government or any other cause beyond its control, but said party shall use reasonable efforts to minimize the extent of the delay. Work affected by a Force Majeure condition may be rescheduled by mutual consent or may be eliminated from the Agreement.
26. **Severability** If any section, subsection, or provision of this Agreement, or any agreement or instrument contemplated hereby, or the application of such section, subsection, or provision is held invalid, the remainder of this Agreement or instrument in the application of such section, subsection or provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby, unless the effect of such invalidity shall be to substantially frustrate the expectations of the Parties.
27. **Waiver** The waiver of either party of any breach or violation of, or default under, any provision of this Agreement, shall not be deemed a continuing waiver by such party of any other provision or of any subsequent breach or violation of this Agreement or default thereunder. Any breach by Consultant to which OCSD does not object shall not operate as a waiver of OCSD's rights to seek remedies available to it for any subsequent breach.
28. **Remedies** In addition to other remedies available in law or equity, if the Consultant fails to make delivery of the goods or Services or repudiates its obligations under this Agreement, or if OCSD rejects the goods or Services or revokes acceptance of the goods or Services, OCSD may (1) terminate the Agreement; (2) recover whatever amount of the purchase price OCSD has paid, and/or (3) "cover" by purchasing, or contracting to purchase, substitute goods or Services for those due from Consultant. In the event OCSD elects to "cover" as described in (3), OCSD shall be entitled to recover from Consultant as damages the difference between the cost of the substitute goods or Services and the Agreement price, together with any incidental or consequential damages.



29. **Governing Law** This Agreement shall be governed by and interpreted under the laws of the State of California and the Parties submit to jurisdiction in Orange County, in the event any action is brought in connection with this Agreement or the performance thereof.
30. **Environmental Compliance** Consultant shall, at its own cost and expense, comply with all Federal, State, and local environmental laws, regulations, and policies which apply to the Consultant, its sub-consultants, and the Services, including, but not limited to, all applicable Federal, State, and local air pollution control laws and regulations.
31. **Attorney's Fees** If any action at law or inequity or if any proceeding in the form of an Alternative Dispute Resolution (ADR) is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which it may be entitled.
32. **Dispute Resolution**
- 32.1 In the event of a dispute as to the construction or interpretation of this Agreement, or any rights or obligations hereunder, the Parties shall first attempt, in good faith, to resolve the dispute by mediation. The Parties shall mutually select a mediator to facilitate the resolution of the dispute. If the Parties are unable to agree on a mediator, the mediation shall be conducted in accordance with the Commercial Mediation Rules of the American Arbitration Agreement, through the alternate dispute resolution procedures of Judicial Arbitration through Mediation Services of Orange County ("JAMS"), or any similar organization or entity conducting an alternate dispute resolution process.
- 32.2 In the event the Parties are unable to timely resolve the dispute through mediation, the issues in dispute shall be submitted to arbitration pursuant to California Code of Civil Procedure, Part 3, Title 9, Sections 1280 et seq. For such purpose, an agreed arbitrator shall be selected, or in the absence of agreement, each party shall select an arbitrator, and those two (2) arbitrators shall select a third. Discovery may be conducted in connection with the arbitration proceeding pursuant to California Code of Civil Procedure Section 1283.05. The arbitrator, or three (3) arbitrators acting as a board, shall take such evidence and make such investigation as deemed appropriate and shall render a written decision on the matter in question. The arbitrator shall decide each and every dispute in accordance with the laws of the State of California. The arbitrator's decision and award shall be subject to review for errors of fact or law in the Superior Court for the County of Orange, with a right of appeal from any judgment issued therein.
33. **Damage to OCSD's Property** Any OCSD property damaged by Consultant will be subject to repair or replacement by Consultant at no cost to OCSD.
34. **OCSD Safety Standards** OCSD requires Consultant and its subconsultants to follow and ensure their employees follow all Federal, State and local regulations as well as OCSD Safety Standards while working at OCSD locations. If during the course of the Agreement it is discovered that OCSD Safety Standards do not comply with Federal, State or local regulations, then the Consultant is required to follow the most stringent regulatory requirement at no additional cost to OCSD. Consultant and all of its employees and subconsultants, shall adhere to all applicable OCSD Safety Standards attached hereto in Exhibit "D" and the Human Resources Policies (Exhibit "E").
35. **Freight (F.O.B. Destination)** Consultant assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Agreement.

36. **Assignments** Consultant shall not delegate any duties nor assign any rights under this Agreement without the prior written consent of OCSD. Any such attempted delegation or assignment shall be void.
37. **Conflict of Interest and Reporting**
- 37.1 Consultant shall at all times avoid conflicts of interest or appearance of conflicts of interest in performance of this Agreement.
- 37.2 Consultant affirms that to the best of its knowledge there exists no actual or potential conflict between Consultant's families, business or financial interest or its Services under this Agreement, and in the event of change in either its private interests or Services under this Agreement, it will raise with OCSD any question regarding possible conflict of interest which may arise as a result of such change.
38. **Third Party Rights** Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OCSD and Consultant.
39. **Non-Liability of OCSD Officers and Employees** No officer or employee of OCSD shall be personally liable to Consultant, or any successor-in-interest, in the event of any default or breach by OCSD or for any amount which may become due to Consultant or to its successor, or for breach of any obligation of the terms of this Agreement.
40. **Authority to Execute** The persons executing this Agreement on behalf of the Parties warrant that they are duly authorized to execute this Agreement and that by executing this Agreement, the Parties are formally bound.
41. **Read and Understood** By signing this Agreement, Consultant represents that it has read and understood the terms and conditions of the Agreement.
42. **Entire Agreement** This Agreement constitutes the entire agreement of the Parties and supersedes all prior written or oral and all contemporaneous oral agreements, understandings, and negotiations between the Parties with respect to the subject matter hereof.

- 43. Notices** All notices under this Agreement must be in writing. Written notice shall be delivered by personal service or sent by registered or certified mail, postage prepaid, return receipt requested, or by any other overnight delivery service which delivers to the noticed destination and provides proof of delivery to the sender. Any facsimile notice must be followed within three (3) days by written notice. Rejection or other refusal to accept or the inability to deliver because of changed address for which no notice was given as provided hereunder shall be deemed to be receipt of the notice, demand or request sent. All notices shall be effective when first received at the following addresses:

OCSD: Jackie Lagade  
Principal Buyer  
Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, CA 92708-7018

Consultant:


Each party shall provide the other party written notice of any change in address as soon as practicable.

***IN WITNESS WHEREOF***, intending to be legally bound, the Parties hereto have caused this Agreement to be signed by the duly authorized representatives.

**ORANGE COUNTY SANITATION DISTRICT**

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

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

David John Shawver  
Chair, Board of Directors

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

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

Kelly A. Lore  
Clerk of the Board

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

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

Ruth Zintzun  
Purchasing and Contracts Manager

**COMPANY**

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

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

\_\_\_\_\_  
Print Name and Title of Officer



# Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

## OPERATIONS COMMITTEE

### Agenda Report

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**File #:** 2019-706

**Agenda Date:** 12/4/2019

**Agenda Item No:** 5.

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**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**480 VOLT CABLE REPLACEMENT AT PLANT NO. 2 HEADWORKS, PROJECT NO. MP-509**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Receive and file Bid Tabulation and Recommendation for 480 Volt Cable Replacement at Plant No. 2 Headworks, Project No. MP-509;
- B. Award a Construction Contract to Mass. Electric Construction Co. for 480 Volt Cable Replacement at Plant No. 2, Project No. MP-509, for a total amount not to exceed \$434,327; and
- C. Approve a contingency of \$86,865 (20%).

**BACKGROUND**

The Orange County Sanitation District (Sanitation District) Headworks lifts sewage from the collections system into the Treatment Plant and provides vital preliminary treatment to all incoming wastewater by removing trash and debris that would otherwise damage downstream treatment equipment.

Electrical cables provide the energy to pumps, fans, augers, meters, and other equipment to make this process function correctly. These cables are routed through underground ducts to connect the motor control centers to devices. These cables are subject to wet conditions. Any deterioration of the cable insulation can result in short circuit or ground fault conditions, which puts the associated equipment out of service.

**RELEVANT STANDARDS**

- Comply with California Public Contract Code Section 20103.8, award construction contract to lowest responsive, responsible bidder
- 24/7/365 treatment plant reliability

**PROBLEM**

Recently, electrical cables to some critical Headworks process equipment have failed which resulted in equipment being out of service.

**PROPOSED SOLUTION**

Award a construction contract for 480 Volt Cable Replacement at Plant No. 2 Headworks, Project No. MP-509, to install new power and control cables in existing spare conduits to repower 13 affected pieces of equipment. Staff is requesting a contingency of 20% for this project to accommodate additional work that may arise if additional cables are found to be defective. The bid prices included unit prices for additional work that might be needed.

**TIMING CONCERNS**

Critical Headworks equipment, currently out of service, needs to be in operation for reliable wastewater treatment.

**RAMIFICATIONS OF NOT TAKING ACTION**

The failed equipment would remain out of service which would greatly reduce treatment reliability.

**PRIOR COMMITTEE/BOARD ACTIONS**

N/A

**ADDITIONAL INFORMATION**

The Sanitation District advertised Project No. MP-509 for bids on September 12, 2019 and September 19, 2019, and five sealed bids were received on October 15, 2019. A summary of the bid opening follows:

Engineer's Estimate                      \$ 700,000

<u>Bidder</u>	<u>Amount of Bid</u>
Mass. Electric Construction Co.	\$ 528,838
Inter-Pacific, Inc.	\$ 548,394
GA Technical Services, Inc.	\$ 686,946
Leed Electric, Inc.	\$ 829,732
CSI Electrical Contractors, Inc.	\$ 850,600

The bid prices listed above include additive bid items with unit prices. The intent of the additive bid items is to provide competitive prices upfront for potential required changes. The actual award value does not include the additive bid items.

The bids were evaluated in accordance with the Sanitation District's policies and procedures. A notice was sent to all bidders on November 13, 2019, informing them of the intent of the Sanitation District to recommend award of the Construction Contract to Mass. Electric Construction Co.

Staff recommends awarding a Construction Contract to the lowest responsive bidder, Mass. Electric Construction Co., for a total amount not to exceed \$434,327.

## **CEQA**

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations sections 15301 because the project involves minor replacement of existing facilities involving no expansion of use or capacity. A Notice of Exemption will be filed with the OC Clerk-Recorder after the Sanitation District's Board of Directors approval of the construction contract.

## **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This recommendation will be funded under the Repairs and Maintenance line item for the Operations and Maintenance Department (Budget Update, Fiscal Year 2019-20, Page 47). The budget is sufficient for the recommended action.

## **ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Construction Contract

SP:dm:sa:gc

**PART A**  
**CONTRACT AGREEMENT**

# TABLE OF CONTENTS

## CONTRACT AGREEMENT

SECTION – 1	GENERAL CONDITIONS .....	1
SECTION – 2	MATERIALS AND LABOR.....	4
SECTION – 3	PROJECT .....	4
SECTION – 4	PLANS AND SPECIFICATONS .....	5
SECTION – 5	TIME OF COMMENCEMENT AND COMPLETION .....	5
SECTION – 6	TIME IS OF THE ESSENCE .....	5
SECTION – 7	EXCUSABLE DELAYS .....	6
SECTION – 8	EXTRA WORK.....	6
SECTION – 9	CHANGES IN PROJECT.....	7
SECTION – 10	LIQUIDATED DAMAGES FOR DELAY .....	7
SECTION – 11	CONTRACT PRICE AND METHOD OF PAYMENT .....	7
SECTION – 12	SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS .....	9
SECTION – 13	COMPLETION .....	9
SECTION – 14	CONTRACTOR'S EMPLOYEES COMPENSATION.....	10
SECTION – 15	SURETY BONDS .....	12
SECTION – 16	INSURANCE.....	13
SECTION – 17	RISK AND INDEMNIFICATION.....	21
SECTION – 18	TERMINATION .....	21
SECTION – 19	WARRANTY .....	21
SECTION – 20	ASSIGNMENT .....	22
SECTION – 21	RESOLUTION OF DISPUTES .....	22
SECTION – 22	SAFETY & HEALTH .....	22
SECTION – 23	NOTICES.....	23



CONTRACT AGREEMENT  
ORANGE COUNTY SANITATION DISTRICT

**PROJECT NO. MP-509**  
**480 VOLTS CABLE REPLACEMENT AT PLANT NO. 2 HEADWORKS**

THIS AGREEMENT is made and entered into, to be effective, this December 18, 2019, by and between Mass. Electric Construction Co., hereinafter referred to as "CONTRACTOR" and the Orange County Sanitation District, hereinafter referred to as "OCSD".

WITNESSETH

That for and in consideration of the promises and agreements hereinafter made and exchanged, OCSD and CONTRACTOR agree as follows:

**SECTION – 1      GENERAL CONDITIONS**

CONTRACTOR certifies and agrees that all the terms, conditions and obligations of the Contract Documents as hereinafter defined, the location of the job site, and the conditions under which the Work is to be performed have been thoroughly reviewed, and enters into this Contract based upon CONTRACTOR's investigation of all such matters and is in no way relying upon any opinions or representations of OCSD. It is agreed that this Contract represents the entire agreement. It is further agreed that the Contract Documents are each incorporated into this Contract by reference, with the same force and effect as if the same were set forth at length herein, and that CONTRACTOR and its Subcontractors, if any, will be and are bound by any and all of said Contract Documents insofar as they relate in any part or in any way, directly or indirectly, to the Work covered by this Contract.

A. Contract Documents Order of Precedence

"Contract Documents" refers to those documents identified in the definition of "Contract Documents" in the General Conditions – Definitions.

1. In the event of a conflict between one Contract Document and any of the other Contract Documents, the provisions in the document highest in precedence shall be controlling. The order of precedence of the Contract Documents is as follows:
  - a. Supplemental Agreements – the last in time being the first in precedence
  - b. Addenda issued prior to opening of Bids – the last in time being the first in precedence
  - c. Contract Agreement
  - d. Permits and other regulatory requirements
  - e. Special Provisions
  - f. General Conditions (GC)
  - g. Notice Inviting Bids and Instruction to Bidders
  - h. Geotechnical Baseline Report (GBR), if attached as a Contract Document
  - i. Plans and Specifications – in these documents the order of precedence shall be:
    - i. Specifications (Divisions 01-17)
    - ii. Plans
    - iii. General Requirements (GR)
    - iv. Standard Drawings and Typical Details
  - j. CONTRACTOR's Bid
2. In the event of a conflict between terms within an individual Contract Document, the conflict shall be resolved by applying the following principles as appears applicable:
  - a. Figured dimensions on the Contract Documents shall govern. Dimensions not specified shall be as directed by the ENGINEER. Details not shown or specified shall be the same as similar parts that are shown or specified, or as directed. Full-size details shall take precedence over scale Drawings as to

shape and details of construction. Specifications shall govern as to material and workmanship.

- b. The Contract Documents calling for the higher quality material or workmanship shall prevail. Materials or Work described in words, which so applied, have a well known technical or trade meaning shall be deemed to refer to such recognized standards. In the event of any discrepancy between any Drawings and the figures thereon, the figures shall be taken as correct.
- c. Scale Drawings, full-size details, and Specifications are intended to be fully complementary and to agree. Should any discrepancy between Contract Documents come to the CONTRACTOR's attention, or should an error occur in the efforts of others, which affect the Work, the CONTRACTOR shall notify the ENGINEER, in writing, at once. In the event any doubts or questions arise with respect to the true meaning of the Contract Documents, reference shall be made to the ENGINEER whose written decision shall be final. If the CONTRACTOR proceeds with the Work affected without written instructions from the ENGINEER, the CONTRACTOR shall be fully responsible for any resultant damage or defect.
- d. Anything mentioned in the Specifications and not indicated in the Plans, or indicated in the Plans and not mentioned in the Specifications, shall be of like effect as if indicated and mentioned in both. In case of discrepancy in the Plans or Specifications, the matter shall be immediately submitted to OCSD's ENGINEER, without whose decision CONTRACTOR shall not adjust said discrepancy save only at CONTRACTOR's own risk and expense. The decision of the ENGINEER shall be final.

In all matters relating to the acceptability of material, machinery or plant equipment; classifications of material or Work; the proper execution, progress or sequence of the Work; and quantities interpretation of the Contract Documents, the decision of the ENGINEER shall be final and binding, and shall be a condition precedent to any payment under the Contract, unless otherwise ordered by the Board of Directors.

**B. Definitions**

Capitalized terms used in this Contract are defined in the General Conditions, Definitions. Additional terms may be defined in the Special Provisions.

**SECTION – 2 MATERIALS AND LABOR**

CONTRACTOR shall furnish, under the conditions expressed in the Plans and Specifications, at CONTRACTOR'S own expense, all labor and materials necessary, except such as are mentioned in the Specifications to be furnished by OCSD, to construct and complete the Project, in good workmanlike and substantial order. If CONTRACTOR fails to pay for labor or materials when due, OCSD may settle such claims by making demand upon the Surety to this Contract. In the event of the failure or refusal of the Surety to satisfy said claims, OCSD may settle them directly and deduct the amount of payments from the Contract Price and any amounts due to CONTRACTOR. In the event OCSD receives a stop payment notice from any laborer or material supplier alleging non-payment by CONTRACTOR, OCSD shall be entitled to deduct all of its costs and expenses incurred relating thereto, including but not limited to administrative and legal fees.

**SECTION – 3 PROJECT**

The Project is described as:

**PROJECT NO. MP-509**

**480 VOLTS CABLE REPLACEMENT AT PLANT NO. 2 HEADWORKS**

#### **SECTION – 4 PLANS AND SPECIFICATONS**

The Work to be done is shown in a set of Plans and Specifications entitled:

##### **PROJECT NO. MP-509**

##### **480 VOLTS CABLE REPLACEMENT AT PLANT NO. 2 HEADWORKS**

Said Plans and Specifications and any revision, amendments and addenda thereto are attached hereto and incorporated herein as part of this Contract and referred to by reference.

#### **SECTION – 5 TIME OF COMMENCEMENT AND COMPLETION**

CONTRACTOR agrees to commence the Project within 15 calendar days from the date set forth in the "Notice to Proceed" sent by OCSD, unless otherwise specified therein and shall diligently prosecute the Work to completion within three hundred sixty five (365) calendar days from the date of the "Notice to Proceed" issued by OCSD, excluding delays caused or authorized by OCSD as set forth in Sections 7, 8, and 9 hereof, and applicable provisions in the General Conditions. The time for completion includes three (3) calendar days determined by OCSD likely to be inclement weather when CONTRACTOR will be unable to work.

#### **SECTION – 6 TIME IS OF THE ESSENCE**

Time is of the essence of this Contract. As required by the Contract Documents, CONTRACTOR shall prepare and obtain approval of all shop drawings, details and samples, and do all other things necessary and incidental to the prosecution of CONTRACTOR's Work in conformance with an approved construction progress schedule. CONTRACTOR shall coordinate the Work covered by this Contract with that of all other contractors, subcontractors and of OCSD, in a manner that will facilitate the efficient completion of the entire Work and accomplish the required milestone(s), if any, by the applicable deadline(s) in accordance with Section 5 herein. OCSD shall have the right to assert complete control of the premises on which the Work is to be performed and shall have the right to decide the time or order in which the various portions of the Work shall be installed or the priority of the work of subcontractors,

and, in general, all matters representing the timely and orderly conduct of the Work of CONTRACTOR on the premises.

#### **SECTION – 7      EXCUSABLE DELAYS**

CONTRACTOR shall only be excused for any delay in the prosecution or completion of the Project as specifically provided in General Conditions, “Extensions for Delay”, and the General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”. Extensions of time and extra compensation arising from such excusable delays will be determined in accordance with the General Conditions, “Extension of Time for Delay” and “Contract Price Adjustments and Payments”, and extensions of time and extra compensation as a result of incurring undisclosed utilities will be determined in accordance with General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”. OCSD’s decision will be conclusive on all parties to this Contract.

#### **SECTION – 8      EXTRA WORK**

The Contract Price as set forth in Section 11, includes compensation for all Work performed by CONTRACTOR, unless CONTRACTOR obtains a Change Order signed by a designated representative of OCSD specifying the exact nature of the Extra Work and the amount of extra compensation to be paid all as more particularly set forth in Section 9 hereof and the General Conditions, “Request for Change (Changes at CONTRACTOR’s Request)”, “OWNER Initiated Changes”, and “Contract Price Adjustments and Payments”.

In the event a Change Order is issued by OCSD pursuant to the Contract Documents, OCSD shall extend the time fixed in Section 5 for completion of the Project by the number of days, if any, reasonably required for CONTRACTOR to perform the Extra Work, as determined by OCSD’s ENGINEER. The decision of the ENGINEER shall be final.

## **SECTION – 9      CHANGES IN PROJECT**

OCSD may at any time, without notice to any Surety, by Change Order, make any changes in the Work within the general scope of the Contract Document, including but not limited to changes:

1. In the Specifications (including Drawings and designs);
2. In the time, method or manner of performance of the Work;
3. In OCSD-furnished facilities, equipment, materials, services or site; or
4. Directing acceleration in the performance of the Work.

No change of period of performance or Contract Price, or any other change in the Contract Documents, shall be binding until the Contract is modified by a fully executed Change Order.

All Change Orders shall be issued in accordance with the requirements set forth in the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and "OWNER Initiated Changes".

## **SECTION – 10      LIQUIDATED DAMAGES FOR DELAY**

Liquidated Damages shall be payable in the amounts and upon the occurrence of such events or failure to meet such requirements or deadlines as provided in the Special Provisions, "Liquidated Damages and Incentives."

## **SECTION – 11      CONTRACT PRICE AND METHOD OF PAYMENT**

- A. OCSD agrees to pay and the CONTRACTOR agrees to accept as full consideration for the faithful performance of this Contract, subject to any additions or deductions as provided in approved Change Orders, the sum of Four Hundred Thirty-Four Thousand Three Hundred Twenty-Seven Dollars (\$434,327) as itemized on the Attached Exhibit "A".

Upon satisfaction of the conditions precedent to payment set forth in the General Requirements, Additional General Requirements and General Conditions (including but

not limited to Sections entitled “Mobilization Payment Requirements” and “Payment Itemized Breakdown of Contract Lump Sum Prices”), there shall be paid to the CONTRACTOR an initial Net Progress Payment for mobilization. OCSD shall issue at the commencement of the job a schedule which shows:

1. A minimum of one payment to be made to the CONTRACTOR for each successive four (4) week period as the Work progresses, and
2. The due dates for the CONTRACTOR to submit requests for payment to meet the payment schedule.

After the initial Net Progress Payment, and provided the CONTRACTOR submits the request for payment prior to the end of the day required to meet the payment schedule, the CONTRACTOR shall be paid a Net Progress Payment on the corresponding monthly payment date set forth in the schedule.

Payments shall be made on demands drawn in the manner required by law, accompanied by a certificate signed by the ENGINEER, stating that the Work for which payment is demanded has been performed in accordance with the terms of the Contract Documents, and that the amount stated in the certificate is due under the terms of the Contract.

Payment applications shall also be accompanied with all documentation, records, and releases as required by the Contract, Exhibit A, Schedule of Prices, and General Conditions, “Payment for Work – General”. The Total amount of Progress Payments shall not exceed the actual value of the Work completed as certified by OCSD’s ENGINEER. The processing of payments shall not be considered as an acceptance of any part of the Work.

- B. As used in this Section, the following defined terms shall have the following meanings:
1. **“Net Progress Payment”** means a sum equal to the Progress Payment less the



Retention Amount and other qualified deductions (Liquidated Damages, stop payment notices, etc.).

2. **“Progress Payment”** means a sum equal to:
  - a. the value of the actual Work completed since the commencement of the Work as determined by OCSD;
  - b. plus the value of material suitably stored at the worksite, treatment plant or approved storage yards subject to or under the control of OCSD since the commencement of the Work as determined by OCSD;
  - c. less all previous Net Progress Payments;
  - d. less all amounts of previously qualified deductions;
  - e. less all amounts previously retained as Retention Amounts.
3. **“Retention Amount”** for each Progress Payment means the percentage of each Progress Payment to be retained by OCSD to assure satisfactory completion of the Contract. The amount to be retained from each Progress Payment shall be determined as provided in the General Conditions –“Retained Funds; Substitution of Securities.”

## **SECTION – 12 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS**

Pursuant to Public Contract Code Section 22300 et seq., the CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.”

## **SECTION – 13 COMPLETION**

Final Completion and Final Acceptance shall occur at the time and in the manner specified in the General Conditions, “Final Acceptance and Final Completion”, “Final Payment” and Exhibit A - Schedule of Prices.

Upon receipt of all documentation, records, and releases as required by the Contract from the CONTRACTOR, OCSD shall proceed with the Final Acceptance as specified in General Conditions.

#### **SECTION – 14     CONTRACTOR’S EMPLOYEES COMPENSATION**

A.    Davis-Bacon Act:

CONTRACTOR will pay and will require all Subcontractors to pay all employees on said Project a salary or wage at least equal to the prevailing rate of per diem wages as determined by the Secretary of Labor in accordance with the Davis-Bacon Act for each craft or type of worker needed to perform the Contract. The provisions of the Davis-Bacon Act shall apply only if the Contract is in excess of Two Thousand Dollars (\$2,000.00) and when twenty-five percent (25%) or more of the Contract is funded by federal assistance. If the aforesaid conditions are met, a copy of the provisions of the Davis-Bacon Act to be complied with are incorporated herein as a part of this Contract and referred to by reference.

B.    General Prevailing Rate:

OCSD has been advised by the State of California Director of Industrial Relations of its determination of the general prevailing rate of per diem wages and the general prevailing rate for legal holiday and overtime Work in the locality in which the Work is to be performed for each craft or type of Work needed to execute this Contract, and copies of the same are on file in the Office of the ENGINEER of OCSD. The CONTRACTOR agrees that not less than said prevailing rates shall be paid to workers employed on this public works Contract as required by Labor Code Section 1774 of the State of California. Per California Labor Code 1773.2, OCSD will have on file copies of the prevailing rate of per diem wages at its principal office and at each job site, which shall be made available to any interested party upon request.

C. Forfeiture for Violation:

CONTRACTOR shall, as a penalty to OCSD, forfeit Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid (either by the CONTRACTOR or any Subcontractor under it) less than the prevailing rate of per diem wages as set by the Director of Industrial Relations, in accordance with Sections 1770-1780 of the California Labor Code for the Work provided for in this Contract, all in accordance with Section 1775 of the Labor Code of the State of California.

D. Apprentices:

Sections 1777.5, 1777.6, 1777.7 of the Labor Code of the State of California, regarding the employment of apprentices are applicable to this Contract and the CONTRACTOR shall comply therewith if the prime contract involves Thirty Thousand Dollars (\$30,000.00) or more.

E. Workday:

In the performance of this Contract, not more than eight (8) hours shall constitute a day's work, and the CONTRACTOR shall not require more than eight (8) hours of labor in a day from any person employed by him hereunder except as provided in paragraph (B) above. CONTRACTOR shall conform to Article 3, Chapter 1, Part 7 (Section 1810 et seq.) of the Labor Code of the State of California and shall forfeit to OCSD as a penalty, the sum of Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by CONTRACTOR or any Subcontractor for each calendar day during which any worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one week in violation of said Article. CONTRACTOR shall keep an accurate record showing the name and actual hours worked each calendar day and each calendar week by each worker employed by CONTRACTOR in connection with the Project.

F. Registration; Record of Wages; Inspection:

CONTRACTOR shall comply with the registration requirements of Labor Code Section 1725.5.

Pursuant to Labor Code Section 1771.4, the Work is subject to compliance monitoring by the California Department of Industrial Relations. CONTRACTOR shall maintain accurate payroll records and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.

CONTRACTOR shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulations Section 16461(e).

**SECTION – 15 SURETY BONDS**

CONTRACTOR shall, before entering upon the performance of this Contract, furnish Bonds approved by OCSD's General Counsel – one in the amount of one hundred percent (100%) of the Contract amount, to guarantee the faithful performance of the Work, and the other in the amount of one hundred percent (100%) of the Contract amount to guarantee payment of all claims for labor and materials furnished. As changes to the Contract occur via approved Change Orders, the CONTRACTOR shall assure that the amounts of the Bonds are adjusted to maintain 100% of the Contract Price. This Contract shall not become effective until such Bonds are supplied to and approved by OCSD. Bonds must be issued by a Surety authorized by the State Insurance Commissioner to do business in California. The Performance Bond shall remain in full force and effect through the warranty period, as specified in Section 19 below. All Bonds required to be submitted relating to this Contract must comply with California Code of Civil Procedure Section 995.630. Each Bond shall be executed in the name of the Surety insurer under penalty of perjury, or the fact of execution of each Bond shall be duly acknowledged before an officer authorized to take and certify acknowledgments, and either one of the following conditions shall be satisfied:

- A. A copy of the transcript or record of the unrevoked appointment, power of attorney, by-laws, or other instrument, duly certified by the proper authority and attested by the seal of the insurer entitling or authorizing the person who executed the Bond to do so for and on behalf of the insurer, is on file in the Office of the County Clerk of the County of Orange; or
- B. A copy of a valid power of attorney is attached to the Bond.

## **SECTION – 16 INSURANCE**

CONTRACTOR shall purchase and maintain, for the duration of the Contract, 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, and the results of that Work by CONTRACTOR, its agents, representatives, employees, or Subcontractors, in amounts equal to the requirements set forth below. CONTRACTOR shall not commence Work under this Contract until all insurance required under this Section is obtained in a form acceptable to OCSD, nor shall CONTRACTOR allow any Subcontractor to commence Work on a subcontract until all insurance required of the Subcontractor has been obtained. CONTRACTOR shall maintain all of the foregoing insurance coverages in force through the point at which the Work under this Contract is fully completed and accepted by OCSD pursuant to the provisions of the General Conditions, "Final Acceptance and Final Completion". Furthermore, CONTRACTOR shall maintain all of the foregoing insurance coverages in full force and effect throughout the warranty period, commencing on the date of Final Acceptance. The requirement for carrying the foregoing insurance shall not derogate from the provisions for indemnification of OCSD by CONTRACTOR under Section 17 of this Contract. Notwithstanding nor diminishing the obligations of CONTRACTOR with respect to the foregoing, CONTRACTOR shall subscribe for and maintain in full force and effect during the life of this Contract, inclusive of all changes to the Contract Documents made in accordance with the provisions of the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and/or "OWNER Initiated

Changes”, the following insurance in amounts not less than the amounts specified. OCSD reserves the right to amend the required limits of insurance commensurate with the CONTRACTOR’s risk at any time during the course of the Project. No vehicles may enter OCSD premises/worksite without possessing the required insurance coverage.

CONTRACTOR’s insurance shall also comply with all insurance requirements prescribed by agencies from whom permits shall be obtained for the Work and any other third parties from whom third party agreements are necessary to perform the Work (collectively, the “Third Parties”), The Special Provisions may list such requirements and sample forms and requirements from such Third Parties may be included in an attachment to the General Requirements. CONTRACTOR bears the responsibility to discover and comply with all requirements of Third Parties, including meeting specific insurance requirements, that are necessary for the complete performance of the Work. To the extent there is a conflict between the Third Parties’ insurance requirements and those set forth by OCSD herein, the requirement(s) providing the more protective coverage for both OCSD and the Third Parties shall control and be purchased and maintained by CONTRACTOR.

A. Limits of Insurance

1. General Liability: One Million Dollars (\$1,000,000) per occurrence and a general aggregate limit of Two Million Dollars (\$2,000,000) for bodily injury, personal injury and property damage. Coverage shall include each of the following:
  - a. Premises-Operations.
  - b. Products and Completed Operations, with limits of at least One Million Dollars (\$1,000,000) per occurrence and a general aggregate limit of Two Million Dollars (\$2,000,000) which shall be in effect at all times during the warranty period set forth in the Warranty section herein, and as set forth in the General Conditions, “Warranty (CONTRACTOR’s Guarantee)”, plus any additional

extension or continuation of time to said warranty period that may be required or authorized by said provisions.

- c. Broad Form Property Damage, expressly including damage arising out of explosion, collapse, or underground damage.
- d. Contractual Liability, expressly including the indemnity provisions assumed under this Contract.
- e. Separation of Insured Clause, providing that coverage applies separately to each insured, except with respect to the limits of liability.
- f. Independent CONTRACTOR's Liability.

To the extent first dollar coverage, including defense of any claim, is not available to OCSD or any other additional insured because of any SIR, deductible, or any other form of self insurance, CONTRACTOR is obligated to assume responsibility of insurer until the deductible, SIR or other condition of insurer assuming its defense and/or indemnity has been satisfied.

CONTRACTOR shall be responsible to pay any deductible or SIR.

- g. If a crane will be used, the General Liability insurance will be endorsed to add Riggers Liability coverage or its equivalent to cover the usage of the crane and exposures with regard to the crane operators, riggers and others involved in using the crane.
  - h. If divers will be used, the General Liability insurance will be endorsed to cover marine liability or its equivalent to cover the usage of divers.
2. Automobile Liability: The CONTRACTOR shall maintain a policy of Automobile Liability Insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limits of liability coverage:

Either (1) a combined single limit of One Million Dollars (\$1,000,000) and a general aggregate limit of One Million Dollars (\$1,000,000) for bodily injury, personal injury and property damage;

Or alternatively, (2) One Million Dollars (\$1,000,000) per person for bodily injury and One Million Dollars (\$1,000,000) per accident for property damage.

3. **Umbrella Excess Liability:** The minimum limits of general liability and automobile liability insurance required, as set forth above, shall be provided for either in a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automobile liability.
4. **Drone Liability Insurance:** If a drone will be used, drone liability insurance must be maintained by CONTRACTOR in the amount of One Million Dollars (\$1,000,000) in a form acceptable by OCSD.
5. **Worker's Compensation/Employer's Liability:** CONTRACTOR shall provide such Worker's Compensation Insurance as required by the Labor Code of the State of California, including employer's liability with a minimum limit of One Million Dollars (\$1,000,000) per accident for bodily injury or disease. If an exposure to Jones Act liability may exist, the insurance required herein shall include coverage with regard to Jones Act claims.

Where permitted by law, CONTRACTOR hereby waives all rights of recovery by subrogation because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason against OCSD, its or their officers, agents, or employees, and any other contractor or subcontractor performing Work or rendering services on behalf of OCSD in connection with the



planning, development and construction of the Project. In all its insurance coverages related to the Work, CONTRACTOR shall include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against OCSD, its or their officers, agents, or employees, or any other contractor or subcontractor performing Work or rendering services at the Project. Where permitted by law, CONTRACTOR shall require similar written express waivers and insurance clauses from each of its Subcontractors of every tier. A waiver of subrogation shall be effective as to any individual or entity, even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium, directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

6. Limits are Minimums: If CONTRACTOR maintains higher limits than the minimums shown in this Section, OCSD requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR.

B. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by OCSD. At the option of OCSD, either: the Insurer shall reduce or eliminate such deductibles or self-insured retentions as respects OCSD, its Directors, officers, agents, CONSULTANTS, and employees; or CONTRACTOR shall provide a financial guarantee satisfactory to OCSD guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

C. Other Insurance Provisions

1. Each such policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to contain, the following provisions:

- a. OCSD, its Directors, officers, agents, CONSULTANTS, and employees, and all public agencies from whom permits will be obtained, and their Directors, officers, agents, and employees are hereby declared to be additional insureds under the terms of this policy, but only with respect to the operations of CONTRACTOR at or from any of the sites of OCSD in connection with this Contract, or acts and omissions of the additional insured in connection with its general supervision or inspection of said operations related to this Contract.
  - b. Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by OCSD shall be excess only and not contributing with insurance provided under this policy.
2. Each insurance policy required herein shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, and that coverage shall not be cancelled for non-payment of premium except after ten (10) days prior written notice by certified mail, return receipt requested. Should there be changes in coverage or an increase in deductible or SIR amounts, CONTRACTOR undertakes to procure a manuscript endorsement from its insurer giving 30 days prior notice of such an event to OCSD, or to have its insurance broker/agent send to OCSD a certified letter describing the changes in coverage and any increase in deductible or SIR amounts. The certified letter must be sent Attention: Risk Management and shall be received not less than twenty (20) days prior to the effective date of the change(s). The letter must be signed by a Director or Officer of the broker/agent and must be on company letterhead, and may be sent via e-mail in pdf format.

3. Coverage shall not extend to any indemnity coverage for the active negligence of any additional insured in any case where an agreement to indemnify the additional insured would be invalid under California Civil Code Section 2782(b).
4. If required by a public agency from whom permit(s) will be obtained, each policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to specify by name the public agency and its legislative members, officers, agents, CONSULTANTS, and employees, to be additional insureds.

D. Acceptability of Insurers

Insurers must have an "A-", or better, Policyholder's Rating, and a Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best Rating Guide. OCSD recognizes that State Compensation Insurance Fund has withdrawn from participation in the A.M. Best Rating Guide process. Nevertheless, OCSD will accept State Compensation Insurance Fund for the required policy of worker's compensation insurance, subject to OCSD's option, at any time during the term of this Contract, to require a change in insurer upon twenty (20) days written notice. Further, OCSD will require CONTRACTOR to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONTRACTOR by OCSD or its agent.

E. Verification of Coverage

CONTRACTOR shall furnish OCSD with original certificates and mandatory endorsements affecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by OCSD before Work commences. OCSD reserves the right to require complete, certified copies of all required insurance policies, including endorsements, affecting the coverage required by these Specifications at any time.

F. Subcontractors

CONTRACTOR shall be responsible to establish insurance requirements for any Subcontractors hired by CONTRACTOR. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subcontractor's operations and work. OCSD and any public agency issuing permits for the Project must be named as "Additional Insured" on any General Liability or Automobile Liability policy obtained by a Subcontractor. The CONTRACTOR must obtain copies and maintain current versions of all Subcontractors' policies, Certificate of Liability and mandatory endorsements effecting coverage. Upon request, CONTRACTOR must furnish OCSD with the above referenced required documents.

G. Required Forms and Endorsements

1. Required ACORD Form

- a. Certificate of Liability                      Form 25

2. Required Insurance Services Office, Inc. Endorsements (when alternative forms are shown, they are listed in order of preference)

In the event any of the following forms are cancelled by Insurance Services Office, Inc. (ISO), or are updated, the ISO replacement form or equivalent must be supplied.

- a. Commercial General Liability                      Form CG-0001 10 01
- b. Additional Insured Including                      Form CG-2010 10 01 **and**  
Products-Completed Operations                      Form CG-2037 10 01
- c. Waiver of Transfer of Rights of                      Form CG-2404 11 85; **or**  
Recovery Against Others to Us/  
Waiver of Subrogation                      Form CG-2404 10 93

3. Required State Compensation Insurance Fund Endorsements

- a. Waiver of Subrogation                      Endorsement No. 2570
- b. Cancellation Notice                      Endorsement No. 2065

4. Additional Required Endorsements

a. Notice of Policy Termination

Manuscript Endorsement

**SECTION – 17 RISK AND INDEMNIFICATION**

All Work covered by this Contract done at the site of construction or in preparing or delivering materials to the site shall be at the risk of CONTRACTOR alone. CONTRACTOR shall save, indemnify, defend, and keep OCSD and others harmless as more specifically set forth in General Conditions, "General Indemnification".

**SECTION – 18 TERMINATION**

This Contract may be terminated in whole or in part in writing by OCSD in the event of substantial failure by the CONTRACTOR to fulfill its obligations under this Agreement, or it may be terminated by OCSD for its convenience provided that such termination is effectuated in a manner and upon such conditions set forth more particularly in General Conditions, "Termination for Default" and/or "Termination for Convenience", provided that no termination may be effected unless proper notice is provided to CONTRACTOR at the time and in the manner provided in said General Conditions. If termination for default or convenience is effected by OCSD, an equitable adjustment in the price provided for in this Contract shall be made at the time and in the manner provided in the General Conditions, "Termination for Default" and "Termination for Convenience".

**SECTION – 19 WARRANTY**

The CONTRACTOR agrees to perform all Work under this Contract in accordance with the Contract Documents, including OCSD's designs, Drawings and Specifications.

The CONTRACTOR guarantees for a period of at least one (1) year from the date of Final Acceptance of the Work, pursuant to the General Conditions, "Final Acceptance and Final Completion" that the completed Work is free from all defects due to faulty materials, equipment or workmanship and that it shall promptly make whatever adjustments or corrections which may

be necessary to cure any defects, including repairs of any damage to other parts of the system resulting from such defects. OCSD shall promptly give notice to the CONTRACTOR of observed defects. In the event that the CONTRACTOR fails to make adjustments, repairs, corrections or other work made necessary by such defects, OCSD may do so and charge the CONTRACTOR the cost incurred. The CONTRACTOR's warranty shall continue as to any corrected deficiency until the later of (1) the remainder of the original one-year warranty period; or (2) one year after acceptance by OCSD of the corrected Work. The Performance Bond and the Payment Bond shall remain in full force and effect through the guarantee period.

The CONTRACTOR's obligations under this clause are in addition to the CONTRACTOR's other express or implied assurances under this Contract, including but not limited to specific manufacturer or other extended warranties specified in the Plans and Specifications, or state law and in no way diminish any other rights that OCSD may have against the CONTRACTOR for faulty materials, equipment or Work.

## **SECTION – 20    ASSIGNMENT**

No assignment by the CONTRACTOR of this Contract or any part hereof, or of funds to be received hereunder, will be recognized by OCSD unless such assignment has had prior written approval and consent of OCSD and the Surety.

## **SECTION – 21    RESOLUTION OF DISPUTES**

OCSD and the CONTRACTOR shall comply with the provisions of California Public Contract Code Section 20104 et. seq., regarding resolution of construction claims for any Claims which arise between the CONTRACTOR and OCSD, as well as all applicable dispute and Claims provisions as set forth in the General Conditions and as otherwise required by law.

## **SECTION – 22    SAFETY & HEALTH**

CONTRACTOR shall comply with all applicable safety and health requirements mandated by federal, state, city and/or public agency codes, permits, ordinances, regulations, and laws, as

well as these Contract Documents, including but not limited to the General Requirements, Section entitled "Safety" and Exhibit B OCSD Safety Standards.

## **SECTION – 23    NOTICES**

Any notice required or permitted under this Contract shall be sent by certified mail, return receipt requested, at the address set forth below. Any party whose address changes shall notify the other party in writing.

TO OCSD:                      Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, California 92708-7018  
Attn: Clerk of the Board

Copy to:                      Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, California 92708-7018  
Attn: Construction Manager

Bradley R. Hogin, Esquire  
Woodruff, Spradlin & Smart  
555 Anton Boulevard  
Suite 1200  
Costa Mesa, California 92626

TO CONTRACTOR:           Mass. Electric Construction Co.  
1925 Wright Avenue, Suite C  
La Verne, CA 91750

Copy to:                      Michael P. Rinehart, Executive Vice President  
Mass. Electric Construction Co.  
1925 Wright Avenue, Suite C  
La Verne, CA 91750

IN WITNESS WHEREOF, the parties hereto have executed this Contract Agreement as the date first hereinabove written.

CONTRACTOR: Mass. Electric Construction Co.  
1925 Wright Avenue, Suite C  
La Verne, CA 91750

By \_\_\_\_\_

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

Its \_\_\_\_\_

CONTRACTOR's State License No. 819912 (Expiration Date – 05/31/2021)

OCSD: Orange County Sanitation District

By \_\_\_\_\_

David John Shawver  
Board Chairman

By \_\_\_\_\_

Kelly A. Lore  
Clerk of the Board

By \_\_\_\_\_

Ruth Zintzun  
Purchasing & Contracts Manager



**EXHIBIT A**  
**SCHEDULE OF PRICES**

**TABLE OF CONTENTS**  
**EXHIBIT A**  
**SCHEDULE OF PRICES**

EXA-1 BASIS OF COMPENSATION..... 1

EXA-2 PROGRESS PAYMENTS ..... 1

EXA-3 RETENTION AND ESCROW ACCOUNTS..... 1

EXA-4 STOP PAYMENT NOTICE..... 3

EXA-5 PAYMENT TO SUBCONTRACTORS ..... 3

EXA-6 PAYMENT OF TAXES ..... 3

EXA-7 FINAL PAYMENT ..... 4

EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT ... 5

ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT ..... 7

ATTACHMENT 2 – SCHEDULE OF PRICES..... 8

# **EXHIBIT A**

## **SCHEDULE OF PRICES**

### **EXA-1 BASIS OF COMPENSATION**

CONTRACTOR will be paid the Contract Price according to the Schedule of Prices, and all other applicable terms and conditions of the Contract Documents.

### **EXA-2 PROGRESS PAYMENTS**

Progress payments will be made in accordance with all applicable terms and conditions of the Contract Documents, including, but not limited to:

1. Contract Agreement – Section 11 – “Contract Price and Method of Payment;”
2. General Conditions – “Payment – General”;
3. General Conditions – “Payment – Applications for Payment”;
4. General Conditions – “Payment – Mobilization Payment Requirements;”
5. General Conditions – “Payment – Itemized Breakdown of Contract Lump Sum Prices”;
6. General Conditions – “Contract Price Adjustments and Payments”;
7. General Conditions – “Suspension of Payments”;
8. General Conditions – “OCSD’s Right to Withhold Certain Amounts and Make Application Thereof”; and
9. General Conditions – “Final Payment.”

### **EXA-3 RETENTION AND ESCROW ACCOUNTS**

#### **A. Retention:**

OCSD shall retain a percentage of each progress payment to assure satisfactory completion of the Work. The amount to be retained from each progress payment shall be determined as provided in General Conditions – “Retained Funds; Substitution of Securities”. In all contracts between CONTRACTOR and its Subcontractors and/or Suppliers, the retention may not exceed the percentage specified in the Contract Documents.

B. Substitution of Securities:

CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.” Payment of Escrow Agent:

In lieu of substitution of securities as provided above, the CONTRACTOR may request and OCSD shall make payment of retention earned directly to the escrow agent at the expense of the CONTRACTOR. At the expense of the CONTRACTOR, the CONTRACTOR may direct the investment of the payments into securities consistent with Government Code §16430 and the CONTRACTOR shall receive the interest earned on the investments upon the same terms provided for in this article for securities deposited by the CONTRACTOR. Upon satisfactory completion of the Contract, the CONTRACTOR shall receive from the escrow agent all securities, interest and payments received by the escrow agent from OCSD, pursuant to the terms of this article. The CONTRACTOR shall pay to each Subcontractor, not later than twenty (20) calendar days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to ensure the performance of the Subcontractor. The escrow agreement used by the escrow agent pursuant to this article shall be substantially similar to the form set forth in §22300 of the California Public Contract Code.

C. Release of Retention:

Upon Final Acceptance of the Work, the CONTRACTOR shall submit an invoice for release of retention in accordance with the terms of the Contract.

D. Additional Deductibles:

In addition to the retentions described above, OCSD may deduct from each progress payment any or all of the following:

1. Liquidated Damages that have occurred as of the date of the application for progress payment;
2. Deductions from previous progress payments already paid, due to OCSD's discovery of deficiencies in the Work or non-compliance with the Specifications or any other requirement of the Contract;
3. Sums expended by OCSD in performing any of the CONTRACTOR'S obligations under the Contract that the CONTRACTOR has failed to perform, and;
4. Other sums that OCSD is entitled to recover from the CONTRACTOR under the terms of the Contract, including without limitation insurance deductibles and assessments.

The failure of OCSD to deduct any of the above-identified sums from a progress payment shall not constitute a waiver of OCSD's right to such sums or to deduct them from a later progress payment.

#### **EXA-4 STOP PAYMENT NOTICE**

In addition to other amounts properly withheld under this article or under other provisions of the Contract, OCSD shall retain from progress payments otherwise due the CONTRACTOR an amount equal to one hundred twenty-five percent (125%) of the amount claimed under any stop payment notice under Civil Code §9350 et. seq. or other lien filed against the CONTRACTOR for labor, materials, supplies, equipment, and any other thing of value claimed to have been furnished to and/or incorporated into the Work; or for any other alleged contribution thereto. In addition to the foregoing and in accordance with Civil Code §9358 OCSD may also satisfy its duty to withhold funds for stop payment notices by refusing to release funds held in escrow pursuant to public receipt of a release of stop payment notice executed by a stop payment notice claimant, a stop payment notice release bond, an order of a court of competent jurisdiction, or other evidence satisfactory to OCSD that the CONTRACTOR has resolved such claim by settlement.

#### **EXA-5 PAYMENT TO SUBCONTRACTORS**

##### **Requirements**

1. The CONTRACTOR shall pay all Subcontractors for and on account of Work performed by such Subcontractors, not later than seven (7) days after receipt of each progress payment as required by the California Business and Professions Code §7108.5. Such payments to Subcontractors shall be based on the measurements and estimates made pursuant to article progress payments provided herein.
2. Except as specifically provided by law, the CONTRACTOR shall pay all Subcontractors any and all retention due and owing for and on account of Work performed by such Subcontractors not later than seven (7) days after CONTRACTOR'S receipt of said retention proceeds from OCSD as required by the California Public Contract Code §7107.

#### **EXA-6 PAYMENT OF TAXES**

Unless otherwise specifically provided in this Contract, the Contract Price includes full compensation to the CONTRACTOR for all taxes. The CONTRACTOR shall pay all federal, state, and local taxes, and duties applicable to and assessable against any Work, including but not limited to retail sales and use, transportation, export, import, business, and special taxes. The CONTRACTOR shall ascertain and pay the taxes when due. The CONTRACTOR will maintain auditable records, subject to OCSD reviews, confirming that tax payments are current at all times.

## **EXA-7 FINAL PAYMENT**

After Final Acceptance of the Work, as more particularly set forth in the General Conditions, "Final Acceptance and Final Completion", and after Resolution of the Board authorizing final payment and satisfaction of the requirements as more particularly set forth in General Conditions – "Final Payment", a final payment will be made as follows:

1. Prior to Final Acceptance, the CONTRACTOR shall prepare and submit an application for Final Payment to OCSD, including:
  - a. The proposed total amount due the CONTRACTOR, segregated by items on the payment schedule, amendments, Change Orders, and other bases for payment;
  - b. Deductions for prior progress payments;
  - c. Amounts retained;
  - d. A conditional waiver and release on final payment for each Subcontractor (per Civil Code Section 8136);
  - e. A conditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8136);
  - f. List of Claims the CONTRACTOR intends to file at that time or a statement that no Claims will be filed,
  - g. List of pending unsettled claims, stating claimed amounts, and copies of any and all complaints and/or demands for arbitration received by the CONTRACTOR; and
  - h. For each and every claim that resulted in litigation or arbitration which the CONTRACTOR has settled, a conformed copy of the Request for Dismissal with prejudice or other satisfactory evidence the arbitration is resolved.
2. The application for Final Payment shall include complete and legally effective releases or waivers of liens and stop payment notices satisfactory to OCSD, arising out of or filed in connection with the Work. Prior progress payments shall be subject to correction in OCSD's review of the application for Final Payment. Claims filed with the application for Final Payment must be otherwise timely under the Contract and applicable law.
3. Within a reasonable time, OCSD will review the CONTRACTOR'S application for Final Payment. Any recommended changes or corrections will then be forwarded to the CONTRACTOR. Within ten (10) calendar days after receipt of recommended changes from OCSD, the CONTRACTOR will make the changes, or list Claims that will be filed as a result of the changes, and shall submit the revised application for Final Payment. Upon

acceptance by OCSD, the revised application for Final Payment will become the approved application for Final Payment.

4. If no Claims have been filed with the initial or any revised application for Final Payment, and no Claims remain unsettled within thirty-five (35) calendar days after Final Acceptance of the Work by OCSD, and agreements are reached on all issues regarding the application for Final Payment, OCSD, in exchange for an executed release, satisfactory in form and substance to OCSD, will pay the entire sum found due on the approved application for Final Payment, including the amount, if any, allowed on settled Claims.
5. The release from the CONTRACTOR shall be from any and all Claims arising under the Contract, except for Claims that with the concurrence of OCSD are specifically reserved, and shall release and waive all unreserved Claims against OCSD and its officers, directors, employees and authorized representatives. The release shall be accompanied by a certification by the CONTRACTOR that:
  - a. It has resolved all Subcontractors, Suppliers and other Claims that are related to the settled Claims included in the Final Payment;
  - b. It has no reason to believe that any party has a valid claim against the CONTRACTOR or OCSD which has not been communicated in writing by the CONTRACTOR to OCSD as of the date of the certificate;
  - c. All warranties are in full force and effect, and;
  - d. The releases and the warranties shall survive Final Payment.
6. If any claims remain open, OCSD may make Final Payment subject to resolution of those claims. OCSD may withhold from the Final Payment an amount not to exceed one hundred fifty percent (150%) of the sum of the amounts of the open claims, and one hundred twenty-five percent (125%) of the amounts of open stop payment notices referred to in article entitled stop payment notices herein.
7. The CONTRACTOR shall provide an unconditional waiver and release on final payment from each Subcontractor and Supplier providing Work under the Contract (per Civil Code Section 8138) and an unconditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8138) within thirty (30) days of receipt of Final Payment.

#### **EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT**

Notwithstanding OCSD's acceptance of the application for Final Payment and irrespective of whether it is before or after Final Payment has been made, OCSD shall not be precluded from subsequently showing that:

1. The true and correct amount payable for the Work is different from that previously accepted;

2. The previously-accepted Work did not in fact conform to the Contract requirements, or;
3. A previous payment or portion thereof for Work was improperly made.

OCSD also shall not be stopped from demanding and recovering damages from the CONTRACTOR, as appropriate, under any of the foregoing circumstances as permitted under the Contract or applicable law.



## ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT

I hereby certify under penalty of perjury as follows:

That the claim for payment is in all respects true, correct; that the services mentioned herein were actually rendered and/or supplies delivered to OCSD in accordance with the Contract.

I understand that it is a violation of both the federal and California False Claims Acts to knowingly present or cause to be presented to OCSD a false claim for payment or approval.

A claim includes a demand or request for money. It is also a violation of the False Claims Acts to knowingly make use of a false record or statement to get a false claim paid. The term "knowingly" includes either actual knowledge of the information, deliberate ignorance of the truth or falsity of the information, or reckless disregard for the truth or falsity of the information. Proof of specific intent to defraud is not necessary under the False Claims Acts. I understand that the penalties under the Federal False Claims Act and State of California False Claims Act are non-exclusive, and are in addition to any other remedies which OCSD may have either under contract or law.

I hereby further certify, to the best of my knowledge and belief, that:

1. The amounts requested are only for performance in accordance with the Specifications, terms, and conditions of the Contract;
2. Payments to Subcontractors and Suppliers have been made from previous payments received under the Contract, and timely payments will be made from the proceeds of the payment covered by this certification;
3. This request for progress payments does not include any amounts which the prime CONTRACTOR intends to withhold or retain from a Subcontractor or Supplier in accordance with the terms and conditions of the subcontract; and
4. This certification is not to be construed as Final Acceptance of a Subcontractor's performance.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

## **ATTACHMENT 2 – SCHEDULE OF PRICES**

See next pages for Bid Submittal Forms (Mass. Electric Construction Co.)

BF-14 SCHEDULE OF PRICES, Page 1 - 5

**BF-14 SCHEDULE OF PRICES**

**INSTRUCTIONS**

**A. General**

For Unit Prices, it is understood that the following quantities are approximate only and are solely for the purpose of estimating the comparison of Bids, and that the actual value of Work will be computed based upon the actual quantities in the completed Work, whether they be more or less than those shown. CONTRACTOR's compensation for the Work under the Contract Documents will be computed based upon the lump sum amount of the Contract at time of award, plus any additional or deleted costs approved by OCSD via approved Change Orders, pursuant to the Contract Documents.

Bidder shall separately price and accurately reflect costs associated with each line item, leaving no blanks. Any and all modifications to the Bid must be initialed by an authorized representative of the Bidder in accordance with the Instructions to Bidders, Preparation of Bid.

Bidders are reminded of Instruction to Bidders, Discrepancy in Bid Items, which, in summary, provides that the total price for each item shall be based on the Unit Price listed for each item multiplied by the quantity; and the correct Total Price for each item shall be totaled to determine the Total Amount of Bid.

All applicable costs including overhead and profit shall be reflected in the respective unit costs and the TOTAL AMOUNT OF BID. The Bid price shall include all costs to complete the Work, including profit, overhead, etc., unless otherwise specified in the Contract Documents. All applicable sales taxes, state and/or federal, and any other special taxes, patent rights or royalties shall be included in the prices quoted in this Bid.

**B. Basis of Award**

AWARD OF THE CONTRACT WILL BE MADE ON THE BASIS OF THE LOWEST RESPONSIVE AND RESPONSIBLE BID.

**Note 1:** Base Bid. Includes all costs necessary to furnish all labor, materials, equipment and services for the construction of the Project per the Contract Documents.

**Note 2:** Additive Bid Items will be used to determine the lowest Responsive, Responsible Bidder. Additive items will not be included as part of the initial award amount. In the event that OCSD elects to add any or all of the Additive Bid Items, it will do so via change order(s). Refer to Part C – SPECIAL PROVISIONS.

All Work in the Contract Documents shall be included in Base Bid Items. The Additive Bid Items are for Work either not specifically shown or in excess of quantities shown in the Contract Documents. The Contractor shall provide a unit price and extended total price for each Additive Bid Item.

Bidders shall accurately reflect the cost to perform the Work. OCSD may reject unbalanced Bids. Refer to Part 2 – INSTRUCTIONS TO BIDDERS.

Bid Submitted By: Mass. Electric Construction Co.  
(Name of Firm)

**EXHIBIT A  
SCHEDULE OF PRICES**

**BASE BID ITEMS** (Refer to Note 1 in the Instructions):

Item No.	Description	Unit of Measurement	Approx Qty	Unit Price	Extended Price
1.	<b>Mobilization:</b> The amount for this Bid Item shall not exceed specified amount and shall include all work not included in other items and shall be in conformance with the Contract Documents for the lump sum price of ...	Not Applicable	Lump Sum		= \$ 15,000.00
2.	Test circuits, install new conductors, and commission MCC PTA TUB 431 screen loading fan loop tag # 20DTUB641	Not Applicable	Lump Sum		= \$ 27,726.00
3.	Test circuits, install new conductors, and commission MCC PTA TUB 422 Washer comp. inlet gate #1A	Not Applicable	Lump Sum		= \$ 19,462.00
4.	Test circuits, install new conductors, and commission MCC PTB TUB 428 bar screen supply fan loop tag#20DTUB633.	Not Applicable	Lump Sum		= \$ 36,162.00
5.	Test circuits, install new conductors, and commission MCC PTB TUB 453 inlet gate 7; tag # 20DFBK232.	Not Applicable	Lump Sum		= \$ 29,143.00
6.	Test circuits, install new conductors, and commission MCC PTB TUB 419 bar screen roll up door #20DFBK053	Not Applicable	Lump Sum		= \$ 38,651.00
7.	Test circuits, install new conductors, and commission MCC PTB TUB 423 bar screen supply fan #20DTUB617	Not Applicable	Lump Sum		= \$ 70,253.00
8.	Test circuits, install new conductors, and commission MCC PTD TUB 426 GATE C3 WEIR ISO LOOP TAG #20EFBK333	Not Applicable	Lump Sum		= \$ 48,684.00
9.	Test circuits, install new conductors, and commission MCC PTD TUB410 grit basin inlet #20EFBK152	Not Applicable	Lump Sum		= \$ 15,538.00

Bid Submitted By: Mass. Electric Construction Co.  
(Name of Firm)

**EXHIBIT A**  
**SCHEDULE OF PRICES**  
(continued)

Item No.	Description	Unit of Measurement	Approx Qty	Unit Price		Extended Price
10.	Test circuits, install new conductors, and commission MCC PTD TUB412 grit basin inlet #6 #20EFBK162	Not Applicable	Lump Sum		= \$	12,190.00
11.	Test circuits, install new conductors, and commission MCC PTD TUB 417 grit pmp. STA. smp/pmp 1&2 #20EFBK171	Not Applicable	Lump Sum		= \$	6,430.00
12.	Test circuits, install new conductors, and commission MCC PTE TUB 405 IN. PMP STN. XFAN LOOP TAG #20DTUB739	Not Applicable	Lump Sum		= \$	39,484.00
13.	Test circuits, install new conductors, and commission MCC PTK TUB 421 HW BIO TOWER 13 FAN LOOP TAG #20FFBK465.	Not Applicable	Lump Sum		= \$	32,913.00
14.	Remove existing control circuits, install and commission new control conductors for MCC STH 402 (at DC-J) – Waste Sludge Pump # 3; tag # 22MPMP230 at Trickling Filters Area.	Not Applicable	Lump Sum		= \$	25,004.00
15.	Test circuits, install and commission new conductors for MCC PTA 410 – Bar Screen # 1, tag # 20DBSR110 at Bar Screen Facility.	Not Applicable	Lump Sum			17,687.00

**SUBTOTAL BASE BID ITEMS NO. 1 THROUGH NO. 15 (INITIAL AWARD AMOUNT)**      \$ 434,327.00

Bid Submitted By: Mass. Electric Construction Co  
(Name of Firm)

**EXHIBIT A**  
**SCHEDULE OF PRICES**  
(continued)

**ADDITIVE BID ITEMS** (Refer to Note 2 in the Instructions):

Item No.	Description	Unit of Measurement	Approx Qty	Unit Price		Extended Price
16.	Install, splice with existing conductors, and commission 500 linear feet of 4/C#12 machine tray power cable (Southwire Spec 45043 or equal).	Linear Foot	500	2.78	= \$	1,390.00
17.	Install, splice with existing conductors, and commission 500 linear feet of 4/C#10 machine tray power cable (Southwire Spec 45043 or equal).	Linear Foot	500	3.18	= \$	1,590.00
18.	Install, splice with existing conductors, and commission 500 linear feet of 12/C#12 control cable (Southwire Spec 45055 or equal).	Linear Foot	500	5.40	= \$	2,700.00
19.	Coordination Meetings	Each	20	124.20	= \$	2,484.00
20.	Stand-by Hourly/Out of Scope Hourly Bill Rate for Contractor's Project Manager	Hourly Bill Rate per hour	60	124.20	= \$	7,452.00
21.	Stand-by Hourly/Out of Scope Hourly Bill Rate for Master Electrician (Licensed)	Hourly Bill Rate per hour	300	95.17	= \$	28,551.00
22.	Stand-by Hourly/Out of Scope Hourly Bill Rate for Journeyman Electrician (Licensed)	Hourly Bill Rate per hour	350	88.38	= \$	30,933.00
23.	Stand-by Hourly/Out of Scope Hourly Bill Rate for Apprentice Electrician	Hourly Bill Rate per hour	350	55.46	= \$	19,411.00

**SUBTOTAL ADDITIVE BID ITEMS NO. 16 THROUGH NO. 23**

**\$ 94,511.00**

**TOTAL AMOUNT OF BID (BASIS OF AWARD)**

**\$ 528,838.00**

Bid Submitted By: Mass. Electric Construction Co.  
(Name of Firm)

**EXHIBIT A**  
**SCHEDULE OF PRICES**  
(continued)

**NOTICE TO BIDDERS:**

Bid items 1 through 15 together with Additive Bid Items 16 through 23 will be used to determine the lowest, responsive, and responsible bidder. Additive Bid Items will not be included as part of the initial award amount. In the event OCSD elects to add any or all of the Additive Bid Items, it will do so via change order(s). Refer to Special Provisions.



## Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

### OPERATIONS COMMITTEE

#### Agenda Report

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**File #:** 2019-621

**Agenda Date:** 12/4/2019

**Agenda Item No:** 6.

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**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**ACTIVATED SLUDGE PLANT CLARIFIER INLET GATE REPLACEMENT AT PLANT NO. 2,  
PROJECT NO. MP-638**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Receive and file Bid Tabulation and Recommendation for Activated Sludge Plant Clarifier Inlet Gate Replacement at Plant No. 2, Project No. MP-638;
- B. Award a Construction Contract to Innovative Construction Solutions for Activated Sludge Plant Clarifier Inlet Gate Replacement at Plant No. 2, Project No. MP-638, for a total amount not to exceed \$658,300; and
- C. Approve a contingency of \$65,830 (10%).

**BACKGROUND**

The Activated Sludge Plant at Orange County Sanitation District (Sanitation District) Plant No. 2 has 12 rectangular clarifiers that are a key part of the biological secondary treatment process. Each clarifier has three inlet gates that allow water to enter the clarifier for the final sludge settling process and protect workers from being engulfed during maintenance activities in the clarifier. These gates are subject to wear and corrosion and have been in service for over 40 years.

**RELEVANT STANDARDS**

- Comply with California Public Contract Code Section 20103.8: Award construction to lowest responsive, responsible bidder
- Maintain a proactive asset management program
- Provide a safe and collegial workplace

**PROBLEM**

Several gates have become inoperable due to corrosion and deterioration. An inoperable gate prevents a clarifier from being taken out of or put into service. Staff has determined that all 36 gates are corroded to some degree and have reached the end of their useful life.



**PROPOSED SOLUTION**

Award a construction contract for Activated Sludge Plant Clarifier Inlet Gate Replacement at Plant No. 2, Project No. MP-638, to replace the inlet gates.

**TIMING CONCERNS**

The inlet gates need to be reliable so that individual clarifiers can be isolated to accommodate upcoming construction work, including Return Activated Sludge Piping Replacement at Plant No. 2, Project No. P2-123, and P2 Secondary Clarifier Repairs, Project No. MP-248.

**RAMIFICATIONS OF NOT TAKING ACTION**

Gates that are not replaced could fail, preventing the clarifiers from operating at its hydraulic capacity, which could impact wet weather performance.

**PRIOR COMMITTEE/BOARD ACTIONS**

N/A

**ADDITIONAL INFORMATION**

Staff is also working on P2 Secondary Clarifier Repairs, Project No. MP-248, to replace the clarifier sludge collection mechanisms for six clarifiers. Completing these two projects will allow a much larger capital improvement program rehabilitation project to be postponed.

**Bid Evaluation**

The Sanitation District advertised Project No. MP-638 for bids on September 4, 2019 and nine sealed bids were received on October 15, 2019. A summary of the bid opening follows:

Engineer's Estimate	\$ 686,000
<u>Bidder</u>	<u>Amount of Bid</u>
Innovative Construction Solutions	\$ 658,300
Tharsos, Inc.	\$ 696,000
J.R. Filanc Construction Co., Inc.	\$ 696,177
Myers & Sons Construction, LLC	\$ 699,995
Environmental Construction, Inc.	\$ 727,560
Mehta Mechanical Company, Inc. dba MMC, Inc.	\$ 764,000
Abhe & Svoboda, Inc.	\$ 774,565
W.M. Lyles Co.	\$ 829,000
Innovative Engineering & Maintenance	\$ 1,385,000

The bids were evaluated in accordance with the Sanitation District's policies and procedures. A notice was sent to all bidders on November 19, 2019 informing them of the intent of Sanitation District staff to recommend award of the Construction Contract to Innovative Construction Solutions.

Staff recommends awarding a Construction Contract to the lowest responsive bidder, Innovative Construction Solutions, for a total amount not to exceed \$658,300.

## **CEQA**

This project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations sections 15301 because the project involves repairs, replacement, and/or minor alteration of the existing facilities involving no expansion of use or capacity. A Notice of Exemption will be filed with the OC Clerk-Recorder after the Sanitation District's Board of Directors approval of the Activated Sludge Plant Clarifier Inlet Gate Replacement at Plant No. 2, Project No. MP-638.

## **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This recommendation would be funded under the Operations and Maintenance Department budget for Repairs & Maintenance, (FY 2019-20 Budget Update, Page 47). The budget is sufficient for the recommended action.

## **ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Construction Contract

SS:dm:sa

**PART A**  
**CONTRACT AGREEMENT**

# TABLE OF CONTENTS

## CONTRACT AGREEMENT

SECTION – 1	GENERAL CONDITIONS .....	1
SECTION – 2	MATERIALS AND LABOR.....	4
SECTION – 3	PROJECT .....	4
SECTION – 4	PLANS AND SPECIFICATONS .....	4
SECTION – 5	TIME OF COMMENCEMENT AND COMPLETION .....	5
SECTION – 6	TIME IS OF THE ESSENCE .....	5
SECTION – 7	EXCUSABLE DELAYS .....	6
SECTION – 8	EXTRA WORK.....	6
SECTION – 9	CHANGES IN PROJECT.....	6
SECTION – 10	LIQUIDATED DAMAGES FOR DELAY .....	7
SECTION – 11	CONTRACT PRICE AND METHOD OF PAYMENT .....	7
SECTION – 12	SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS .....	9
SECTION – 13	COMPLETION .....	9
SECTION – 14	CONTRACTOR'S EMPLOYEES COMPENSATION.....	10
SECTION – 15	SURETY BONDS .....	12
SECTION – 16	INSURANCE.....	13
SECTION – 17	RISK AND INDEMNIFICATION.....	22
SECTION – 18	TERMINATION .....	22
SECTION – 19	WARRANTY .....	22
SECTION – 20	ASSIGNMENT .....	23
SECTION – 21	RESOLUTION OF DISPUTES .....	23
SECTION – 22	SAFETY & HEALTH .....	24
SECTION – 23	NOTICES.....	24

CONTRACT AGREEMENT  
ORANGE COUNTY SANITATION DISTRICT

**PROJECT NO. MP-638**

**ACTIVATED SLUDGE PLANT CLARIFIER INLET GATE REPLACEMENT AT PLANT NO. 2**

THIS AGREEMENT is made and entered into, to be effective, this December 18, 2019, by and between Innovative Construction Solutions, hereinafter referred to as "CONTRACTOR" and the Orange County Sanitation District, hereinafter referred to as "OCSD".

WITNESSETH

That for and in consideration of the promises and agreements hereinafter made and exchanged, OCSD and CONTRACTOR agree as follows:

**SECTION – 1      GENERAL CONDITIONS**

CONTRACTOR certifies and agrees that all the terms, conditions and obligations of the Contract Documents as hereinafter defined, the location of the job site, and the conditions under which the Work is to be performed have been thoroughly reviewed, and enters into this Contract based upon CONTRACTOR's investigation of all such matters and is in no way relying upon any opinions or representations of OCSD. It is agreed that this Contract represents the entire agreement. It is further agreed that the Contract Documents are each incorporated into this Contract by reference, with the same force and effect as if the same were set forth at length herein, and that CONTRACTOR and its Subcontractors, if any, will be and are bound by any and all of said Contract Documents insofar as they relate in any part or in any way, directly or indirectly, to the Work covered by this Contract.

A. Contract Documents Order of Precedence

"Contract Documents" refers to those documents identified in the definition of "Contract Documents" in the General Conditions – Definitions.

1. In the event of a conflict between one Contract Document and any of the other Contract Documents, the provisions in the document highest in precedence shall be controlling. The order of precedence of the Contract Documents is as follows:
  - a. Supplemental Agreements – the last in time being the first in precedence
  - b. Addenda issued prior to opening of Bids – the last in time being the first in precedence
  - c. Contract Agreement
  - d. Permits and other regulatory requirements
  - e. Special Provisions
  - f. General Conditions (GC)
  - g. Notice Inviting Bids and Instruction to Bidders
  - h. Geotechnical Baseline Report (GBR), if attached as a Contract Document
  - i. Plans and Specifications – in these documents the order of precedence shall be:
    - i. Specifications (Divisions 01-17)
    - ii. Plans
    - iii. General Requirements (GR)
    - iv. Standard Drawings and Typical Details
  - j. CONTRACTOR's Bid
2. In the event of a conflict between terms within an individual Contract Document, the conflict shall be resolved by applying the following principles as appears applicable:
  - a. Figured dimensions on the Contract Documents shall govern. Dimensions not specified shall be as directed by the ENGINEER. Details not shown or specified shall be the same as similar parts that are shown or specified, or as directed. Full-size details shall take precedence over scale Drawings as to shape and details of construction. Specifications shall govern as to material and workmanship.

- b. The Contract Documents calling for the higher quality material or workmanship shall prevail. Materials or Work described in words, which so applied, have a well known technical or trade meaning shall be deemed to refer to such recognized standards. In the event of any discrepancy between any Drawings and the figures thereon, the figures shall be taken as correct.
- c. Scale Drawings, full-size details, and Specifications are intended to be fully complementary and to agree. Should any discrepancy between Contract Documents come to the CONTRACTOR's attention, or should an error occur in the efforts of others, which affect the Work, the CONTRACTOR shall notify the ENGINEER, in writing, at once. In the event any doubts or questions arise with respect to the true meaning of the Contract Documents, reference shall be made to the ENGINEER whose written decision shall be final. If the CONTRACTOR proceeds with the Work affected without written instructions from the ENGINEER, the CONTRACTOR shall be fully responsible for any resultant damage or defect.
- d. Anything mentioned in the Specifications and not indicated in the Plans, or indicated in the Plans and not mentioned in the Specifications, shall be of like effect as if indicated and mentioned in both. In case of discrepancy in the Plans or Specifications, the matter shall be immediately submitted to OCSD's ENGINEER, without whose decision CONTRACTOR shall not adjust said discrepancy save only at CONTRACTOR's own risk and expense. The decision of the ENGINEER shall be final.

In all matters relating to the acceptability of material, machinery or plant equipment; classifications of material or Work; the proper execution, progress or sequence of the Work; and quantities interpretation of the Contract Documents, the decision of the

ENGINEER shall be final and binding, and shall be a condition precedent to any payment under the Contract, unless otherwise ordered by the Board of Directors.

B. Definitions

Capitalized terms used in this Contract are defined in the General Conditions, Definitions.

Additional terms may be defined in the Special Provisions.

**SECTION – 2 MATERIALS AND LABOR**

CONTRACTOR shall furnish, under the conditions expressed in the Plans and Specifications, at CONTRACTOR'S own expense, all labor and materials necessary, except such as are mentioned in the Specifications to be furnished by OCSD, to construct and complete the Project, in good workmanlike and substantial order. If CONTRACTOR fails to pay for labor or materials when due, OCSD may settle such claims by making demand upon the Surety to this Contract. In the event of the failure or refusal of the Surety to satisfy said claims, OCSD may settle them directly and deduct the amount of payments from the Contract Price and any amounts due to CONTRACTOR. In the event OCSD receives a stop payment notice from any laborer or material supplier alleging non-payment by CONTRACTOR, OCSD shall be entitled to deduct all of its costs and expenses incurred relating thereto, including but not limited to administrative and legal fees.

**SECTION – 3 PROJECT**

The Project is described as:

**PROJECT NO. MP-638**

**ACTIVATED SLUDGE PLANT CLARIFIER INLET GATE REPLACEMENT AT PLANT NO. 2**

**SECTION – 4 PLANS AND SPECIFICATONS**

The Work to be done is shown in a set of Plans and Specifications entitled:

**PROJECT NO. MP-638**

**ACTIVATED SLUDGE PLANT CLARIFIER INLET GATE REPLACEMENT AT PLANT NO. 2**



Said Plans and Specifications and any revision, amendments and addenda thereto are attached hereto and incorporated herein as part of this Contract and referred to by reference.

#### **SECTION – 5      TIME OF COMMENCEMENT AND COMPLETION**

CONTRACTOR agrees to commence the Project within 15 calendar days from the date set forth in the “Notice to Proceed” sent by OCSD, unless otherwise specified therein and shall diligently prosecute the Work to completion within three hundred sixty-five (365) calendar days from the date of the “Notice to Proceed” issued by OCSD, excluding delays caused or authorized by OCSD as set forth in Sections 7, 8, and 9 hereof, and applicable provisions in the General Conditions. The time for completion includes ten (10) calendar days determined by OCSD likely to be inclement weather when CONTRACTOR will be unable to work.

#### **SECTION – 6      TIME IS OF THE ESSENCE**

Time is of the essence of this Contract. As required by the Contract Documents, CONTRACTOR shall prepare and obtain approval of all shop drawings, details and samples, and do all other things necessary and incidental to the prosecution of CONTRACTOR’s Work in conformance with an approved construction progress schedule. CONTRACTOR shall coordinate the Work covered by this Contract with that of all other contractors, subcontractors and of OCSD, in a manner that will facilitate the efficient completion of the entire Work and accomplish the required milestone(s), if any, by the applicable deadline(s) in accordance with Section 5 herein. OCSD shall have the right to assert complete control of the premises on which the Work is to be performed and shall have the right to decide the time or order in which the various portions of the Work shall be installed or the priority of the work of subcontractors, and, in general, all matters representing the timely and orderly conduct of the Work of CONTRACTOR on the premises.

## **SECTION – 7      EXCUSABLE DELAYS**

CONTRACTOR shall only be excused for any delay in the prosecution or completion of the Project as specifically provided in General Conditions, “Extensions for Delay”, and the General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”.

Extensions of time and extra compensation arising from such excusable delays will be determined in accordance with the General Conditions, “Extension of Time for Delay” and “Contract Price Adjustments and Payments”, and extensions of time and extra compensation as a result of incurring undisclosed utilities will be determined in accordance with General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”.

OCSD’s decision will be conclusive on all parties to this Contract.

## **SECTION – 8      EXTRA WORK**

The Contract Price as set forth in Section 11, includes compensation for all Work performed by CONTRACTOR, unless CONTRACTOR obtains a Change Order signed by a designated representative of OCSD specifying the exact nature of the Extra Work and the amount of extra compensation to be paid all as more particularly set forth in Section 9 hereof and the General Conditions, “Request for Change (Changes at CONTRACTOR’s Request)”, “OWNER Initiated Changes”, and “Contract Price Adjustments and Payments”.

In the event a Change Order is issued by OCSD pursuant to the Contract Documents, OCSD shall extend the time fixed in Section 5 for completion of the Project by the number of days, if any, reasonably required for CONTRACTOR to perform the Extra Work, as determined by OCSD’s ENGINEER. The decision of the ENGINEER shall be final.

## **SECTION – 9      CHANGES IN PROJECT**

OCSD may at any time, without notice to any Surety, by Change Order, make any changes in the Work within the general scope of the Contract Document, including but not limited to changes:

1. In the Specifications (including Drawings and designs);
2. In the time, method or manner of performance of the Work;
3. In OCSD-furnished facilities, equipment, materials, services or site; or
4. Directing acceleration in the performance of the Work.

No change of period of performance or Contract Price, or any other change in the Contract Documents, shall be binding until the Contract is modified by a fully executed Change Order.

All Change Orders shall be issued in accordance with the requirements set forth in the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and "OWNER Initiated Changes".

#### **SECTION – 10 LIQUIDATED DAMAGES FOR DELAY**

Liquidated Damages shall be payable in the amounts and upon the occurrence of such events or failure to meet such requirements or deadlines as provided in the Special Provisions, "Liquidated Damages and Incentives."

#### **SECTION – 11 CONTRACT PRICE AND METHOD OF PAYMENT**

- A. OCSD agrees to pay and the CONTRACTOR agrees to accept as full consideration for the faithful performance of this Contract, subject to any additions or deductions as provided in approved Change Orders, the sum of Six Hundred Fifty Eight Thousand Three Hundred Dollars (\$658,300) as itemized on the Attached Exhibit "A".

Upon satisfaction of the conditions precedent to payment set forth in the General Requirements, Additional General Requirements and General Conditions (including but not limited to Sections entitled "Mobilization Payment Requirements" and "Payment Itemized Breakdown of Contract Lump Sum Prices"), there shall be paid to the CONTRACTOR an initial Net Progress Payment for mobilization. OCSD shall issue at the commencement of the job a schedule which shows:

1. A minimum of one payment to be made to the CONTRACTOR for each successive four (4) week period as the Work progresses, and
2. The due dates for the CONTRACTOR to submit requests for payment to meet the payment schedule.

After the initial Net Progress Payment, and provided the CONTRACTOR submits the request for payment prior to the end of the day required to meet the payment schedule, the CONTRACTOR shall be paid a Net Progress Payment on the corresponding monthly payment date set forth in the schedule.

Payments shall be made on demands drawn in the manner required by law, accompanied by a certificate signed by the ENGINEER, stating that the Work for which payment is demanded has been performed in accordance with the terms of the Contract Documents, and that the amount stated in the certificate is due under the terms of the Contract.

Payment applications shall also be accompanied with all documentation, records, and releases as required by the Contract, Exhibit A, Schedule of Prices, and General Conditions, "Payment for Work – General". The Total amount of Progress Payments shall not exceed the actual value of the Work completed as certified by OCSD's ENGINEER. The processing of payments shall not be considered as an acceptance of any part of the Work.

- B. As used in this Section, the following defined terms shall have the following meanings:
1. **"Net Progress Payment"** means a sum equal to the Progress Payment less the Retention Amount and other qualified deductions (Liquidated Damages, stop payment notices, etc.).
  2. **"Progress Payment"** means a sum equal to:

- a. the value of the actual Work completed since the commencement of the Work as determined by OCSD;
  - b. plus the value of material suitably stored at the worksite, treatment plant or approved storage yards subject to or under the control of OCSD since the commencement of the Work as determined by OCSD;
  - c. less all previous Net Progress Payments;
  - d. less all amounts of previously qualified deductions;
  - e. less all amounts previously retained as Retention Amounts.
3. **“Retention Amount”** for each Progress Payment means the percentage of each Progress Payment to be retained by OCSD to assure satisfactory completion of the Contract. The amount to be retained from each Progress Payment shall be determined as provided in the General Conditions –“Retained Funds; Substitution of Securities.”

## **SECTION – 12 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS**

Pursuant to Public Contract Code Section 22300 et seq., the CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.”

## **SECTION – 13 COMPLETION**

Final Completion and Final Acceptance shall occur at the time and in the manner specified in the General Conditions, “Final Acceptance and Final Completion”, “Final Payment” and Exhibit A - Schedule of Prices.

Upon receipt of all documentation, records, and releases as required by the Contract from the CONTRACTOR, OCSD shall proceed with the Final Acceptance as specified in General Conditions.

## **SECTION – 14     CONTRACTOR’S EMPLOYEES COMPENSATION**

### **A.    Davis-Bacon Act:**

CONTRACTOR will pay and will require all Subcontractors to pay all employees on said Project a salary or wage at least equal to the prevailing rate of per diem wages as determined by the Secretary of Labor in accordance with the Davis-Bacon Act for each craft or type of worker needed to perform the Contract. The provisions of the Davis-Bacon Act shall apply only if the Contract is in excess of Two Thousand Dollars (\$2,000.00) and when twenty-five percent (25%) or more of the Contract is funded by federal assistance. If the aforesaid conditions are met, a copy of the provisions of the Davis-Bacon Act to be complied with are incorporated herein as a part of this Contract and referred to by reference.

### **B.    General Prevailing Rate:**

OCSD has been advised by the State of California Director of Industrial Relations of its determination of the general prevailing rate of per diem wages and the general prevailing rate for legal holiday and overtime Work in the locality in which the Work is to be performed for each craft or type of Work needed to execute this Contract, and copies of the same are on file in the Office of the ENGINEER of OCSD. The CONTRACTOR agrees that not less than said prevailing rates shall be paid to workers employed on this public works Contract as required by Labor Code Section 1774 of the State of California. Per California Labor Code 1773.2, OCSD will have on file copies of the prevailing rate of per diem wages at its principal office and at each job site, which shall be made available to any interested party upon request.

### **C.    Forfeiture for Violation:**

CONTRACTOR shall, as a penalty to OCSD, forfeit Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid (either by the CONTRACTOR or

any Subcontractor under it) less than the prevailing rate of per diem wages as set by the Director of Industrial Relations, in accordance with Sections 1770-1780 of the California Labor Code for the Work provided for in this Contract, all in accordance with Section 1775 of the Labor Code of the State of California.

D. Apprentices:

Sections 1777.5, 1777.6, 1777.7 of the Labor Code of the State of California, regarding the employment of apprentices are applicable to this Contract and the CONTRACTOR shall comply therewith if the prime contract involves Thirty Thousand Dollars (\$30,000.00) or more.

E. Workday:

In the performance of this Contract, not more than eight (8) hours shall constitute a day's work, and the CONTRACTOR shall not require more than eight (8) hours of labor in a day from any person employed by him hereunder except as provided in paragraph (B) above. CONTRACTOR shall conform to Article 3, Chapter 1, Part 7 (Section 1810 et seq.) of the Labor Code of the State of California and shall forfeit to OCSD as a penalty, the sum of Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by CONTRACTOR or any Subcontractor for each calendar day during which any worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one week in violation of said Article. CONTRACTOR shall keep an accurate record showing the name and actual hours worked each calendar day and each calendar week by each worker employed by CONTRACTOR in connection with the Project.

F. Registration; Record of Wages; Inspection:

CONTRACTOR shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the Work is subject to compliance monitoring by the

California Department of Industrial Relations. CONTRACTOR shall maintain accurate payroll records and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.

CONTRACTOR shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulations Section 16461(e).

## **SECTION – 15 SURETY BONDS**

CONTRACTOR shall, before entering upon the performance of this Contract, furnish Bonds approved by OCSD's General Counsel – one in the amount of one hundred percent (100%) of the Contract amount, to guarantee the faithful performance of the Work, and the other in the amount of one hundred percent (100%) of the Contract amount to guarantee payment of all claims for labor and materials furnished. As changes to the Contract occur via approved Change Orders, the CONTRACTOR shall assure that the amounts of the Bonds are adjusted to maintain 100% of the Contract Price. This Contract shall not become effective until such Bonds are supplied to and approved by OCSD. Bonds must be issued by a Surety authorized by the State Insurance Commissioner to do business in California. The Performance Bond shall remain in full force and effect through the warranty period, as specified in Section 19 below. All Bonds required to be submitted relating to this Contract must comply with California Code of Civil Procedure Section 995.630. Each Bond shall be executed in the name of the Surety insurer under penalty of perjury, or the fact of execution of each Bond shall be duly acknowledged before an officer authorized to take and certify acknowledgments, and either one of the following conditions shall be satisfied:

- A. A copy of the transcript or record of the unrevoked appointment, power of attorney, by-laws, or other instrument, duly certified by the proper authority and attested by the seal of the insurer entitling or authorizing the person who executed the Bond to do so for and on



behalf of the insurer, is on file in the Office of the County Clerk of the County of Orange; or

B. A copy of a valid power of attorney is attached to the Bond.

## **SECTION – 16 INSURANCE**

CONTRACTOR shall purchase and maintain, for the duration of the Contract, 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, and the results of that Work by CONTRACTOR, its agents, representatives, employees, or Subcontractors, in amounts equal to the requirements set forth below. CONTRACTOR shall not commence Work under this Contract until all insurance required under this Section is obtained in a form acceptable to OCSD, nor shall CONTRACTOR allow any Subcontractor to commence Work on a subcontract until all insurance required of the Subcontractor has been obtained. CONTRACTOR shall maintain all of the foregoing insurance coverages in force through the point at which the Work under this Contract is fully completed and accepted by OCSD pursuant to the provisions of the General Conditions, "Final Acceptance and Final Completion". Furthermore, CONTRACTOR shall maintain all of the foregoing insurance coverages in full force and effect throughout the warranty period, commencing on the date of Final Acceptance. The requirement for carrying the foregoing insurance shall not derogate from the provisions for indemnification of OCSD by CONTRACTOR under Section 17 of this Contract. Notwithstanding nor diminishing the obligations of CONTRACTOR with respect to the foregoing, CONTRACTOR shall subscribe for and maintain in full force and effect during the life of this Contract, inclusive of all changes to the Contract Documents made in accordance with the provisions of the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and/or "OWNER Initiated Changes", the following insurance in amounts not less than the amounts specified. OCSD reserves the right to amend the required limits of insurance commensurate with the CONTRACTOR's risk at any time during the course of the Project. No vehicles may enter

OCSD premises/worksite without possessing the required insurance coverage.

CONTRACTOR's insurance shall also comply with all insurance requirements prescribed by agencies from whom permits shall be obtained for the Work and any other third parties from whom third party agreements are necessary to perform the Work (collectively, the "Third Parties"), The Special Provisions may list such requirements and sample forms and requirements from such Third Parties may be included in an attachment to the General Requirements. CONTRACTOR bears the responsibility to discover and comply with all requirements of Third Parties, including meeting specific insurance requirements, that are necessary for the complete performance of the Work. To the extent there is a conflict between the Third Parties' insurance requirements and those set forth by OCSD herein, the requirement(s) providing the more protective coverage for both OCSD and the Third Parties shall control and be purchased and maintained by CONTRACTOR.

A. Limits of Insurance

1. General Liability: Three Million Dollars (\$3,000,000) per occurrence and a general aggregate limit of Three Million Dollars (\$3,000,000) for bodily injury, personal injury and property damage. Coverage shall include each of the following:
  - a. Premises-Operations.
  - b. Products and Completed Operations, with limits of at least Three Million Dollars (\$3,000,000) per occurrence and a general aggregate limit of Three Million Dollars (\$3,000,000) which shall be in effect at all times during the warranty period set forth in the Warranty section herein, and as set forth in the General Conditions, "Warranty (CONTRACTOR's Guarantee)", plus any additional extension or continuation of time to said warranty period that may be required or authorized by said provisions.

- c. Broad Form Property Damage, expressly including damage arising out of explosion, collapse, or underground damage.
- d. Contractual Liability, expressly including the indemnity provisions assumed under this Contract.
- e. Separation of Insured Clause, providing that coverage applies separately to each insured, except with respect to the limits of liability.
- f. Independent CONTRACTOR's Liability.

To the extent first dollar coverage, including defense of any claim, is not available to OCSD or any other additional insured because of any SIR, deductible, or any other form of self insurance, CONTRACTOR is obligated to assume responsibility of insurer until the deductible, SIR or other condition of insurer assuming its defense and/or indemnity has been satisfied.

CONTRACTOR shall be responsible to pay any deductible or SIR.

- g. If a crane will be used, the General Liability insurance will be endorsed to add Riggers Liability coverage or its equivalent to cover the usage of the crane and exposures with regard to the crane operators, riggers and others involved in using the crane.
  - h. If divers will be used, the General Liability insurance will be endorsed to cover marine liability or its equivalent to cover the usage of divers.
2. Automobile Liability: The CONTRACTOR shall maintain a policy of Automobile Liability Insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limits of liability coverage:

Either (1) a combined single limit of Two Million Dollars (\$2,000,000) and a general aggregate limit of Two Million Dollars (\$2,000,000) for bodily injury, personal injury and property damage;

Or alternatively, (2) One Million Dollars (\$1,000,000) per person for bodily injury and One Million Dollars (\$1,000,000) per accident for property damage.

3. **Umbrella Excess Liability:** The minimum limits of general liability and automobile liability insurance required, as set forth above, shall be provided for either in a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automobile liability.
4. **Drone Liability Insurance:** If a drone will be used, drone liability insurance must be maintained by CONTRACTOR in the amount of One Million Dollars (\$1,000,000) in a form acceptable by OCSD.
5. **Worker's Compensation/Employer's Liability:** CONTRACTOR shall provide such Worker's Compensation Insurance as required by the Labor Code of the State of California, including employer's liability with a minimum limit of One Million Dollars (\$1,000,000) per accident for bodily injury or disease. If an exposure to Jones Act liability may exist, the insurance required herein shall include coverage with regard to Jones Act claims.

Where permitted by law, CONTRACTOR hereby waives all rights of recovery by subrogation because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason against OCSD, its or their officers, agents, or employees, and any other contractor or subcontractor performing Work or rendering services on behalf of OCSD in connection with the

planning, development and construction of the Project. In all its insurance coverages related to the Work, CONTRACTOR shall include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against OCSD, its or their officers, agents, or employees, or any other contractor or subcontractor performing Work or rendering services at the Project. Where permitted by law, CONTRACTOR shall require similar written express waivers and insurance clauses from each of its Subcontractors of every tier. A waiver of subrogation shall be effective as to any individual or entity, even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium, directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

6. Pollution Liability Insurance: CONTRACTOR shall purchase and maintain insurance for pollution liability covering bodily injury, property damage (including loss of use of damaged property or property that has not been physically injured or destroyed), cleanup costs, and defense costs (including costs and expenses for investigation, defense, or settlement of claims). Coverage shall carry limits of at least One Million Dollars (\$1,000,000) and shall apply to sudden and non-sudden pollution conditions (including sewage spills), both at the site or needed due to migration of pollutants from the site, resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials, or other irritants, contaminants or pollutants.

If CONTRACTOR provides coverage written on a claims-made basis, OCSD has the right to approve or reject such coverage in its own discretion. If written on a claims-made basis, the CONTRACTOR warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this Contract, and that

continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of two years beginning from the time that the Project under this Contract is completed.

7. Limits are Minimums: If CONTRACTOR maintains higher limits than the minimums shown in this Section, OCSD requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR.

B. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by OCSD. At the option of OCSD, either: the Insurer shall reduce or eliminate such deductibles or self-insured retentions as respects OCSD, its Directors, officers, agents, CONSULTANTS, and employees; or CONTRACTOR shall provide a financial guarantee satisfactory to OCSD guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

C. Other Insurance Provisions

1. Each such policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to contain, the following provisions:
  - a. OCSD, its Directors, officers, agents, CONSULTANTS, and employees, and all public agencies from whom permits will be obtained, and their Directors, officers, agents, and employees are hereby declared to be additional insureds under the terms of this policy, but only with respect to the operations of CONTRACTOR at or from any of the sites of OCSD in connection with this Contract, or acts and omissions of the additional insured in connection with its general supervision or inspection of said operations related to this Contract.
  - b. Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by OCSD shall be excess

only and not contributing with insurance provided under this policy.

2. Each insurance policy required herein shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, and that coverage shall not be cancelled for non-payment of premium except after ten (10) days prior written notice by certified mail, return receipt requested. Should there be changes in coverage or an increase in deductible or SIR amounts, CONTRACTOR undertakes to procure a manuscript endorsement from its insurer giving 30 days prior notice of such an event to OCSD, or to have its insurance broker/agent send to OCSD a certified letter describing the changes in coverage and any increase in deductible or SIR amounts. The certified letter must be sent Attention: Risk Management and shall be received not less than twenty (20) days prior to the effective date of the change(s). The letter must be signed by a Director or Officer of the broker/agent and must be on company letterhead, and may be sent via e-mail in pdf format.
3. Coverage shall not extend to any indemnity coverage for the active negligence of any additional insured in any case where an agreement to indemnify the additional insured would be invalid under California Civil Code Section 2782(b).
4. If required by a public agency from whom permit(s) will be obtained, each policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to specify by name the public agency and its legislative members, officers, agents, CONSULTANTS, and employees, to be additional insureds.

D. Acceptability of Insurers

Insurers must have an "A-", or better, Policyholder's Rating, and a Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best Rating Guide.

OCSD recognizes that State Compensation Insurance Fund has withdrawn from

participation in the A.M. Best Rating Guide process. Nevertheless, OCSD will accept State Compensation Insurance Fund for the required policy of worker's compensation insurance, subject to OCSD's option, at any time during the term of this Contract, to require a change in insurer upon twenty (20) days written notice. Further, OCSD will require CONTRACTOR to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONTRACTOR by OCSD or its agent.

E. Verification of Coverage

CONTRACTOR shall furnish OCSD with original certificates and mandatory endorsements affecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by OCSD before Work commences. OCSD reserves the right to require complete, certified copies of all required insurance policies, including endorsements, affecting the coverage required by these Specifications at any time.

F. Subcontractors

CONTRACTOR shall be responsible to establish insurance requirements for any Subcontractors hired by CONTRACTOR. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subcontractor's operations and work. OCSD and any public agency issuing permits for the Project must be named as "Additional Insured" on any General Liability or Automobile Liability policy obtained by a Subcontractor. The CONTRACTOR must obtain copies and maintain current versions of all Subcontractors' policies, Certificate of Liability and mandatory endorsements effecting coverage. Upon request, CONTRACTOR must furnish OCSD with the above referenced required documents.



G. Required Forms and Endorsements

1. Required ACORD Form

- a. Certificate of Liability                      Form 25

2. Required Insurance Services Office, Inc. Endorsements (when alternative forms are shown, they are listed in order of preference)

In the event any of the following forms are cancelled by Insurance Services Office, Inc. (ISO), or are updated, the ISO replacement form or equivalent must be supplied.

- |    |  |   |
|----|--|---|
| a. | Commercial General Liability   | Form CG-0001 10 01                                  |
| b. | Additional Insured Including<br>Products-Completed Operations                              | Form CG-2010 10 01 <b>and</b><br>Form CG-2037 10 01 |
| c. | Waiver of Transfer of Rights of<br>Recovery Against Others to Us/<br>Waiver of Subrogation | Form CG-2404 11 85; <b>or</b><br>Form CG-2404 10 93 |

3. Required State Compensation Insurance Fund Endorsements

- |    |                       |                      |
|----|-----------------------|----------------------|
| a. | Waiver of Subrogation | Endorsement No. 2570 |
| b. | Cancellation Notice   | Endorsement No. 2065 |

4. Additional Required Endorsements

- |    |                              |                        |
|----|------------------------------|------------------------|
| a. | Notice of Policy Termination | Manuscript Endorsement |
|----|------------------------------|------------------------|

5. Pollution Liability Endorsements

There shall be a Separation of Insured Clause or endorsement, providing that coverage applies separately to each insured, except with respect to the limits of liability. There shall also be an endorsement or policy language containing a waiver of subrogation rights on the part of the insurer.

OCSD, its directors, officers, agents, CONSULTANTS and employees and all public agencies from whom permits will be obtained as well as their directors, officers, agents, and employees shall be included as insureds under the policy. Any

additional insured endorsement shall contain language at least as broad as the coverage language contained in ISO form CG 20 10 11 85 or alternatively in both CG 20 10 10 01 and CG 20 37 10 01 together.

## **SECTION – 17     RISK AND INDEMNIFICATION**

All Work covered by this Contract done at the site of construction or in preparing or delivering materials to the site shall be at the risk of CONTRACTOR alone. CONTRACTOR shall save, indemnify, defend, and keep OCSD and others harmless as more specifically set forth in General Conditions, "General Indemnification".

## **SECTION – 18     TERMINATION**

This Contract may be terminated in whole or in part in writing by OCSD in the event of substantial failure by the CONTRACTOR to fulfill its obligations under this Agreement, or it may be terminated by OCSD for its convenience provided that such termination is effectuated in a manner and upon such conditions set forth more particularly in General Conditions, "Termination for Default" and/or "Termination for Convenience", provided that no termination may be effected unless proper notice is provided to CONTRACTOR at the time and in the manner provided in said General Conditions. If termination for default or convenience is effected by OCSD, an equitable adjustment in the price provided for in this Contract shall be made at the time and in the manner provided in the General Conditions, "Termination for Default" and "Termination for Convenience".

## **SECTION – 19     WARRANTY**

The CONTRACTOR agrees to perform all Work under this Contract in accordance with the Contract Documents, including OCSD's designs, Drawings and Specifications.

The CONTRACTOR guarantees for a period of at least one (1) year from the date of Final Acceptance of the Work, pursuant to the General Conditions, "Final Acceptance and Final Completion" that the completed Work is free from all defects due to faulty materials, equipment

or workmanship and that it shall promptly make whatever adjustments or corrections which may be necessary to cure any defects, including repairs of any damage to other parts of the system resulting from such defects. OCSD shall promptly give notice to the CONTRACTOR of observed defects. In the event that the CONTRACTOR fails to make adjustments, repairs, corrections or other work made necessary by such defects, OCSD may do so and charge the CONTRACTOR the cost incurred. The CONTRACTOR's warranty shall continue as to any corrected deficiency until the later of (1) the remainder of the original one-year warranty period; or (2) one year after acceptance by OCSD of the corrected Work. The Performance Bond and the Payment Bond shall remain in full force and effect through the guarantee period.

The CONTRACTOR's obligations under this clause are in addition to the CONTRACTOR's other express or implied assurances under this Contract, including but not limited to specific manufacturer or other extended warranties specified in the Plans and Specifications, or state law and in no way diminish any other rights that OCSD may have against the CONTRACTOR for faulty materials, equipment or Work.

## **SECTION – 20    ASSIGNMENT**

No assignment by the CONTRACTOR of this Contract or any part hereof, or of funds to be received hereunder, will be recognized by OCSD unless such assignment has had prior written approval and consent of OCSD and the Surety.

## **SECTION – 21    RESOLUTION OF DISPUTES**

OCSD and the CONTRACTOR shall comply with the provisions of California Public Contract Code Section 20104 et. seq., regarding resolution of construction claims for any Claims which arise between the CONTRACTOR and OCSD, as well as all applicable dispute and Claims provisions as set forth in the General Conditions and as otherwise required by law.

## **SECTION – 22    SAFETY & HEALTH**

CONTRACTOR shall comply with all applicable safety and health requirements mandated by federal, state, city and/or public agency codes, permits, ordinances, regulations, and laws, as well as these Contract Documents, including but not limited to the General Requirements, Section entitled “Safety” and Exhibit B OCSD Safety Standards.

## **SECTION – 23    NOTICES**

Any notice required or permitted under this Contract shall be sent by certified mail, return receipt requested, at the address set forth below. Any party whose address changes shall notify the other party in writing.

TO OCSD:                      Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, California 92708-7018  
Attn: Clerk of the Board

Copy to:                      Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, California 92708-7018  
Attn: Construction Manager

Bradley R. Hogin, Esquire  
Woodruff, Spradlin & Smart  
555 Anton Boulevard  
Suite 1200  
Costa Mesa, California 92626

TO CONTRACTOR:           Innovative Construction Solutions  
575 Anton Blvd, Suite 850  
Costa Mesa, CA 92626

Copy to:                      Hiram Emadi, President  
Innovative Construction Solutions  
575 Anton Blvd, Suite 850  
Costa Mesa, CA 92626

IN WITNESS WHEREOF, the parties hereto have executed this Contract Agreement as the date first hereinabove written.

CONTRACTOR: Innovative Construction Solutions  
575 Anton Blvd, Suite 850  
Costa Mesa, CA 92626

By \_\_\_\_\_

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

Its \_\_\_\_\_

CONTRACTOR's State License No. 764815 (Expiration Date – 06/30/2021)

OCSD: Orange County Sanitation District

By \_\_\_\_\_

David John Shawver  
Board Chairman

By \_\_\_\_\_

Kelly A. Lore  
Clerk of the Board

By \_\_\_\_\_

Ruth Zintzun  
Purchasing & Contracts Manager

**EXHIBIT A**  
**SCHEDULE OF PRICES**

**TABLE OF CONTENTS**  
**EXHIBIT A**  
**SCHEDULE OF PRICES**

EXA-1 BASIS OF COMPENSATION..... 1

EXA-2 PROGRESS PAYMENTS ..... 1

EXA-3 RETENTION AND ESCROW ACCOUNTS..... 1

EXA-4 STOP PAYMENT NOTICE..... 3

EXA-5 PAYMENT TO SUBCONTRACTORS ..... 3

EXA-6 PAYMENT OF TAXES ..... 3

EXA-7 FINAL PAYMENT ..... 4

EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT ... 5

ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT ..... 7

ATTACHMENT 2 – SCHEDULE OF PRICES..... 8

# **EXHIBIT A**

## **SCHEDULE OF PRICES**

### **EXA-1 BASIS OF COMPENSATION**

CONTRACTOR will be paid the Contract Price according to the Schedule of Prices, and all other applicable terms and conditions of the Contract Documents.

### **EXA-2 PROGRESS PAYMENTS**

Progress payments will be made in accordance with all applicable terms and conditions of the Contract Documents, including, but not limited to:

1. Contract Agreement – Section 11 – “Contract Price and Method of Payment;”
2. General Conditions – “Payment – General”;
3. General Conditions – “Payment – Applications for Payment”;
4. General Conditions – “Payment – Mobilization Payment Requirements;”
5. General Conditions – “Payment – Itemized Breakdown of Contract Lump Sum Prices”;
6. General Conditions – “Contract Price Adjustments and Payments”;
7. General Conditions – “Suspension of Payments”;
8. General Conditions – “OCSD’s Right to Withhold Certain Amounts and Make Application Thereof”; and
9. General Conditions – “Final Payment.”

### **EXA-3 RETENTION AND ESCROW ACCOUNTS**

#### **A. Retention:**

OCSD shall retain a percentage of each progress payment to assure satisfactory completion of the Work. The amount to be retained from each progress payment shall be determined as provided in General Conditions – “Retained Funds; Substitution of Securities”. In all contracts between CONTRACTOR and its Subcontractors and/or Suppliers, the retention may not exceed the percentage specified in the Contract Documents.



B. Substitution of Securities:

CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.” Payment of Escrow Agent:

In lieu of substitution of securities as provided above, the CONTRACTOR may request and OCSD shall make payment of retention earned directly to the escrow agent at the expense of the CONTRACTOR. At the expense of the CONTRACTOR, the CONTRACTOR may direct the investment of the payments into securities consistent with Government Code §16430 and the CONTRACTOR shall receive the interest earned on the investments upon the same terms provided for in this article for securities deposited by the CONTRACTOR. Upon satisfactory completion of the Contract, the CONTRACTOR shall receive from the escrow agent all securities, interest and payments received by the escrow agent from OCSD, pursuant to the terms of this article. The CONTRACTOR shall pay to each Subcontractor, not later than twenty (20) calendar days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to ensure the performance of the Subcontractor. The escrow agreement used by the escrow agent pursuant to this article shall be substantially similar to the form set forth in §22300 of the California Public Contract Code.

C. Release of Retention:

Upon Final Acceptance of the Work, the CONTRACTOR shall submit an invoice for release of retention in accordance with the terms of the Contract.

D. Additional Deductibles:

In addition to the retentions described above, OCSD may deduct from each progress payment any or all of the following:

1. Liquidated Damages that have occurred as of the date of the application for progress payment;
2. Deductions from previous progress payments already paid, due to OCSD's discovery of deficiencies in the Work or non-compliance with the Specifications or any other requirement of the Contract;
3. Sums expended by OCSD in performing any of the CONTRACTOR'S obligations under the Contract that the CONTRACTOR has failed to perform, and;
4. Other sums that OCSD is entitled to recover from the CONTRACTOR under the terms of the Contract, including without limitation insurance deductibles and assessments.

The failure of OCSD to deduct any of the above-identified sums from a progress payment shall not constitute a waiver of OCSD's right to such sums or to deduct them from a later progress payment.

#### **EXA-4 STOP PAYMENT NOTICE**

In addition to other amounts properly withheld under this article or under other provisions of the Contract, OCSD shall retain from progress payments otherwise due the CONTRACTOR an amount equal to one hundred twenty-five percent (125%) of the amount claimed under any stop payment notice under Civil Code §9350 et. seq. or other lien filed against the CONTRACTOR for labor, materials, supplies, equipment, and any other thing of value claimed to have been furnished to and/or incorporated into the Work; or for any other alleged contribution thereto. In addition to the foregoing and in accordance with Civil Code §9358 OCSD may also satisfy its duty to withhold funds for stop payment notices by refusing to release funds held in escrow pursuant to public receipt of a release of stop payment notice executed by a stop payment notice claimant, a stop payment notice release bond, an order of a court of competent jurisdiction, or other evidence satisfactory to OCSD that the CONTRACTOR has resolved such claim by settlement.

#### **EXA-5 PAYMENT TO SUBCONTRACTORS**

##### **Requirements**

1. The CONTRACTOR shall pay all Subcontractors for and on account of Work performed by such Subcontractors, not later than seven (7) days after receipt of each progress payment as required by the California Business and Professions Code §7108.5. Such payments to Subcontractors shall be based on the measurements and estimates made pursuant to article progress payments provided herein.
2. Except as specifically provided by law, the CONTRACTOR shall pay all Subcontractors any and all retention due and owing for and on account of Work performed by such Subcontractors not later than seven (7) days after CONTRACTOR'S receipt of said retention proceeds from OCSD as required by the California Public Contract Code §7107.

#### **EXA-6 PAYMENT OF TAXES**

Unless otherwise specifically provided in this Contract, the Contract Price includes full compensation to the CONTRACTOR for all taxes. The CONTRACTOR shall pay all federal, state, and local taxes, and duties applicable to and assessable against any Work, including but not limited to retail sales and use, transportation, export, import, business, and special taxes. The CONTRACTOR shall ascertain and pay the taxes when due. The CONTRACTOR will maintain auditable records, subject to OCSD reviews, confirming that tax payments are current at all times.

## **EXA-7 FINAL PAYMENT**

After Final Acceptance of the Work, as more particularly set forth in the General Conditions, "Final Acceptance and Final Completion", and after Resolution of the Board authorizing final payment and satisfaction of the requirements as more particularly set forth in General Conditions – "Final Payment", a final payment will be made as follows:

1. Prior to Final Acceptance, the CONTRACTOR shall prepare and submit an application for Final Payment to OCSD, including:
  - a. The proposed total amount due the CONTRACTOR, segregated by items on the payment schedule, amendments, Change Orders, and other bases for payment;
  - b. Deductions for prior progress payments;
  - c. Amounts retained;
  - d. A conditional waiver and release on final payment for each Subcontractor (per Civil Code Section 8136);
  - e. A conditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8136);
  - f. List of Claims the CONTRACTOR intends to file at that time or a statement that no Claims will be filed,
  - g. List of pending unsettled claims, stating claimed amounts, and copies of any and all complaints and/or demands for arbitration received by the CONTRACTOR; and
  - h. For each and every claim that resulted in litigation or arbitration which the CONTRACTOR has settled, a conformed copy of the Request for Dismissal with prejudice or other satisfactory evidence the arbitration is resolved.
2. The application for Final Payment shall include complete and legally effective releases or waivers of liens and stop payment notices satisfactory to OCSD, arising out of or filed in connection with the Work. Prior progress payments shall be subject to correction in OCSD's review of the application for Final Payment. Claims filed with the application for Final Payment must be otherwise timely under the Contract and applicable law.
3. Within a reasonable time, OCSD will review the CONTRACTOR'S application for Final Payment. Any recommended changes or corrections will then be forwarded to the CONTRACTOR. Within ten (10) calendar days after receipt of recommended changes from OCSD, the CONTRACTOR will make the changes, or list Claims that will be filed as a result of the changes, and shall submit the revised application for Final Payment. Upon

acceptance by OCSD, the revised application for Final Payment will become the approved application for Final Payment.

4. If no Claims have been filed with the initial or any revised application for Final Payment, and no Claims remain unsettled within thirty-five (35) calendar days after Final Acceptance of the Work by OCSD, and agreements are reached on all issues regarding the application for Final Payment, OCSD, in exchange for an executed release, satisfactory in form and substance to OCSD, will pay the entire sum found due on the approved application for Final Payment, including the amount, if any, allowed on settled Claims.
5. The release from the CONTRACTOR shall be from any and all Claims arising under the Contract, except for Claims that with the concurrence of OCSD are specifically reserved, and shall release and waive all unreserved Claims against OCSD and its officers, directors, employees and authorized representatives. The release shall be accompanied by a certification by the CONTRACTOR that:
  - a. It has resolved all Subcontractors, Suppliers and other Claims that are related to the settled Claims included in the Final Payment;
  - b. It has no reason to believe that any party has a valid claim against the CONTRACTOR or OCSD which has not been communicated in writing by the CONTRACTOR to OCSD as of the date of the certificate;
  - c. All warranties are in full force and effect, and;
  - d. The releases and the warranties shall survive Final Payment.
6. If any claims remain open, OCSD may make Final Payment subject to resolution of those claims. OCSD may withhold from the Final Payment an amount not to exceed one hundred fifty percent (150%) of the sum of the amounts of the open claims, and one hundred twenty-five percent (125%) of the amounts of open stop payment notices referred to in article entitled stop payment notices herein.
7. The CONTRACTOR shall provide an unconditional waiver and release on final payment from each Subcontractor and Supplier providing Work under the Contract (per Civil Code Section 8138) and an unconditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8138) within thirty (30) days of receipt of Final Payment.

#### **EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT**

Notwithstanding OCSD's acceptance of the application for Final Payment and irrespective of whether it is before or after Final Payment has been made, OCSD shall not be precluded from subsequently showing that:

1. The true and correct amount payable for the Work is different from that previously accepted;

2. The previously-accepted Work did not in fact conform to the Contract requirements, or;
3. A previous payment or portion thereof for Work was improperly made.

OCSD also shall not be stopped from demanding and recovering damages from the CONTRACTOR, as appropriate, under any of the foregoing circumstances as permitted under the Contract or applicable law.

## ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT

I hereby certify under penalty of perjury as follows:

That the claim for payment is in all respects true, correct; that the services mentioned herein were actually rendered and/or supplies delivered to OCSD in accordance with the Contract.

I understand that it is a violation of both the federal and California False Claims Acts to knowingly present or cause to be presented to OCSD a false claim for payment or approval.

A claim includes a demand or request for money. It is also a violation of the False Claims Acts to knowingly make use of a false record or statement to get a false claim paid. The term "knowingly" includes either actual knowledge of the information, deliberate ignorance of the truth or falsity of the information, or reckless disregard for the truth or falsity of the information. Proof of specific intent to defraud is not necessary under the False Claims Acts. I understand that the penalties under the Federal False Claims Act and State of California False Claims Act are non-exclusive, and are in addition to any other remedies which OCSD may have either under contract or law.

I hereby further certify, to the best of my knowledge and belief, that:

1. The amounts requested are only for performance in accordance with the Specifications, terms, and conditions of the Contract;
2. Payments to Subcontractors and Suppliers have been made from previous payments received under the Contract, and timely payments will be made from the proceeds of the payment covered by this certification;
3. This request for progress payments does not include any amounts which the prime CONTRACTOR intends to withhold or retain from a Subcontractor or Supplier in accordance with the terms and conditions of the subcontract; and
4. This certification is not to be construed as Final Acceptance of a Subcontractor's performance.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

## **ATTACHMENT 2 – SCHEDULE OF PRICES**

See next pages for Bid Submittal Forms (Innovative Construction Solutions)

BF-14 SCHEDULE OF PRICES, Page 1 - 2

**BF-14 SCHEDULE OF PRICES**

**INSTRUCTIONS**

**A. General**

For Unit Prices, it is understood that the following quantities are approximate only and are solely for the purpose of estimating the comparison of Bids, and that the actual value of Work will be computed based upon the actual quantities in the completed Work, whether they be more or less than those shown. CONTRACTOR's compensation for the Work under the Contract Documents will be computed based upon the lump sum amount of the Contract at time of award, plus any additional or deleted costs approved by OCSD via approved Change Orders, pursuant to the Contract Documents.

Bidder shall separately price and accurately reflect costs associated with each line item, leaving no blanks. Any and all modifications to the Bid must be initialed by an authorized representative of the Bidder in accordance with the Instructions to Bidders, Preparation of Bid.

Bidders are reminded of Instruction to Bidders, Discrepancy in Bid Items, which, in summary, provides that the total price for each item shall be based on the Unit Price listed for each item multiplied by the quantity; and the correct Total Price for each item shall be totaled to determine the Total Amount of Bid.

All applicable costs including overhead and profit shall be reflected in the respective unit costs and the TOTAL AMOUNT OF BID. The Bid price shall include all costs to complete the Work, including profit, overhead, etc., unless otherwise specified in the Contract Documents. All applicable sales taxes, state and/or federal, and any other special taxes, patent rights or royalties shall be included in the prices quoted in this Bid.

**B. Basis of Award**

AWARD OF THE CONTRACT WILL BE MADE ON THE BASIS OF THE LOWEST RESPONSIVE AND RESPONSIBLE BID.

**Note 1:** Base Bid. Includes all costs necessary to furnish all labor, materials, equipment and services for the construction of the Project per the Contract Documents.



Bid Submitted By: Innovative Construction Solutions  
(Name of Firm)

**EXHIBIT A**  
**SCHEDULE OF PRICES**

**BASE BID ITEMS** (Refer to Note 1 in the Instructions):

Item No.	Description	Unit of Measurement	Approx Qty		Unit Price		Extended Price
1.	Mobilization	Lump Sum				=	\$40,000
2.	Inlet Gates and Remaining Work	Lump Sum				=	\$ <u>618,300</u>

**TOTAL AMOUNT OF BID (BASIS OF AWARD)**

\$ 658,300



# Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

## OPERATIONS COMMITTEE

### Agenda Report

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**File #:** 2019-671

**Agenda Date:** 12/4/2019

**Agenda Item No:** 7.

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**FROM:** James D. Herberg, General Manager  
Originator: Rob Thompson, Assistant General Manager

**SUBJECT:**

**PLANT NO. 1 EMERGENCY GENERATOR BREAKER PURCHASE, PROJECT NO. MP-641**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION:

- A. Approve a purchase order contract to Romac Supply Co., Inc. for the purchase of ten critical circuit breakers for Plant No.1 Project No. MP-641 per Specification No. E-2019-1091BD-R (Rebid), for a total amount not to exceed \$102,326, plus applicable sales tax; and
- B. Approve a contingency of \$5,117 (5%).

**BACKGROUND**

Circuit breakers are a critical part of the power distribution infrastructure and serve as protective devices to quickly isolate faults in an electrical power system. Emergency generators are protected by a single circuit breaker between the generator and the distribution system. This design creates a single point of failure on this critical back-up system. If the circuit breaker fails, the result is an emergency system that cannot function, placing plant operations at risk.

**RELEVANT STANDARDS**

- Protect Orange County Sanitation District assets
- 24/7/365 treatment plant reliability
- Maintain a proactive asset management program

**PROBLEM**

Several of the Plant No. 1 emergency generator circuit breakers have been in service for many years. Many of these large circuit breakers are no longer manufactured and not readily available. If spare units are not available at the time of failure, service outages of up to eight weeks are possible while faulty units are repaired.

**PROPOSED SOLUTION**

Purchase dedicated spare breakers to mitigate the impact of single points of failure between generators and generator bus.

**TIMING CONCERNS**

Proceeding in a timely fashion is desired to prevent operational delays and to sustain a safe working environment during an emergency.

**RAMIFICATIONS OF NOT TAKING ACTION**

Not taking action will potentially cause disruption or prolonged outage. Prolonged outages are costly, requiring bypass and temporary power set-up as the circuit breakers are considered critical electrical assets for normal operation and for protecting and isolating electrical faults in power distribution equipment.

**PRIOR COMMITTEE/BOARD ACTIONS**

N/A

**ADDITIONAL INFORMATION**

The Orange County Sanitation District (Sanitation District) advertised for bids on September 27, 2019. Two sealed bids were received on October 22, 2019. The bids were evaluated in accordance with the Sanitation District's policies and procedures. Staff recommends awarding a purchase order to the lowest responsive and responsible bidder, Romac Supply Co., Inc., for purchase of ten critical circuit breakers.

Summary information on the bid opening is as follows:

Bidder	Amount of bid (not including sales tax)
Romac Supply Co., Inc.	\$102,326
Advanced Electrical & Motor Controls	\$146,000

A contingency of 5% is recommended to address the potential need for additional breaker components or breaker trip units.

**CEQA**

N/A

**FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This recommendation will be funded under the Repair and Maintenance line item for Operations and Maintenance Department (Budget Update Fiscal Year 2019-20, Page 47). The available funding is sufficient for this action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
12/04/2019	\$102,326	\$5,117 (5%)

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**ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

N/A

RM:sh:ab:gc



# Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

## OPERATIONS COMMITTEE

### Agenda Report

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**File #:** 2019-544

**Agenda Date:** 12/4/2019

**Agenda Item No:** 8.

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**FROM:** James D. Herberg, General Manager  
Originator: Rob Thompson, Assistant General Manager

**SUBJECT:**

**AGREEMENT FOR THE PURCHASE OF LIQUID CATIONIC POLYMER, SPECIFICATION NO. C-2019-1087BD**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Chemical Supplier Agreement with Polydyne, Inc. for the purchase of Cationic Polymer, Specification No. C-2019-1087BD, for the period beginning February 1, 2020 through January 31, 2021 for a unit price of \$2.548 per active pound plus freight and applicable sales tax, for a total estimated annual amount of \$3,866,280 with four (4) one-year renewal options; and
- B. Approve an annual unit price contingency of 15%.

**BACKGROUND**

The cationic polymer is a crucial chemical in the thickening and dewatering processes. The Orange County Sanitation District (Sanitation District) currently uses cationic polymer to dewater digested sludge in the centrifuges at both Plant Nos. 1 and 2. It is mixed into the digested biosolids prior to the dewatering centrifuge process to induce coagulation and to improve dewaterability. Cationic polymer is also used to thicken primary and secondary solids at both Plant Nos. 1 and 2. The thickening process increases the concentration of solids introduced to the digesters which is necessary to maintain regulatory standards for digester detention time and volatile solids reduction.

The unit cost of \$2.548 per active pound is a 13% savings from the current unit cost of \$2.947 per active pound in the current contract.

**RELEVANT STANDARDS**

- Safe, beneficial reuse of Biosolids
- Use all practical and effective means for resource recovery
- Sustain 1, 5, 20-year planning horizons

**PROBLEM**

The current cationic polymer contract with Polydyne, Inc. will end on January 31, 2019 with no renewals remaining.

**PROPOSED SOLUTION**

Develop cationic polymer specifications for new and existing thickening processes and conduct the standard competitive bid process to award the agreement to the lowest responsive and responsible bidder.

**TIMING CONCERNS**

A new agreement needs to be in place prior to the expiration of the current agreement on January 31, 2019.

**RAMIFICATIONS OF NOT TAKING ACTION**

A shortage in cationic polymer would result in an inability for the Sanitation District's thickening processes to operate correctly which would reduce digester operating volume, reduce biosolids production, and increase offsite biosolids hauling.

**PRIOR COMMITTEE/BOARD ACTIONS**

November 2018 - Awarded sole source chemical agreement to SNF Polydyne, Inc.

**ADDITIONAL INFORMATION**

In accordance with Purchasing Ordinance No. OCSD-52, the Sanitation District selected a two-step bidding process which included a Request for Qualifications (RFQ) and a Notice Inviting Bids (NIB). Of the two companies that submitted their samples for testing, only one, Polydyne, Inc., was deemed responsive. The other prospective bidder, Univar, provided a sample, however they did not provide a complete bid and was deemed non-responsive.

Polydyne, Inc. submitted a bid for one polymer type, WE-1233, that had successfully passed the testing process. Staff recommends awarding to the lowest responsive and responsible bidder, Polydyne, Inc., for the purchase of cationic polymer, type WE-1233.

**CEQA**

N/A

**FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted in the Proposed Budget Fiscal Years 2018-19 and 2019-20 Division 830 and 840 operating budgets (Line item: Section 6, Pages 84 and 88).

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
12/18/2019	\$3,866,280	-
12/18/2019	Future Unit Price	15%

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**ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Chemical Supplier Agreement

JS:MPV:cf:gc

**CHEMICAL SUPPLIER AGREEMENT**  
**Purchase of Liquid Cationic Polymer**  
**Specification No. C-2019-1087BD**

**THIS AGREEMENT** is made and entered into as of the date fully executed below, by and between Orange County Sanitation District, with a principal place of business at 10844 Ellis Avenue, Fountain Valley, CA 92708 (hereinafter referred to as "OCSD") and Polydyne, Inc. with a principal place of business at 1 Chemical Plant Road, Riceboro, GA 31323 (hereinafter referred to as "Supplier") collectively referred to as the "Parties".

**WITNESSETH**

**WHEREAS**, OCSD desires to temporarily engage Supplier to provide Cationic Polymer as described in Exhibit "A"; and

**WHEREAS**, Supplier submitted its Bid dated October 3, 2019; and

**WHEREAS**, on December 18, 2019, the Board of Directors of OCSD, by minute order, authorized execution of this Agreement between OCSD and Supplier; and

**WHEREAS**, OCSD has chosen Supplier to provide Cationic Polymer in accordance with Ordinance No. OCSD-52; and

**NOW, THEREFORE**, in consideration of the mutual promises and mutual benefits exchanged between the Parties, the Parties mutually agreed as follows:

**1. Introduction**

1.1 This Agreement and all exhibits hereto (called the "Agreement") is made by OCSD and the Supplier. The terms and conditions herein exclusively govern the purchase of Cationic Polymer as described in Exhibit "A".

1.2 Exhibits to this Agreement are incorporated by reference and made a part of this Agreement as though fully set forth at length herein.

Exhibit "A" Scope of Work  
Exhibit "B" Bid  
Exhibit "C" Acknowledgement of Insurance Requirements  
Exhibit "D" OCSD Safety Standards  
Exhibit "E" Human Resources Policies  
Exhibit "F" Not Used

1.3 In the event of any conflict or inconsistency between the provisions of this Agreement and any of the provisions of the exhibits hereto, the provisions of this Agreement shall in all respects govern and control.

1.4 This Agreement may not be modified, changed, or supplemented, nor may any obligations hereunder be waived or extensions of time for performance granted, except by written instrument signed by both Parties.

1.5 The various headings in this Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Agreement or any section or provision hereof.



- 1.6 The term “days”, when used in the Agreement, shall mean calendar days, unless otherwise noted as workdays.
- 1.7 The term “workday”. Workdays are defined as all days that are not Saturday, Sunday, or OCSD observed holidays. Meetings with OCSD staff shall be scheduled from Monday through Thursday between the hours of 8 a.m. and 4 p.m. (exception is Operations staff who maintain plant operations 24 hours per day 7 days per week and work a rotated 12-hour shift) and shall conform to OCSD work schedules.
- 1.8 OCSD holidays (non-working days) are as follows: New Year’s Day, Lincoln’s Birthday, Presidents Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, and Christmas Day.
- 1.9 Work Hours: The work required under this Agreement may include normal business hours, evenings, and weekends.
- 1.10 Supplier shall provide OCSD with all required premiums and/or overtime work at no charge beyond the total amount of the Agreement.
- 1.11 Except as expressly provided otherwise, OCSD accepts no liability for any expenses, losses, or action incurred or undertaken by Supplier as a result of work performed in anticipation of purchases of said services by OCSD.

## **2. Delivery**

- 2.1 LOCATIONS: Deliveries shall be made in accordance with the Scope of Work, Exhibit “A”.
- 2.2 OCSD will pay only for the actual quantity of Cationic Polymer delivered, based upon certified tare weight and net weight. The quantity invoiced by Supplier and payable by OCSD will be for the total net weight of Cationic Polymer delivered (loaded gross weight minus the tare weight). Tare weight shall be determined immediately after each delivery and prior to cleaning, emptying, or clearing the delivery tank.
- 2.3 A bill of lading shall accompany all shipments in accordance with Exhibit “A”.

3. **Possession** Ownership and control of all Cationic Polymer delivered pursuant to this Agreement shall remain solely and exclusively with Supplier, until complete transfer of possession by delivery to OCSD at the designated locations is made by Supplier.

## **4. Quantity**

- 4.1 OCSD makes no guarantee to actual use or quantity of Cationic Polymer purchased. Use may be sporadic based on the wastewater treatment requirements unique to each treatment plant.
- 4.2 OCSD will, through the term of this Agreement, purchase Cationic Polymer from Supplier exclusively, except when OCSD determines Supplier cannot make delivery within the time specified, with the quality and quantity specified, at the Agreement price, the level of Service is inadequate, OCSD unapproved increase in active dry pound rate or for any other default or breach of this Agreement. In such event, OCSD may purchase Cationic Polymer elsewhere and charge Supplier any difference in the delivered price to OCSD from that provided in this Agreement, or alternatively, OCSD may terminate the Agreement based on said breach or failure to deliver the specified product. Quality control tests will be performed

by OCSD on the delivered Cationic Polymer to ensure it is consistent with the requirements specified in Exhibit "A".

**5. Pricing and Invoicing**

- 5.1 Supplier will invoice for Cationic Polymer delivered in accordance with Exhibit "A", and in accordance with the unit price(s) listed in Exhibit "B". Prices shall include all cartage and taxes except California State Sales Tax. The sales tax will be paid by OCSD.
- 5.2 OCSD shall pay, net thirty (30) days, upon receipt and approval by OCSD of itemized invoices, submitted in a form acceptable to OCSD to enable audit of the charges thereon. Supplier shall email invoices to OCSD Accounts Payable at [APStaff@OCSD.com](mailto:APStaff@OCSD.com) and "INVOICE" with the Purchase Order Number and Cationic Polymer shall be referenced in the subject line. All invoices shall include a description of the delivery location, the delivery date and the unit price(s).

**6. Modifications**

- 6.1 This Agreement may be modified or changed only by written instrument in the form of an amendment to this Agreement signed by both Parties.
- 6.2 Pricing modifications: The prices established in this Agreement shall remain firm for the one-year Agreement term. Quarterly pricing will not be accepted. Any adjustments made will allow for increases or decreases in the manufactured cost of the Cationic Polymer and will be based upon OCSD validated information furnished by Supplier and OCSD sources. Adjustments will only be reviewed on an annual basis. OCSD reserves the right to agree with or reject the proposed unit price increase or decrease.
- 6.3 Price changes may be made through the OCSD Purchase Order Process.

- 7. Agreement Term** The Services provided under this Agreement shall be for the period of one (1) year commencing on February 1, 2020 and continuing through January 31, 2021.

**8. Renewals**

- 8.1 OCSD may exercise the option to renew the Agreement for up to four (4) one-year periods based upon the criteria set forth in Exhibit "A", if mutually acceptable terms can be negotiated. OCSD shall make no obligation to renew nor give reason if it elects not to renew.
- 8.1.1 Renewals may be made through the OCSD Purchase Order Process.
- 8.2 The prices established in the original Agreement may be adjusted. The adjustment will allow for any increase or decrease in the manufactured cost of the Cationic Polymer and will be based upon OCSD validated information furnished by Supplier and OCSD sources. Adjustments will only be reviewed on an annual basis. OCSD reserves the right to agree with or reject the proposed unit price increase or decrease.
- 8.2.1 Price adjustments shall be made through the Amendment process.

**9. Termination**

- 9.1 OCSD reserves the right to terminate this Agreement for its convenience, with or without cause, in whole or in part, at any time, by written notice from OCSD. Upon receipt of a termination notice, Supplier shall immediately discontinue all work under this Agreement (unless the notice directs otherwise). OCSD shall thereafter, within thirty (30) days, pay Supplier for work performed (cost and fee) to the date of termination. Supplier expressly

waives any claim to receive anticipated profits to be earned during the uncompleted portion of this Agreement. Such notice of termination shall terminate this Agreement and release OCSD from any further fee, cost or claim hereunder by Supplier other than for work performed to the date of termination.

9.2 OCSD reserves the right to terminate this Agreement immediately upon OCSD's determination that Supplier is not meeting specification requirements for delivery of quantities needed, the level of service is inadequate, for poor quality of product, for OCSD unapproved increase in unit price(s), or any other default or breach of this Agreement.

9.3 OCSD may also immediately terminate for default of this Agreement in whole or in part by written notice to Supplier:

- if Supplier becomes insolvent or files a petition under the Bankruptcy Act; or
- if Supplier sells its business; or
- if Supplier breaches any of the terms of this Agreement; or
- if total amount of compensation exceeds the amount authorized under this Agreement.

9.4 All OCSD property in the possession or control of Supplier shall be returned by Supplier to OCSD upon demand, or at the termination of this Agreement, whichever occurs first.

**10. Indemnification and Hold Harmless** Supplier shall assume all responsibility for damages to property and/or injuries to persons, including accidental death, which may arise out of or be caused by Supplier's services under this Agreement, or by its subcontractor or by anyone directly or indirectly employed by Supplier, and whether such damage or injury shall accrue or be discovered before or after the termination of the Agreement. Except as to the sole active negligence of or willful misconduct of OCSD, Supplier shall indemnify, protect, defend and hold harmless OCSD, its elected and appointed officials, officers, agents and employees, from and against any and all claims, liabilities, damages or expenses of any nature, including attorneys' fees: (a) for injury to or death of any person or damage to property or interference with the use of property, arising out of or in connection with Supplier's performance under this Agreement, and/or (b) on account of any goods and services provided under this Agreement. This indemnification provision shall apply to any acts or omissions, willful misconduct, or negligent misconduct, whether active or passive, on the part of Supplier or anyone employed by or working under Supplier. To the maximum extent permitted by law, Supplier's duty to defend shall apply whether or not such claims, allegations, lawsuits, or proceedings have merit or are meritless, or which involve claims or allegations that any of the parties to be defended were actively, passively, or concurrently negligent, or which otherwise assert that the parties to be defended are responsible, in whole or in part, for any loss, damage, or injury. Supplier agrees to provide this defense immediately upon written notice from OCSD, and with well qualified, adequately insured, and experienced legal counsel acceptable to OCSD. This section shall survive the expiration or early termination of the Agreement.

**11. Insurance** Supplier shall purchase and maintain, throughout the life of this Agreement and any periods of warranty or extensions, insurance in amounts equal to the requirements set forth in the signed Acknowledgement of Insurance Requirements, Exhibit "C". Supplier shall not commence work under this Agreement until all required insurance is obtained in a form acceptable to OCSD, nor shall Supplier allow any subcontractor to commence service pursuant to a subcontract until all insurance required of the subcontractor has been obtained. Failure to maintain required insurance coverage shall result in termination of this

Agreement.

12. **Equipment Loss** OCSD will be responsible for any loss or damage to Supplier-owned equipment, when OCSD determines OCSD is at fault, only to the extent of OCSD's fault, and will reimburse Supplier for such loss or damage upon receipt of invoices, minus a deduction for any amount determined to be the fault of Supplier or its subcontractor or a third party.
13. **Conflict of Interest and Reporting** Supplier shall at all times avoid conflict of interest or appearance of conflict of interest in performance of this Agreement.
14. **Supplier's Relationship to OCSD** Supplier's relationship to OCSD in the performance of this Agreement is that of an independent contractor. The personnel performing Services under this Agreement shall, at all times, be under Supplier's exclusive direction and control, and shall be employees of Supplier and not employees of OCSD. Supplier shall pay all wages, salaries and other amounts due its employees in connection with this Agreement, and shall be responsible for all legal reports and obligations respecting them, such as social security, income tax withholding, unemployment compensation, worker's compensation and similar matters.
15. **OCSD Safety Standards**
  - 15.1 In addition to the requirements set forth in Exhibit "A", Supplier shall meet with personnel from OCSD'S Risk Management Division prior to providing Services to OCSD to review safety and accident prevention policies and procedures. All subcontractors should be present at this meeting. Supplier is responsible to inform all subcontractors of the items discussed at this meeting. Supplier shall not be permitted to provide Services to OCSD prior to this meeting.
  - 15.2 OCSD requires Supplier and its subcontractor(s) to follow and ensure their employees follow all Federal, State, and local regulations as well as OCSD Safety Standards while working at OCSD locations. If during the course of the Agreement it is discovered that OCSD Safety Standards do not comply with Federal, State, or local regulations, then the Supplier is required to follow the most stringent regulatory requirement at no additional cost to OCSD. Supplier and all of its employees and subcontractors, shall adhere to all applicable OCSD Safety Standards attached hereto in Exhibit "D" and the Human Resources Policies attached hereto in Exhibit "E".
16. **Drug-Free Workplace** All employees of Supplier who will perform work under this Agreement must adhere to the California Drug-Free Workplace Act, Government Code Sections 8350 through 8357.
17. **Assignments** Neither this Agreement nor any interest herein or any claim hereunder may be assigned by Supplier either voluntarily or by operation of law, nor may all or substantially all of this Agreement be further subcontracted by Supplier without the prior written consent of OCSD.
18. **Attorney's Fees** If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to any other relief to which it may be entitled.

19. **Permits, Ordinances and Regulations** Any and all fees required by Federal, State, County, City and/or municipal laws, codes and/or tariffs that pertain to work performed under the terms of this Agreement shall be paid by Supplier. Fees demanded for obtaining certificates, including associated inspection fees and expenses of regulatory inspectors shall be paid by Supplier.
20. **Training Certification** When required by regulation, certificates of training shall be maintained on-site for the duration of the activity that requires an employee of Supplier to be certified. Certificates shall be current. Lack of certificates when required will be cause for removal of offending personnel from the site, termination of the Agreement, or both.
21. **Compliance with Law** Supplier warrants that under the performance of this Agreement, it shall comply with all applicable Federal, State and local laws, and all lawful orders rules and regulations thereunder. In connection with the execution of this Agreement, Supplier shall not discriminate against employees or an applicant for employment because of race, religion, color, sex or national origin. Supplier shall take affirmative action to ensure that applicants are employed and employees are treated during their employment without regard to their race, religion, color, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; lay-off or termination; rate of pay, or other forms of compensation; and selection for training, including apprenticeship.
22. **Disputes**
- 22.1 This Agreement shall be governed by and interpreted under the laws of the State of California and the Parties submit to jurisdiction in Orange County, in the event any action is brought in connection with this Agreement or the performance thereof. Pending final resolution of a dispute hereunder, Supplier shall proceed diligently with the performance of this Agreement and in accordance with OCSD'S decision.
- 22.2 In the event of a dispute as to the construction or interpretation of this Agreement, or any rights or obligations hereunder, the Parties shall first attempt, in good faith, to resolve the dispute by mediation. The Parties shall mutually select a mediator to facilitate the resolution of the dispute. If the Parties are unable to agree on a mediator, the mediation shall be conducted in accordance with the Commercial Mediation Rules of the American Arbitration Agreement, through the alternate dispute resolution procedures of Judicial Arbitration through Mediation Services of Orange County ("JAMS"), or any similar organization or entity conducting an alternate dispute resolution process.
- 22.3 In the event the Parties are unable to timely resolve the dispute through mediation, the issues in dispute shall be submitted to arbitration pursuant to California Code of Civil Procedure, Part 3, Title 9, Sections 1280 et seq. For such purpose, an agreed arbitrator shall be selected, or in the absence of Agreement, each party shall select an arbitrator, and those two (2) arbitrators shall select a third. Discovery may be conducted in connection with the arbitration proceeding pursuant to California Code of Civil Procedure Section 1283.05. The arbitrator, or three (3) arbitrators acting as a board, shall take such evidence and make such investigation as deemed appropriate and shall render a written decision on the matter in question. The arbitrator shall decide each and every dispute in accordance with the laws of the State of California. The arbitrator's decision and award shall be subject to review for errors of fact or law in the Superior Court for the County of Orange, with a right of appeal from any judgment issued therein.

**23. Right to Review Services, Facilities, and Records**

- 23.1 OCSD reserves the right to review any portion of the Services performed by Supplier under this Agreement, and Supplier agrees to cooperate to the fullest extent possible. Supplier shall furnish to OCSD such reports, statistical data, and other information pertaining to Supplier's Services as shall be reasonably required by OCSD to carry out its rights and responsibilities under its agreements with its bondholders or noteholders and in connection with the issuance of its official statements and other prospectuses with respect to the offering, sale, and issuance of its bond and other obligations.
- 23.2 The right of OCSD to review or approve specifications, procedures, instructions, reports, test results, calculations, schedules, or other data that are developed by Supplier shall not relieve Supplier of any obligation set forth herein.

**24. Incorporated Documents**

- 24.1 The Scope of Work, Bid, Acknowledgement of Insurance Requirements, OCSD Safety Standards, and Human Resources Policies are hereby incorporated into and made a part of this Agreement, and unless modified or changed hereinabove, are controlling for all matters pertaining to the supply of Cationic Polymer and the manner of performance thereof.
- 24.2 In the event of any conflict or inconsistency between the provisions of this Agreement and any of the provisions of the other incorporated documents, the provisions of this Agreement shall in all respects govern and control.

- 25. Severability** Any provision of this Agreement which is found to be invalid or unenforceable shall be ineffective to the extent of such invalidity or unenforceability, and the invalidity or unenforceability of such provision shall not affect the validity or enforceability of the remaining provisions hereof.

- 26. Waiver** The waiver of either party of any breach or violation of, or default under, any provision of this Agreement, shall not be deemed a continuing waiver by such party of any other provision or of any subsequent breach or violation of this Agreement or default thereunder.

- 27. Breach** Any breach by Supplier to which OCSD does not object shall not operate as a waiver of OCSD to seek remedies available to it for any subsequent breach.

- 28. Public Contracts Law** OCSD is subject to the provisions listed in the prevailing wage determination made by the Director of the Department of Industrial Relations pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773 and 1773.1. It is agreed that all provisions of law applicable to public contracts are part of this Agreement to the same extent as though set forth herein and will be complied with by Supplier. Supplier shall not pay less than the prevailing wage.

- 29. South Coast Air Quality Management District's (SCAQMD) Requirements** It is Supplier's responsibility that all equipment furnished and installed be in accordance with the latest rules and regulations of the South Coast Air Quality Management District (SCAQMD). All work practices, which may have associated emissions such as sandblasting, open field spray painting or demolition of asbestos containing components or structures, shall comply with the appropriate rules and regulations of the SCAQMD.

- 30. Performance** Time is of the essence in the performance of the provisions hereof.

31. **Familiarity with Work** By executing this Agreement, Supplier warrants that: 1) it has investigated the work to be performed; 2) it has investigated the site of the work and is aware of all conditions there; and 3) it understands the facilities, difficulties and restrictions of the work under this Agreement. Should Supplier discover any latent or unknown conditions materially differing from those inherent in the work or as represented by OCSD, it shall immediately inform OCSD of this and shall not proceed, except at Supplier's risk, until written instructions are received from OCSD.
32. **Damage to OCSD'S Property** Any OCSD property damaged by Supplier, its subcontractor(s), or by the personnel of either will be subject to repair or replacement by Supplier at no cost to OCSD.
33. **Third Party Rights** Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OCSD and Supplier.
34. **Authority to Execute** The persons executing this Agreement on behalf of the Parties warrant that they are duly authorized to execute this Agreement and that by executing this Agreement, the Parties are formally bound.
35. **Read and Understood** By signing this Agreement, Supplier represents that it has read and understood the terms and conditions of the Agreement.
36. **Entire Agreement** This Agreement constitutes the entire agreement of the Parties and supersedes all prior written or oral and all contemporaneous oral agreements, understandings, and negotiations between the Parties with respect to the subject matter hereof.
37. **Notices** All notices under this Agreement must be in writing. Written notice shall be sent by registered or certified mail, postage prepaid, return receipt requested, or by any other overnight delivery service which delivers to the noticed destination and provides proof of delivery to the sender. Any facsimile notice must be followed within three (3) days by written notice. All notices shall be effective when first received at the following addresses:

OCSD: Jackie Lagade  
Senior Buyer  
Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, CA 92708

Supplier: Boyd Stanley  
Vice President  
Polydyne, Inc.  
1 Chemical Plant Road  
Riceboro, GA 31323

***IN WITNESS WHEREOF***, intending to be legally bound, the Parties hereto have caused this Agreement to be signed by the duly authorized representatives.

**ORANGE COUNTY SANITATION DISTRICT**

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

By: \_\_\_\_\_  
David John Shawver  
Board Chairman

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

By: \_\_\_\_\_  
Kelly A. Lore  
Clerk of the Board

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

By: \_\_\_\_\_  
Ruth Zintzun  
Purchasing and Contracts Manager

**POLYDYNE, INC.**

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

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

\_\_\_\_\_  
Print Name and Title of Officer

\_\_\_\_\_  
IRS Employer's I.D. Number



**Exhibit A**  
**SCOPE OF WORK**  
**For**  
**Purchase of Liquid Cationic Polymer**

**EXHIBIT A**  
**SCOPE OF WORK**  
**PURCHASE OF LIQUID CATIONIC POLYMER**  
**Specification No. C-2019-1087BD**

**1. General**

The purpose of this Scope of Work is to identify the criteria to provide cationic polymer (polymer) to the Orange County Sanitation District's (OCSD) wastewater treatment facilities at Plant 1, located at 10844 Ellis Avenue, Fountain Valley, California 92708 and Plant 2, located at 22212 Brookhurst Street, Huntington Beach, California 92646. The polymer will be used to dewater anaerobically digested sludge in dewatering centrifuges (DWC). The polymer will be also used in the thickening centrifuges (THC) at Plant 1 to thicken the sludge mixture from primary sludge, trickling filter sludge, surface wasting and secondary waste activated sludge (WAS). In addition to chemical supply, the Supplier shall remotely monitor and manage the polymer bulk inventory at both Plant 1 and Plant 2 by installing a telemetering system.

In thickening, blended sludge from the primary and secondary clarifiers, and trickling filters is pumped to the thickening centrifuges at a concentration of 3~4% total solids (TS) and thickened to 7% TS. In dewatering, digested sludge overflow is pumped to dewatering centrifuges at an average TS concentration of 3~4% and produce biosolids cake at an average 28% TS content.

Table 1 below identifies the criteria, including minimum performance targets, that polymers shall meet in the digested sludge dewatering unit.

Table 1. Cationic Polymers for Dewatering Processes at OCSD

<b>Dewatering Unit</b>	<b>Cake %TS</b>	<b>TSS % Capture</b>	<b>Polymer Type</b>	<b>Polymer Usage* (active lbs./year)</b>	<b>Minimum % Active</b>	<b>Current % Active</b>
Plant 1 Centrifuge	24%	95%	Emulsion	790,000	35%	42.0%
Plant 2 Centrifuge	28%	95%	Emulsion	300,000	35%	42.0%

\* Estimated quantity. OCSD makes no guarantee to the actual quantity used or quantity of polymer purchased.

Table 2 below provides the criteria, including minimum performance targets, for polymers to meet in sludge thickening unit.

Table 2. Cationic Polymers for Thickening Processes at OCSD

<b>Thickening Unit</b>	<b>Thickened %TS</b>	<b>TSS % Capture</b>	<b>Polymer Type</b>	<b>Polymer Usage* (active lbs/year)</b>	<b>Minimum % Active</b>	<b>Current % Active</b>
Plant 2 DAFT	5%	95%	Emulsion	32,000	35%	42.0%
Plant 1 Centrifuge	7%	95%	Emulsion	250,000	35%	42.0%

\* Estimated quantity. OCSD makes no guarantee to the actual quantity used or quantity of polymer purchased.

If during the term of the Agreement OCSD determines that the polymers do not meet any of the minimum performance requirements above, the Supplier will be given one (1) month to optimize the system to meet the requirements. If after one (1) month of Supplier field testing the polymer still does not meet the minimum performance requirements, OCSD may, at its sole discretion, terminate the Agreement.

## **2. Polymer**

The polymers will be used in digested sludge dewatering and sludge thickening.

### **2.1 Plant 1 Dewatering**

Emulsion polymer is currently being used at Plant 1 Dewatering Centrifuge process to condition sludge for the dewatering centrifuges. In process, neat emulsion polymer is diluted down to a concentration of 0.5% active polymer concentration (5,000 mg/L) and injected into digested sludge through a static mixer, an upstream of the dewatering centrifuges.

The estimated polymer dosage rate is 25 active lb. polymer per ton of dry solids (lb/dt). The centrifuge is designed to handle a varied polymer dosage that can range from 20 active lb. polymer per ton of dry solids (lb/dt) to 30 lb/dt. The Supplier field testing is expected during the start-up period for chemical optimization. If the emulsion polymer used for the centrifuge does not meet minimum performance requirements within the estimated dosage rate, the Supplier must provide another polymer at the same polymer bid price.

Emulsion polymers submitted with a minimum % active concentration less than 35% will not be accepted. Polymers submitted for the Plant 1 dewatering must be accepted by OCSD. Polymers may be rejected if excessive nitrosodimethylamine (NDMA) is detected in the submitted sample.

### **2.2 Plant 2 Dewatering**

Emulsion polymer is currently being used at Plant 2 Dewatering Centrifuge process to condition sludge for the dewatering centrifuges. In this process, neat emulsion polymer is diluted through a makedown unit to a concentration of 0.5% active polymer, and then further diluted down to a concentration of 0.10% - 0.25% before being fed to the centrifuges.

The estimated polymer dosage rate is 25 active lb. polymer per ton of dry solids (lb/dt). The centrifuge is designed to handle a varied polymer dosage that can range from 20 active lb. polymer per ton of dry solids (lb/dt) to 30 lb/dt. The Supplier field testing is expected during the start-up period for chemical optimization. If the emulsion polymer used for the centrifuge does not meet minimum performance requirements within the estimated dosage rate, the Supplier must provide another polymer at the same polymer Bid price.

Emulsion polymers submitted with a minimum % active concentration less than 35% will not be accepted. Polymers submitted for the Plant 2 dewatering must be accepted by OCSD. Polymers may be rejected if excessive NDMA is detected in the submitted sample.

### **2.3 Plant 1 Thickening**

Emulsion polymer is currently being used at Plant 1 Thickening Centrifuge process to thicken blended primary and secondary WAS. In this process, neat emulsion polymer is fed through a makedown unit at 0.5% active polymer concentration and injected into the blended primary sludge and WAS through a static mixer, an upstream of the dewatering centrifuges.

The estimated polymer dosage rate is 10 active lb. polymer per ton of dry solids (lb/dt), and the centrifuge shall be designed to handle a varied polymer dosage that can range from 5 active lb. polymer per ton of dry solids (lb./dt) to 15 lb/dt. The Supplier field testing is expected during the start-up period for chemical optimization. If the emulsion polymer used for the centrifuge does not meet minimum performance requirements within the estimated dosage rate, the Supplier must provide another polymer at the same polymer bid price.

Emulsion polymers submitted with a minimum % active concentration less than 35% will not be accepted. Polymers submitted for the Plant 1 thickening process must be accepted by OCSD. Polymers may be rejected if excessive NDMA is detected in the submitted sample.

### **2.4 Plant 2 Thickening**

Emulsion polymer is currently used at the Plant 2 thickening process to thicken WAS and Waste Secondary Sludge (WSS) for the Dissolved Air Floatation Thickener (DAFT). No other type of polymer will be accepted for this process unit. Neat emulsion polymer is diluted in a mix tank to a concentration of 0.2% to 0.4% before the polymer is fed to the WAS at the influent to the DAFT.

Emulsion polymers submitted with a minimum % active concentration less than 35% will not be accepted. Polymers submitted for the Plant 2 thickening process must be accepted by OCSD. Polymers may be rejected if excessive NDMA is detected in the submitted sample.

## **3. Quality Control**

A 250mL sample will accompany every polymer delivery with the following data printed clearly on the label:

- The minimum % total solids to be delivered
- The % volatile solids
- The % active polymer
- The viscosity (cp) range
- The molecular weight
- The charge density

The above analysis information must be accompanied by a reference test procedure. The analysis procedure must be in accordance with Standard Methods and be acceptable to OCSD. The minimum % total solids, as stated above, will be the minimum specification to be used for billing and product quality determinations.

Failure to provide any of the above requested information may cause OCSD to reject the load. the disqualification of that polymer from bench tests and bidding.

4. **Quantity**

OCSD estimates annual polymer usage as follows:

Plant 1 Centrifuge = 250,000 active pounds of emulsion cationic polymer

Plant 2 DAFT = 32,000 active pounds of emulsion cationic polymer

Plant 1 Centrifuge = 790,000 active pounds of emulsion cationic polymer

Plant 2 Centrifuge = 300,000 active pounds of emulsion cationic polymer

The net quantity of each Supplier's polymer may vary due to the difference in performance as determined by OCSD. OCSD makes no guarantee to the actual quantity used or quantity of polymer purchased. Use may be sporadic and is based on treatment requirements unique to each plant.

5. **Delivery Requirements**

- a. Chemical delivery Procedures can be found in Appendix A-1. It is the responsibility of the Supplier to view the document and understand it.
- b. OCSD reserves the right to request polymer on a schedule convenient to the needs of the treatment plants. Deliveries shall typically be made within three (3) days of request and only received Monday through Friday between the hours of 7:00 a.m. to 4:00 p.m. OCSD also reserves the right to request twenty-four (24) hour deliveries in case of plant emergencies. Such expedited deliveries will be provided at no additional cost to OCSD. Supplier will follow chemical delivery procedures described in Appendix A-1.
- c. Periodic quality control tests will be performed by OCSD on the delivered polymer to assure that minimum specifications are attained, and that supplier-reported quality is accurate. All billings will be for no more than the actual polymer delivered. Polymer will be paid for on a corrected weight basis. All polymer delivered under the minimum product specifications shall be discounted proportionately. A discount formula as shown shall be utilized.

**Cost per Active Pound \* Active Pounds Delivered = Delivered Cost**

- d. **Bills of Lading** must be labeled with the information listed below in order to be accepted:
  - Approved name/number of product
  - Specify "Cationic"
  - For Dewatering/WAS Thickening
  - Deliver and place into Cationic Tank

If the above information is not on the Bill of Lading, off-loading will not take place without confirmation from OCSD's supervision and/or Supplier that it is the product ordered.


- e. OCSD will not accept what might be considered typographical errors. Supplier may have many products with similar product numbers.
- f. A sample is required with each load. An OCSD operator will smell the sample and look at it for color, consistency, and odor. If the sample indicates that the selected cationic polymer has not been supplied, Do Not Off-Load the Product.
- g. The cationic polymer connections will be 4-inch flange PVC connections with eight (8) bolts. Suppliers must adjust delivery hoses to fit OCSD connections. All connections are to be made by the truck driver with unloading in accordance with these instructions.
- h. The chemical delivery shall conform to the following requirements:

- i. OCSD staff shall notify Supplier when to provide the delivery. A method of communication for subsequent deliveries shall be clarified.
- j. Supplier shall deliver the product to either Plant 1 or Plant 2 as ordered.
- k. At time of delivery, supplier shall provide all necessary, fully trained and qualified personnel to be in continuous attendance during the transfer of product.
- l. Supplier shall allow a two (2) to three (3) hours unloading time for each delivery. Chemical shall not be off-loaded at a rate greater than 30 gpm. Supplier's personnel shall provide one (1) copy of the delivery statement and product sample to OCSD's operator prior to connection. Supplier shall provide all necessary safety equipment required by OCSD.
- m. Supplier shall provide a 24-hour phone number where qualified personnel can be contacted in the event of an emergency. It will be Supplier's responsibility to update any changes or phone numbers.
- n. OCSD's plant gates are equipped with intercoms for the purpose of announcing arrivals. Please follow instructions – DO NOT USE HORNS.
- o. Supplier shall provide OCSD with the name of the product hauling company and safety related provisions set forth between the Supplier and the hauling company. OCSD requires personal protective equipment be worn on plant premises. Refer to this Scope of Work for additional safety requirements. Supplier shall provide OCSD with written procedures concerning compliance with these rules and prior to commencement of the Agreement by OCSD.
- p. Chemical delivery drivers must sign in at the Control Center at Plant 1 or at the Operations Center at Plant 2.
- q. Each delivery of polymer requires a written certified analysis of the % total solids and % active polymer for that shipment. A certified analysis is defined as a statement signed by Supplier's representative declaring the analysis information is true and accurate.
- r. Chemical deliveries will be refused for the following:
  - i. Incorrect chemical sample color, appearance or smell.
  - ii. Incorrect documentation
  - iii. Unsafe delivery vehicle off-loading equipment
- s. The driver is responsible for clean-up of spilled material. Clean-up must be in conformance with OCSD's safety procedures, EPA, regional and local regulations and ordinances, and the product manufacturer's recommended clean-up procedures. OCSD only has plant water available for use by the driver. Solvents, special equipment, or chemicals required for clean-up must be provided by Supplier.

6. **Rejection of Shipment** – OCSD may reject any delivery of polymer which does not meet this Scope of Work. Supplier shall remove the rejected material immediately following telephone notification. Supplier shall replace the volume of removed material immediately. OCSD may purchase polymer from other sources in an emergency caused by Supplier. Supplier will pay any additional costs.

Supplier shall maintain OCSD's operation by providing, if necessary, temporary facilities in the event any Supplier's polymer is rejected by OCSD. Temporary facilities include polymer storage tankage, pumps, piping, and miscellaneous appurtenances. Costs for removal and replacement of rejected polymer and temporary facilities shall be the responsibility of Supplier.

**Appendix A-1**  
**CHEMICAL DELIVERY PROCEDURES**  
**For**  
**Purchase of Liquid Cationic Polymer**

 <b>Orange County Sanitation District</b>	<b>Chemical SOP</b> <b>Number: CHEM SOP-001-P1-P2</b>
	<b>Rev. 4 Final Plant 1 and Plant 2 Chemical Delivery Procedures</b>
<b>Subject: Plant No.1 and No.2 Chemical Delivery Procedures for Contract Drivers</b>	<b>Effective Date: June 10, 2015</b>

## **POLICY**

Orange County Sanitation District (OCSD) Operations Division 830/840 has outlined their standard operating procedure (SOP) for delivery of designated bulk chemicals delivered to the Fountain Valley and Huntington Beach treatment plants. Chemical drivers are permitted to connect and disconnect their deliveries without OCSD operator assistance for all bleach, ferric, bisulfite, anionic polymer, and cationic polymer deliveries.

This unloading procedure has a built in safeguard which eliminates the chance of deliveries being offloaded into incorrect chemical bulk tanks. All Chemical delivery lines will have a lock on each cam-lock cap to ensure the chemical is being delivered to the correct chemical tank. Each lock will be keyed differently which will eliminate the possibility of the chemical driver mistakenly hooking up to the wrong tank in the field.

- A phone is available at or near the chemical containment area for the drivers. Emergency contact numbers will be provided for the driver by the OCSD Operator.
- All chemical tanks and delivery lines are clearly marked.

## **Chemical Drivers' Responsibilities:**

- Under this procedure, all drivers shall review this "Bulk Chemical SOP for Contract Drivers" and sign, print, and date the acknowledgment of training sheet prior to completing their initial delivery. An OCSD representative shall accompany each driver for his/her initial delivery.
  - **NOTE:** OCSD has the discretion to require additional assistance for subsequent deliveries, if warranted, and it will be noted on the acknowledgement sheet if it is necessary.
- All drivers shall comply with the above requirements and must provide a contact phone number to the Control Center or Operations Center Operator which will be recorded on the signature acknowledgement sheet.
- The driver must sign in the visitors log book and obtain pre-delivery signatures from the control center operator located in the Control Center or Operations Center. The driver must also receive clear instructions as to which tank is to receive the delivery.



- If required, chemical samples may be left on the designated chemical containment wall or handed to the OCSD operations staff prior to off loading their delivery.
- The driver must wear the appropriate personal protective equipment while on site at OCSD. OCSD requires all personnel who enter our process areas to wear hard hats, safety glasses, Class 2 Safety Vest, and steel toed shoes at a minimum while in the process areas.
- At the chemical tank, prior to offloading the delivery the driver will need to remove cam-lock caps with the key provided.
- For added safety, the driver agrees to use a safety strap on all cam-lock connections during the transfer of chemicals. The safety strap must be applied at the tank connection and the truck connection. **NOTE: Chemical suppliers are responsible to supply their drivers with safety straps.**
- The Driver is permitted to use OCSD plant air to offload their delivery. If OCSD plant air is not available, the driver is responsible to supply their own. (Driver will ensure air hose is neatly coiled after use).
- Prior to opening delivery valves, the driver shall verify correct tank and tank level, and ensure that cam-lock safety straps are secured on all cam-lock connections.
- Driver must report all spills larger than a quart to the Control Center before they leave the facility. If a large spill (greater than 5 gallons) is occurring during their delivery, the driver shall immediately call the Control Center and report the spill.
- In the event of an **emergency**, immediately call the Control Center or Operations Center for assistance at the following numbers:

If using the OCSD phone call extension 2222

If using a cell phone call: Plant 1: 714-593-7133  
Plant 2: 714-593-7677

- If non-emergency assistance is needed at Plant 1, call extension 7025 using an OCSD phone. If at Plant 2, call extension 7625 using an OCSD phone.
- After the delivery is complete, the driver shall ensure the delivery valve is closed and the cam-lock cap and lock have been re-connected.
- The driver shall then return to the Control Center or Operations Center and receive post-delivery signatures on all documents pertaining to the delivery and return the key to the Control Center Operator.

**Example of how the procedure is designed to work:**

1. Chemical driver checks into either Plant 1 Control Center or Plant 2 Operations Center and signs the visitor log book.
2. At that time the Control Center or Operations Center Operator will assign the driver a chemical tank and give the driver a key for that specific tank.
3. Pre-delivery paperwork will be signed by OCSD and the start tank level will be recorded.
4. Chemical driver will drive to assigned chemical tank, unlock cam-lock cap for assigned tank, hook up his hose, apply cam-lock safety straps to all cam-lock connections, open the delivery valve for the assigned tank, and unload chemical.
5. Once the driver has finished unloading he/she will close the delivery valve, put the cam-lock cap back on delivery fitting, and lock it.
6. Driver will return to the Control Center or Operations Center to return the key, report any problems encountered during their delivery, receive post-delivery signatures, and sign out on the visitor log book.
7. Operations staff will be responsible to record start and stop tank levels.

**Chemical SOP**  
**Number: CHEM SOP-001-P1-P2**  
**(Acknowledgement Signatures)**

Driver's  
Signature: \_\_\_\_\_

Driver's Printed  
Name: \_\_\_\_\_

Driver's Contact  
Number: \_\_\_\_\_

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

Operations Division Representative

Name/Signature: \_\_\_\_\_

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

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



EXHIBIT B  
BID PRICE FORM  
PURCHASE OF CATIONIC POLYMER  
SPECIFICATION NO. C-2019-1087BD

**PLANT NO. 2**

**Area: DAFT Process**

PRODUCT NAME: Clarifloc	PRODUCT NUMBER: WE-1233
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Unit Price per Active LB.	Active LBs Required (for the product to be bid on)	Freight	Total Cost Delivered
\$ 2.548/Act. Lb.	X 320,000 Active Lbs.	+ \$ 121,920.00	= \$ 937,280.00

**Area: Dewatering Process**

PRODUCT NAME: Clarifloc	PRODUCT NUMBER: WE-1233
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Unit Price per Active LB	Active LBs Required (for the product to be bid on)	Freight	Total Cost Delivered
\$ 2.548/Act. Lb.	X 40,000 Active Lbs.	+ \$ 15,240.00	= \$ 117,160.00

Polydyne Inc.  
Name of Firm

Boyd Stanley, Vice-President  
Authorized Agent

  
Signature



**EXHIBIT B  
BID PRICE FORM  
PURCHASE OF CATIONIC POLYMER  
SPECIFICATION NO. C-2019-1087BD**

**Due Date for Online Bid Submittal: October 3, 2019 at 2:00 P.M. PST.**

The undersigned does hereby propose to provide goods or services in accordance with all provisions of the Notice Inviting Bid and the Scope of Work for the following price. Incomplete submittal of requested information as called out in the bid specification requirements may deem the bid as non-responsive. Submit total amount as follows:

**PLANT NO. 1**

**Area: Thickener Process**

<b>PRODUCT NAME:</b> Clarifloc	<b>PRODUCT NUMBER:</b> WE-1233
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Unit Price per Active LB	Active LBs Required (for the product to be bid on)	Freight	Total Cost Delivered
\$ 2.548/Act. Lb.	X 650,000 Active Lbs.	+ \$ 247,650.00	= \$ 1,903,850.00

**Area: Dewatering Process**

<b>PRODUCT NAME:</b> Clarifloc	<b>PRODUCT NUMBER:</b> WE-1233
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Unit Price per Active LB	Active LBs Required (for the product to be bid on)	Freight	Total Cost Delivered
\$ 2.548/Act. Lb.	X 310,000 Active Lbs.	+ \$ 118,110.00	= \$ 907,990.00

Polydyne Inc.

Name of Firm

Boyd Stanley, Vice-President

Authorized Agent

Signature



# Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

## OPERATIONS COMMITTEE

### Agenda Report

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**File #:** 2019-626

**Agenda Date:** 12/4/2019

**Agenda Item No:** 9.

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**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**SEAL BEACH PUMP STATION REPLACEMENT, PROJECT NO. 3-67**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Design Services Agreement with Lee & Ro, Inc. to provide engineering services for Seal Beach Pump Station Replacement, Project No. 3-67, for an amount not to exceed \$5,947,850; and
- B. Approve a contingency of \$594,785 (10%).

**BACKGROUND**

The Seal Beach Pump Station, located at the intersection of Seal Beach Boulevard and Westminster Boulevard in the City of Seal Beach, was constructed in 1970 and must handle up to 34 million gallons per day during peak wet weather flows.

Staff had initiated Seal Beach Pump Station Rehabilitation, Project No. 3-62, in 2015 with the intention of designing for a rehabilitation. During the design of the rehabilitation, however, it was determined that the pump station should be replaced, rather than rehabilitated. Replacement with a deeper pump station allows for construction of a gravity sewer between the Seal Beach Pump Station and the upstream West Side Pump Station. This would allow the West Side Pump Station to be abandoned, which would reduce maintenance costs and spill risks. This decision was presented at the March 2018 Operations Committee. As such, the Seal Beach Pump Station rehabilitation work was cancelled and replaced with two new projects, Seal Beach Pump Station Replacement, Project No. 3-67, and Los Alamitos Sub-Trunk Extension, Project No. 3-68, as part of the Fiscal Year 2018-19 Budget.

**RELEVANT STANDARDS**

- Operate and maintain facilities to minimize impacts on surrounding communities, including odor, noise, and lighting
- Comply with Government Code Section 4526: Select the “best qualified firm” and “negotiate fair and equitable fees”

**PROBLEM**

The existing Seal Beach Pump Station is approaching the end of its useful life and equipment is beginning to fail. In addition, the pump station is too shallow causing the upstream trunk sewer to flow nearly full which blocks foul air and creates fugitive odor emissions in upstream manholes.

**PROPOSED SOLUTION**

Replace the existing Seal Beach Pump Station with a new pump station that will provide long-term, reliable service; improved hydraulic characteristics; improved odor control; and allow for the future abandonment of the West Side Pump Station.

**TIMING CONCERNS**

If the project is delayed, assets could fail more often resulting in unexpected facility downtime. Such failures could result in sanitary sewer overflows, significant repair costs, and increased operation and maintenance resources.

**RAMIFICATIONS OF NOT TAKING ACTION**

Multiple repair and rehabilitation projects would be required to maintain operation of the Seal Beach Pump Station. The future abandonment of the West Side Pump Station would not be feasible.

**PRIOR COMMITTEE/BOARD ACTIONS**

March 2018 - In an Informational Presentation to the Operations Committee, staff presented the reasons for replacing the Seal Beach Pump Station with a new deeper facility rather than rehabilitating the existing, as had previously been the plan.

**ADDITIONAL INFORMATION**Consultant Selection:

The Orange County Sanitation District (Sanitation District) requested and advertised for proposals for Seal Beach Pump Station Replacement, Project No. 3-67, on July 9, 2019. The following evaluation criterion were described in the Request for Proposals (RFP) and used to determine the most qualified Consultant.

CRITERION	WEIGHT
Project Understanding and Approach	40%
Related Project Experience	30%
Project Team and Staff Qualifications	30%

Six proposals were received on August 27, 2019 and evaluated in accordance with the evaluation process set forth in the Sanitation District's Purchasing Ordinance by a pre-selected Evaluation Team

consisting of the following Sanitation District staff; Senior Engineer (Project Manager), Engineer (Project Engineer), Engineering Supervisor, Maintenance Manager, Engineering Manager, Engineering Supervisor (Non-voting member), and Senior Engineer (Non-voting member).

The Evaluation Team also included one non-voting representative from the Contracts Administration Division.

The Evaluation Team scored the proposals based on the established criteria as summarized in the table below.

	Firm	Approach (Max 40)	Related Experience (Max 30)	Team (Max 30)	Total Score (Max 100)
1	LEE & RO, Inc.	34	22	23	79
2	Brown and Caldwell	32	22	23	77
3	CDM Smith	22	20	19	61
4	Arcadis U.S., Inc.	23	19	18	60
5	HDR Engineering, Inc.	26	14	16	56
6	Stantec Consulting Services	20	14	17	51

Based on this scoring, two Consultants were shortlisted for interviews that were held on September 25, 2019. Following the interviews, each member of the Evaluation Team scored the Consultants based on both the proposals and interviews using the evaluation criterion and weighting described above. Based on the scoring shown below, Lee & Ro, Inc. was selected as the most qualified Consultant.

	Firm	Approach (Max 40)	Related Experience (Max 30)	Team (Max 30)	Total Score (Max 100)
1	LEE & RO, Inc.	34	21	23	78
2	Brown and Caldwell	30	20	22	72

The selected firm presented a clear understanding of the project's risks and associated approaches to address them. In particular, their proposal stood out in terms of identifying and addressing construction-phase geotechnical and groundwater risks. The proposed team's experience, qualifications, and staff utilization best matched the Sanitation District's needs for this project

#### Review of Fee Proposal and Negotiations:

Proposals were accompanied by sealed fee proposals. In accordance with Sanitation District's Purchasing Ordinance, the fee proposal of only the highest-ranked firm was opened after approval by the Director of Engineering of the Evaluation Committee's recommendation.

Meetings were held with Lee & Ro to review the required project elements, clarify components of the Scope of Work, discuss any assumptions made for the estimated level of effort, and ensure a thorough understanding of the proposed approach to meet the goals and objectives for the project.



These negotiations resulted in modifications to the level of effort for various project tasks and modified the original scope of work to include a prescriptive shoring and groundwater monitoring design, physical modeling of the new upstream junction structure, and an updated surge analysis.

The negotiated hours and price are appropriate for the effort required to complete the design of a replacement pump station of this size and complexity.

	Total Hours	Total Fee
Original Fee Proposal	26,684	\$5,496,714
Negotiated Fee Proposal	29,456	\$5,947,850

The Consultant's fringe and overhead costs, which factor into the billing rate, have been substantiated. The contract profit is 5%, which is based on an established formula included in the Sanitation District's standard design agreements.

Based on the above, staff has determined that the final negotiated fee is fair and reasonable for the level of effort required for this project and recommends award of the Professional Design Services Agreement to Lee & Ro.

## **CEQA**

This project is included in the Sanitation District's Facility Master Plan, Program Environmental Impact Report, which is scheduled to be certified in August 2020.

## **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted, (Budget Update FY2019-20, Appendix A, Page A-7) and the project budget is sufficient for the recommended action.

## **ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Professional Design Services Agreement

JMF:dm:sa:gc

## **PROFESSIONAL DESIGN SERVICES AGREEMENT**

THIS AGREEMENT, is made and entered into to be effective the 18<sup>th</sup> day of December, 2019 by and between the ORANGE COUNTY SANITATION DISTRICT, hereinafter referred to as "SANITATION DISTRICT", and LEE & RO, INC., for purposes of this Agreement hereinafter referred to as "CONSULTANT".

### **WITNESSETH:**

WHEREAS, the SANITATION DISTRICT desires to engage a CONSULTANT for **Seal Beach Pump Station Replacement, Project No. 3-67**; and to provide Design services for the replacement of the existing Seal Beach Pump Station with a deeper wet well on the existing site and demolish the old pump station when the new one is complete. The project will also include odor control improvements of vapor-phase and liquid-phase treatment at the pump station and,

WHEREAS, CONSULTANT is qualified to provide the necessary services in connection with these requirements and has agreed to provide the necessary professional services; and,

WHEREAS, the SANITATION DISTRICT has adopted procedures for the selection of professional services and has proceeded in accordance with said procedures to select a CONSULTANT to perform this work; and,

WHEREAS, at its regular meeting on December 18, 2019 the Board of Directors, by Minute Order, accepted the recommendation of the Operations Committee pursuant to SANITATION DISTRICT's Purchasing Ordinance to approve this Agreement between the SANITATION DISTRICT and CONSULTANT.

NOW, THEREFORE, in consideration of the promises and mutual benefits, which will result to the parties in carrying out the terms of this Agreement, it is mutually agreed as follows:

#### **1. SCOPE OF WORK**

CONSULTANT agrees to furnish necessary professional and technical services to accomplish those project elements outlined in the Scope of Work attached hereto as Attachment "A", and by this reference made a part of this Agreement.

- A. The CONSULTANT shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all design, drawings, specifications, and other services furnished by the CONSULTANT under this Agreement, including the work performed by its Subconsultants. Where approval by the SANITATION DISTRICT is indicated, it is understood to be conceptual approval only and does not relieve the CONSULTANT of responsibility for complying with all laws, codes, industry standards and liability for damages caused by errors, omissions, noncompliance with industry standards, and/or negligence on the part of the CONSULTANT or its Subconsultants.
- B. CONSULTANT is responsible for the quality of work prepared under this Agreement and shall ensure that all work is performed to the standards of best engineering practice for clarity, uniformity, and completeness. CONSULTANT

shall respond to all comments, suggestions, and recommendations on the SANITATION DISTRICT's review comment sheets (i.e. DS1, DS2 and DS3). All comments shall be incorporated into the design prior to the next submittal deadline or addressed, in writing, as to why the comment has not been incorporated. CONSULTANT shall ensure that each submittal is 100% accurate for the level of work submitted (i.e. correct references, terms, capitalization or equal status, spelling, punctuation, etc.)

- C. In the event that work is not performed to the satisfaction of the SANITATION DISTRICT and does not conform to the requirements of this Agreement or any applicable industry standards, the CONSULTANT shall, without additional compensation, promptly correct or revise any errors or deficiencies in its designs, drawings, specifications, or other services within the timeframe specified by the Project Engineer/Project Manager. The SANITATION DISTRICT may charge to CONSULTANT all costs, expenses and damages associated with any such corrections or revisions.
- D. All CAD drawings, figures, and other work shall be produced by CONSULTANTS and Subconsultants using the SANITATION DISTRICT CAD Manual. Conversion of CAD work from any other non-standard CAD format to the SANITATION DISTRICT format shall not be acceptable in lieu of this requirement.

Electronic files shall conform to the SANITATION DISTRICT specifications. Any changes to these specifications by the CONSULTANT are subject to review and approval of the SANITATION DISTRICT.

Electronic files shall be subject to an acceptance period of thirty (30) calendar days during which the SANITATION DISTRICT shall perform appropriate reviews and including CAD Manual compliance. CONSULTANT shall correct any discrepancies or errors detected and reported within the acceptance period at no additional cost to the SANITATION DISTRICT.

- E. The CONSULTANT shall ensure that all plans and specifications prepared, or recommended under this Agreement allow for competitive bidding. The CONSULTANT shall design such plans or specifications so that procurement of services, labor or materials are not available from only one source, and shall not design plans and specifications around a single or specific product, piece of major equipment or machinery, a specific patented design or a proprietary process, unless required by principles of sound engineering practice and supported by a written justification that has been approved in writing by the SANITATION DISTRICT. The CONSULTANT shall submit this written justification to the SANITATION DISTRICT prior to beginning work on such plans and specifications. Whenever the CONSULTANT recommends a specific product or equipment for competitive procurement, such recommendation shall include at least two brand names of products that are capable of meeting the functional requirements applicable to the project.

- F. All professional services performed by the CONSULTANT, including but not limited to all drafts, data, correspondence, proposals, reports, and estimates compiled or composed by the CONSULTANT, pursuant to this Agreement, are for the sole use of the SANITATION DISTRICT, its agents and employees. Neither the documents nor their contents shall be released to any third party without the prior written consent of the SANITATION DISTRICT. This provision does not apply to information that (a) was publicly known, or otherwise known to the CONSULTANT, at the time that it was disclosed to the CONSULTANT by the SANITATION DISTRICT, (b) subsequently becomes publicly known to the CONSULTANT other than through disclosure by the SANITATION DISTRICT.

## **2. COMPENSATION**

Total compensation shall be paid to CONSULTANT for services in accordance with the following provisions:

A. Total Compensation

Total compensation shall be in an amount not to exceed Five Million Nine Hundred Forty-Seven Thousand Eight Hundred Fifty Dollars (\$5,947,850.00). Total compensation to CONSULTANT including burdened labor (salaries plus benefits), overhead, profit, direct costs, and Subconsultant(s) fees and costs shall not exceed the sum set forth in Attachment "E" - Fee Proposal.

B. Labor

As a portion of the total compensation to be paid to CONSULTANT, the SANITATION DISTRICT shall pay to CONSULTANT a sum equal to the burdened salaries (salaries plus benefits) actually paid by CONSULTANT charged on an hourly-rate basis to this project and paid to the personnel of CONSULTANT. Upon request of the SANITATION DISTRICT, CONSULTANT shall provide the SANITATION DISTRICT with certified payroll records of all employees' work that is charged to this project.

C. Overhead

As a portion of the total compensation to be paid to CONSULTANT, the SANITATION DISTRICT shall compensate CONSULTANT and Subconsultants for overhead at the rate equal to the percentage of burdened labor as specified in Attachment "E" - Fee Proposal.

D. Profit

Profit for CONSULTANT and Subconsultants shall be a percentage of consulting services fees (Burdened Labor and Overhead). When the consulting or subconsulting services amount is \$250,000 or less, the maximum Profit shall be 10%. Between \$250,000 and \$2,500,000, the maximum Profit shall be limited by a straight declining percentage between 10% and 5%. For consulting or

subconsulting services fees with a value greater than \$2,500,000, the maximum Profit shall be 5%. Addenda shall be governed by the same maximum Profit percentage after adding consulting services fees.

As a portion of the total compensation to be paid to CONSULTANT and Subconsultants, the SANITATION DISTRICT shall pay profit for all services rendered by CONSULTANT and Subconsultants for this project according to Attachment "E" - Fee Proposal.

E. Subconsultants

For any Subconsultant whose fees for services are greater than or equal to \$100,000 (excluding out-of-pocket costs), CONSULTANT shall pay to Subconsultant total compensation in accordance with the Subconsultant amount specified in Attachment "E" - Fee Proposal.

For any Subconsultant whose fees for services are less than \$100,000, CONSULTANT may pay to Subconsultant total compensation on an hourly-rate basis per the attached hourly rate Schedule and as specified in the Scope of Work. The SANITATION DISTRICT shall pay to CONSULTANT the actual costs of Subconsultant fees and charges in an amount not to exceed the sum set forth in Attachment "E" - Fee Proposal.

F. Direct Costs

The SANITATION DISTRICT shall pay to CONSULTANT and Subconsultants the actual costs of permits and associated fees, travel and licenses for an amount not to exceed the sum set forth in Attachment "E" - Fee Proposal. The SANITATION DISTRICT shall also pay to CONSULTANT actual costs for equipment rentals, leases or purchases with prior approval of the SANITATION DISTRICT. Upon request, CONSULTANT shall provide to the SANITATION DISTRICT receipts and other documentary records to support CONSULTANT's request for reimbursement of these amounts, see Attachment "D" - Allowable Direct Costs. All incidental expenses shall be included in overhead pursuant to Section 2 - COMPENSATION above.

G. Other Direct Costs

Other Direct Costs incurred by CONSULTANT and its Contractor due to modifications in scope of work resulting from field investigations and field work required by Contract. These items may include special equipment, test equipment and tooling and other materials and services not previously identified. Refer to attachment "D" Allowable Direct Costs for payment information.

H. Reimbursable Direct Costs

The SANITATION DISTRICT will reimburse the CONSULTANT for reasonable travel and business expenses as described in this section and further described in Attachment "D" - Allowable Direct Costs to this Agreement. The reimbursement of

the above-mentioned expenses will be based on an “accountable plan” as considered by Internal Revenue Service (IRS). The plan includes a combination of reimbursements based upon receipts and a “per diem” component approved by IRS. The most recent schedule of the per diem rates utilized by the SANITATION DISTRICT can be found on the U.S. General Service Administration website at <http://www.gsa.gov/portal/category/104711#>.

The CONSULTANT shall be responsible for the most economical and practical means of management of reimbursable costs inclusive but not limited to travel, lodging and meals arrangements. The SANITATION DISTRICT shall apply the most economic and practical method of reimbursement which may include reimbursements based upon receipts and/or “per diem” as deemed the most practical.

CONSULTANT shall be responsible for returning to the SANITATION DISTRICT any excess reimbursements after the reimbursement has been paid by the SANITATION DISTRICT.

Travel and travel arrangements – Any travel involving airfare, overnight stays or multiple day attendance must be approved by the SANITATION DISTRICT in advance.

Local Travel is considered travel by the CONSULTANT within the SANITATION DISTRICT general geographical area which includes Orange, Los Angeles, Ventura, San Bernardino, Riverside, San Diego, Imperial and Kern Counties. Automobile mileage is reimbursable if CONSULTANT is required to utilize personal vehicle for local travel.

Lodging – Overnight stays will not be approved by the SANITATION DISTRICT for local travel. However, under certain circumstances overnight stay may be allowed at the discretion of the SANITATION DISTRICT based on reasonableness of meeting schedules and the amount of time required for travel by the CONSULTANT. Such determination will be made on a case-by-case basis and at the discretion of the SANITATION DISTRICT.

Travel Meals – Per-diem rates as approved by IRS shall be utilized for travel meals reimbursements. Per diem rates shall be applied to meals that are appropriate for travel times. Receipts are not required for the approved meals.

Additional details related to the reimbursement of the allowable direct costs are provided in the Attachment “D” - Allowable Direct Costs of this Agreement.

#### I. Limitation of Costs

If, at any time, CONSULTANT estimates the cost of performing the services described in CONSULTANT's Proposal will exceed seventy-five percent (75%) of the not-to-exceed amount of the Agreement, including approved additional compensation, CONSULTANT shall notify the SANITATION DISTRICT immediately, and in writing. This written notice shall indicate the additional amount necessary to complete the services. Any cost incurred in excess of the

approved not-to-exceed amount, without the express written consent of the SANITATION DISTRICT's authorized representative shall be at CONSULTANT's own risk. This written notice shall be provided separately from, and in addition to any notification requirements contained in the CONSULTANT's invoice and monthly progress report. Failure to notify the SANITATION DISTRICT that the services cannot be completed within the authorized not-to-exceed amount is a material breach of this Agreement.

### **3. REALLOCATION OF TOTAL COMPENSATION**

The SANITATION DISTRICT, by its Director of Engineering, shall have the right to approve a reallocation of the incremental amounts constituting the total compensation, provided that the total compensation is not increased.

### **4. PAYMENT**

- A. Monthly Invoice: CONSULTANT shall include in its monthly invoice, a detailed breakdown of costs associated with the performance of any corrections or revisions of the work for that invoicing period. CONSULTANT shall allocate costs in the same manner as it would for payment requests as described in this Section of the Agreement. CONSULTANT shall warrant and certify the accuracy of these costs and understand that submitted costs are subject to Section 11 - AUDIT PROVISIONS.
- B. CONSULTANT may submit monthly or periodic statements requesting payment for those items included in Section 2 - COMPENSATION hereof in the format as required by the SANITATION DISTRICT. Such requests shall be based upon the amount and value of the work and services performed by CONSULTANT under this Agreement and shall be prepared by CONSULTANT and accompanied by such supporting data, including a detailed breakdown of all costs incurred and project element work performed during the period covered by the statement, as may be required by the SANITATION DISTRICT.

Upon approval of such payment request by the SANITATION DISTRICT, payment shall be made to CONSULTANT as soon as practicable of one hundred percent (100%) of the invoiced amount on a per-project-element basis.

If the SANITATION DISTRICT determines that the work under this Agreement or any specified project element hereunder, is incomplete and that the amount of payment is in excess of:

- i. The amount considered by the SANITATION DISTRICT's Director of Engineering to be adequate for the protection of the SANITATION DISTRICT; or
- ii. The percentage of the work accomplished for each project element.

He may, at his discretion, retain an amount equal to that which insures that the total amount paid to that date does not exceed the percentage of the completed work for each project element or the project in its entirety.

- C. CONSULTANT may submit periodic payment requests for each 30-day period of this Agreement for the profit as set forth in Section 2 - COMPENSATION above. Said profit payment request shall be proportionate to the work actually accomplished to date on a per-project-element basis. In the event the SANITATION DISTRICT's Director of Engineering determines that no satisfactory progress has been made since the prior payment, or in the event of a delay in the work progress for any reason, the SANITATION DISTRICT shall have the right to withhold any scheduled proportionate profit payment.
- D. Upon satisfactory completion by CONSULTANT of the work called for under the terms of this Agreement, and upon acceptance of such work by the SANITATION DISTRICT, CONSULTANT will be paid the unpaid balance of any money due for such work, including any retained percentages relating to this portion of the work.
- E. Upon satisfactory completion of the work performed hereunder and prior to final payment under this Agreement for such work, or prior settlement upon termination of this Agreement, and as a condition precedent thereto, CONSULTANT shall execute and deliver to the SANITATION DISTRICT a release of all claims against the SANITATION DISTRICT arising under or by virtue of this Agreement other than such claims, if any, as may be specifically exempted by CONSULTANT from the operation of the release in stated amounts to be set forth therein.
- F. Pursuant to the California False Claims Act (Government Code Sections 12650-12655), any CONSULTANT that knowingly submits a false claim to the SANITATION DISTRICT for compensation under the terms of this Agreement may be held liable for treble damages and up to a ten thousand dollars (\$10,000) civil penalty for each false claim submitted. This Section shall also be binding on all Subconsultants.

A CONSULTANT or Subconsultant shall be deemed to have submitted a false claim when the CONSULTANT or Subconsultant: a) knowingly presents or causes to be presented to an officer or employee of the SANITATION DISTRICT a false claim or request for payment or approval; b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by the SANITATION DISTRICT; c) conspires to defraud the SANITATION DISTRICT by getting a false claim allowed or paid by the SANITATION DISTRICT; d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to the SANITATION DISTRICT; or e) is a beneficiary of an inadvertent submission of a false claim to the SANITATION DISTRICT, and fails to disclose the false claim to the SANITATION DISTRICT within a reasonable time after discovery of the false claim.

## **5. CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION AND RECORD OF WAGES**

- A. To the extent CONSULTANT's employees and/or Subconsultants who will perform Work during the design and preconstruction phases of a construction contract for which Prevailing Wage Determinations have been issued by the DIR



and as more specifically defined under Labor Code Section 1720 et seq, CONSULTANT and Subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the Work is subject to compliance monitoring and enforcement by the DIR.

- B. The CONSULTANT and Subconsultants shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776, and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.
- C. Pursuant to Labor Code Section 1776, the CONSULTANT and Subconsultants shall furnish a copy of all certified payroll records to SANITATION DISTRICT and/or general public upon request, provided the public request is made through SANITATION DISTRICT, the Division of Apprenticeship Standards or the Division of Labor Enforcement of the Department of Industrial Relations.
- D. The CONSULTANT and Subconsultants shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulation Section 16461(e).

## **6. DOCUMENT OWNERSHIP – SUBSEQUENT CHANGES TO PLANS AND SPECIFICATIONS**

- A. Ownership of Documents for the Professional Services performed.

All documents, including but not limited to, original plans, studies, sketches, drawings, computer printouts and disk files, and specifications prepared in connection with or related to the Scope of Work or Professional Services, shall be the property of the SANITATION DISTRICT. The SANITATION DISTRICT's ownership of these documents includes use of, reproduction or reuse of and all incidental rights, whether or not the work for which they were prepared has been performed. The SANITATION DISTRICT ownership entitlement arises upon payment or any partial payment for work performed and includes ownership of any and all work product completed prior to that payment. This Section shall apply whether the CONSULTANT's Professional Services are terminated: a) by the completion of the Agreement, or b) in accordance with other provisions of this Agreement. Notwithstanding any other provision of this paragraph or Agreement, the CONSULTANT shall have the right to make copies of all such plans, studies, sketches, drawings, computer printouts and disk files, and specifications.
- B. CONSULTANT shall not be responsible for damage caused by subsequent changes to or uses of the plans or specifications, where the subsequent changes or uses are not authorized or approved by CONSULTANT, provided that the service rendered by CONSULTANT was not a proximate cause of the damage.

## **7. INSURANCE**

### **A. General**

- i. Insurance shall be issued and underwritten by insurance companies acceptable to the SANITATION DISTRICT.
- ii. Insurers must have an "A-" Policyholder's Rating, or better, and Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best's Guide Rating. However, the SANITATION DISTRICT will accept State Compensation Insurance Fund, for the required policy of Worker's Compensation Insurance subject to the SANITATION DISTRICT's option to require a change in insurer in the event the State Fund financial rating is decreased below "B". Further, the SANITATION DISTRICT will require CONSULTANT to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONSULTANT, by the SANITATION DISTRICT or its agent.
- iii. Coverage shall be in effect prior to the commencement of any work under this Agreement.

### **B. General Liability**

The CONSULTANT shall maintain during the life of this Agreement, including the period of warranty, Commercial General Liability Insurance written on an occurrence basis providing the following minimum limits of liability coverage: Two Million Dollars (\$2,000,000) per occurrence with Two Million Dollars (\$2,000,000) aggregate. Said insurance shall include coverage for the following hazards: Premises-Operations, blanket contractual liability (for this Agreement), products liability/completed operations (including any product manufactured or assembled), broad form property damage, blanket contractual liability, independent contractors liability, personal and advertising injury, mobile equipment, owners and contractors protective liability, and cross liability and severability of interest clauses. A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement(s). If requested by SANITATION DISTRICT and applicable, XCU coverage (Explosion, Collapse and Underground) and Riggers/On Hook Liability must be included in the General Liability policy and coverage must be reflected on the submitted Certificate of Insurance.

### **C. Umbrella Excess Liability**

The minimum limits of general liability and Automotive Liability Insurance required, as set forth herein, shall be provided for through either a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Umbrella excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automotive liability.

D. Automotive/Vehicle liability Insurance

The CONSULTANT shall maintain a policy of Automotive Liability Insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limits of liability coverage: Combined single limit of Two Million Dollars (\$2,000,000) or alternatively, One Million Dollars (\$1,000,000) per person for bodily injury and One Million Dollars (\$1,000,000) per accident for property damage. A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement.

E. Drone Liability Insurance

If a drone will be used, drone liability insurance must be maintained by CONSULTANT in the amount of One Million Dollars (\$1,000,000) in form acceptable to the SANITATION DISTRICT.

F. Worker's Compensation Insurance

The CONSULTANT shall provide such Workers' Compensation Insurance as required by the Labor Code of the State of California in the amount of the statutory limit, including Employer's Liability Insurance with a minimum limit of One Million Dollars (\$1,000,000) per occurrence. Such Worker's Compensation Insurance shall be endorsed to provide for a waiver of subrogation in favor of the SANITATION DISTRICT. A statement on an insurance certificate will not be accepted in lieu of the actual endorsements unless the insurance carrier is State of California Insurance Fund and the identifier "SCIF" and endorsement numbers 2570 and 2065 are referenced on the certificate of insurance. If an exposure to Jones Act liability may exist, the insurance required herein shall include coverage for Jones Act claims.

G. Errors and Omissions/Professional Liability

CONSULTANT shall maintain in full force and effect, throughout the term of this Agreement, standard industry form professional negligence errors and omissions insurance coverage in an amount of not less than Five Million Dollars (\$5,000,000) with limits in accordance with the provisions of this Paragraph. If the policy of insurance is written on a "claims made" basis, said policy shall be continued in full force and effect at all times during the term of this Agreement, and for a period of five (5) years from the date of the completion of the services hereunder.

In the event of termination of said policy during this period, CONSULTANT shall obtain continuing insurance coverage for the prior acts or omissions of CONSULTANT during the course of performing services under the term of this Agreement. Said coverage shall be evidenced by either a new policy evidencing no gap in coverage or by separate extended "tail" coverage with the present or new carrier.

In the event the present policy of insurance is written on an “occurrence” basis, said policy shall be continued in full force and effect during the term of this Agreement or until completion of the services provided for in this Agreement, whichever is later. In the event of termination of said policy during this period, new coverage shall be obtained for the required period to insure for the prior acts of CONSULTANT during the course of performing services under the term of this Agreement.

CONSULTANT shall provide to the SANITATION DISTRICT a certificate of insurance in a form acceptable to the SANITATION DISTRICT indicating the deductible or self-retention amounts and the expiration date of said policy, and shall provide renewal certificates not less than ten (10) days prior to the expiration of each policy term.

#### H. Proof of Coverage

The CONSULTANT shall furnish the SANITATION DISTRICT with original certificates and amendatory endorsements effecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by the SANITATION DISTRICT before work commences. The SANITATION DISTRICT reserves the right to require complete, certified copies of all required insurance policies, including endorsements, effecting the coverage required, at any time. The following are approved forms that must be submitted as proof of coverage:

- Certificate of Insurance      ACORD Form 25 (5/2010) or equivalent.
- Additional Insurance      (ISO Form) CG2010 11 85 or  
  (General Liability)      The combination of (ISO Forms)  
   CG 2010 10 01 and CG 2037 10 01  
  
   All other Additional Insured endorsements must  
   be submitted for approval by the SANITATION  
   DISTRICT, and the SANITATION DISTRICT  
   may reject alternatives that provide different or  
   less coverage to the SANITATION DISTRICT.
- Additional Insured      Submit endorsement provided by carrier for the  
  (Auto Liability)      SANITATION DISTRICT approval.
- Waiver of Subrogation      State Compensation Insurance Fund  
   Endorsement No. 2570 or equivalent.
- Cancellation Notice      State Compensation Insurance Fund  
   Endorsement No. 2065 or equivalent.

I. Cancellation Notice

Each insurance policy required herein shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days' prior written notice. The Cancellation Section of ACORD Form 25 (5/2010) shall state the required thirty (30) days' written notification. The policy shall not terminate, nor shall it be cancelled, nor the coverage reduced until thirty (30) days after written notice is given to the SANITATION DISTRICT except for nonpayment of premium, which shall require not less than ten (10) days written notice to the SANITATION DISTRICT. Should there be changes in coverage or an increase in deductible or SIR amounts, the CONSULTANT and its insurance broker/agent shall send to the SANITATION DISTRICT a certified letter which includes a description of the changes in coverage and/or any increase in deductible or SIR amounts. The certified letter must be sent to the attention of Risk Management, and shall be received by the SANITATION DISTRICT not less than thirty (30) days prior to the effective date of the change(s) if the change would reduce coverage or increase deductibles or SIR amounts or otherwise reduce or limit the scope of insurance coverage provided to the SANITATION DISTRICT.

J. Primary Insurance

All liability policies shall contain a Primary and Non-Contributory Clause. Any other insurance maintained by the SANITATION DISTRICT shall be excess and not contributing with the insurance provided by CONSULTANT.

K. Separation of Insured

All liability policies shall contain a "Separation of Insureds" clause.

L. Non-Limiting (if applicable)

Nothing in this document shall be construed as limiting in any way, nor shall it limit the indemnification provision contained in this Agreement, or the extent to which CONSULTANT may be held responsible for payment of damages to persons or property.

M. Deductibles and Self-Insured Retentions

Any deductible and/or self-insured retention must be declared to the SANITATION DISTRICT on the Certificate of Insurance. All deductibles and/or self-insured retentions require approval by the SANITATION DISTRICT. At the option of the SANITATION DISTRICT, either: the insurer shall reduce or eliminate such deductible or self-insured retention as respects the SANITATION

DISTRICT; or the CONSULTANT shall provide a financial guarantee satisfactory to the SANITATION DISTRICT guaranteeing payment of losses and related investigations, claim administration and defense expenses.

N. Defense Costs

Liability policies shall have a provision that defense costs for all insureds and additional insureds are paid in addition to and do not deplete any policy limits.

O. Subconsultants

The CONSULTANT shall be responsible to establish insurance requirements for any Subconsultant hired by the CONSULTANT. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subconsultant's operations and work.

P. Limits Are Minimums

If the CONSULTANT maintains higher limits than any minimums shown above, then SANITATION DISTRICT requires and shall be entitled to coverage for the higher limits maintained by CONSULTANT.

**8. SCOPE CHANGES**

In the event of a change in the Scope of Work, requested by SANITATION DISTRICT, the parties hereto shall execute an amendment to this Agreement setting forth with particularity all terms of the new Agreement, including but not limited to any additional CONSULTANT's fees.

**9. PROJECT TEAM AND SUBCONSULTANTS**

CONSULTANT shall provide to SANITATION DISTRICT, prior to execution of this Agreement, the names and full description of all Subconsultants and CONSULTANT's project team members anticipated to be used on this project by CONSULTANT. CONSULTANT shall include a description of the scope of work to be done by each Subconsultant and each CONSULTANT's project team member. CONSULTANT shall include the respective compensation amounts for CONSULTANT and each Subconsultant on a per-project-element basis, broken down as indicated in Section 2 - COMPENSATION.

There shall be no substitution of the listed Subconsultants and CONSULTANT's project team members without prior written approval by the SANITATION DISTRICT.

**10. ENGINEERING REGISTRATION**

The CONSULTANT's personnel are comprised of registered engineers and a staff of specialists and draftsmen in each department. The firm itself is not a registered engineer but represents and agrees that wherever in the performance of this Agreement requires the services of a registered engineer. Such services hereunder will be performed under the direct supervision of registered engineers.

## **11. AUDIT PROVISIONS**

- A. SANITATION DISTRICT retains the reasonable right to access, review, examine, and audit, any and all books, records, documents and any other evidence of procedures and practices that the SANITATION DISTRICT determines are necessary to discover and verify that the CONSULTANT is in compliance with all requirements under this Agreement. The CONSULTANT shall include the SANITATION DISTRICT's right as described above, in any and all of their subcontracts, and shall ensure that these rights are binding upon all Subconsultants.
- B. SANITATION DISTRICT retains the right to examine CONSULTANT's books, records, documents and any other evidence of procedures and practices that the SANITATION DISTRICT determines are necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred or to ensure CONSULTANT's compliance with all requirements under this Agreement during the term of this Agreement and for a period of three (3) years after its termination.
- C. CONSULTANT shall maintain complete and accurate records in accordance with generally accepted industry standard practices and the SANITATION DISTRICT's policy. The CONSULTANT shall make available to the SANITATION DISTRICT for review and audit, all project related accounting records and documents, and any other financial data within 15 days after receipt of notice from the SANITATION DISTRICT. Upon SANITATION DISTRICT's request, the CONSULTANT shall submit exact duplicates of originals of all requested records to the SANITATION DISTRICT. If an audit is performed, CONSULTANT shall ensure that a qualified employee of the CONSULTANT will be available to assist SANITATION DISTRICT's auditor in obtaining all project related accounting records and documents, and any other financial data.

## **12. LEGAL RELATIONSHIP BETWEEN PARTIES**

The legal relationship between the parties hereto is that of an independent contractor and nothing herein shall be deemed to make CONSULTANT an employee of the SANITATION DISTRICT.

## **13. NOTICES**

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, return receipt requested, postage prepaid.

Notices shall be mailed to the SANITATION DISTRICT at:

ORANGE COUNTY SANITATION DISTRICT  
10844 Ellis Avenue  
Fountain Valley, CA 92708-7018  
Attention: Ludwig Lapus, Senior Contracts Administrator  
Copy: Jacob Dalgoff, Project Manager

Notices shall be mailed to CONSULTANT at:

LEE & RO, INC.  
1199 South Fullerton Road  
City of Industry, CA 91748  
Attention: Charles Ro, Principal in Charge

All communication regarding the Scope of Work, will be addressed to the Project Manager. Direction from other SANITATION DISTRICT's staff must be approved in writing by the SANITATION DISTRICT's Project Manager prior to action from the CONSULTANT.

#### **14. TERMINATION**

The SANITATION DISTRICT may terminate this Agreement at any time, without cause, upon giving thirty (30) days written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be entitled to compensation for work performed on a prorated basis through and including the effective date of termination.

CONSULTANT shall be permitted to terminate this Agreement upon thirty (30) days written notice only if CONSULTANT is not compensated for billed amounts in accordance with the provisions of this Agreement, when the same are due.

Notice of termination shall be mailed to the SANITATION DISTRICT and/or CONSULTANT in accordance with Section 13 - NOTICES.

#### **15. DOCUMENTS AND STUDY MATERIALS**

The documents and study materials for this project shall become the property of the SANITATION DISTRICT upon the termination or completion of the work. CONSULTANT agrees to furnish to the SANITATION DISTRICT copies of all memoranda, correspondence, computation and study materials in its files pertaining to the work described in this Agreement, which is requested in writing by the SANITATION DISTRICT.

#### **16. COMPLIANCE**

##### **A. Labor**

CONSULTANT certifies by the execution of this Agreement that it pays employees not less than the minimum wage as defined by law, and that it does not discriminate in its employment with regard to race, color, religion, sex or national origin; that it is in compliance with all federal, state and local directives and executive orders regarding non-discrimination in employment; and that it agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

##### **B. Air Pollution**

CONSULTANT and its subconsultants and subcontractors shall comply with all applicable federal, state and local air pollution control laws and regulations.



## **17. AGREEMENT EXECUTION AUTHORIZATION**

Both the SANITATION DISTRICT and CONSULTANT do covenant that each individual executing this document by and on behalf of each party is a person duly authorized to execute agreements for that party.

## **18. DISPUTE RESOLUTION**

In the event of a dispute arising between the parties regarding performance or interpretation of this Agreement, the dispute shall be resolved by binding arbitration under the auspices of the Judicial Arbitration and Mediation Service ("JAMS"), or similar organization or entity conducting alternate dispute resolution services.

## **19. ATTORNEY'S FEES, COSTS AND NECESSARY DISBURSEMENTS**

If any action at law or in equity or if any proceeding in the form of an Alternative Dispute Resolution (ADR) is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which it may be entitled.

## **20. PROGRESS REPORTS**

Monthly progress reports shall be submitted for review by the tenth day of the following month and must include as a minimum: 1) current activities, 2) future activities, 3) potential items that are not included in the Scope of Work, 4) concerns and possible delays, 5) percentage of completion, and 6) budget status.

## **21. WARRANTY**

CONSULTANT shall perform its services in accordance with generally accepted industry and professional standards. If, within the 12-month period following completion of its services, the SANITATION DISTRICT informs CONSULTANT that any part of the services fails to meet those standards, CONSULTANT shall, within the time prescribed by the SANITATION DISTRICT, take all such actions as are necessary to correct or complete the noted deficiency(ies).

## **22. INDEMNIFICATION**

To the fullest extent permitted by law, CONSULTANT shall indemnify, defend (at CONSULTANT's sole cost and expense and with legal counsel approved by the SANITATION DISTRICT, which approval shall not be unreasonably withheld), protect and hold harmless the SANITATION DISTRICT and all of SANITATION DISTRICT's officers, directors, employees, CONSULTANT's, and agents (collectively the "Indemnified Parties"), from and against any and all claims, damages, liabilities, causes of action, suits, arbitration awards, losses, judgments, fines, penalties, costs and expenses (including, without limitation, attorneys' fees, disbursements and court costs, and all other professional, expert or CONSULTANT's fees and costs and the SANITATION DISTRICT's general and administrative expenses; individually, a "Claim"; collectively, "Claims") which may arise from or are in any manner related, directly or

indirectly, to any work performed, or any operations, activities, or services provided by CONSULTANT in carrying out its obligations under this Agreement to the extent of the negligent, recklessness and/or willful misconduct of CONSULTANT, its principals, officers, agents, employees, CONSULTANT's suppliers, CONSULTANT, Subconsultants, subcontractors, and/or anyone employed directly or indirectly by any of them, regardless of any contributing negligence or strict liability of an Indemnified Party. Notwithstanding the foregoing, nothing herein shall be construed to require CONSULTANT to indemnify the Indemnified Parties from any Claim arising solely from:

(A) the active negligence or willful misconduct of the Indemnified Parties; or

(B) a natural disaster or other act of God, such as an earthquake; or

(C) the independent action of a third party who is neither one of the Indemnified Parties nor the CONSULTANT, nor its principal, officer, agent, employee, nor CONSULTANT's supplier, CONSULTANT, Subconsultant, subcontractor, nor anyone employed directly or indirectly by any of them.

Exceptions (A) through (B) above shall not apply, and CONSULTANT shall, to the fullest extent permitted by law, indemnify the Indemnified Parties, from Claims arising from more than one cause if any such cause taken alone would otherwise result in the obligation to indemnify hereunder.

CONSULTANT's liability for indemnification hereunder is in addition to any liability CONSULTANT may have to the SANITATION DISTRICT for a breach by CONSULTANT of any of the provisions of this Agreement. Under no circumstances shall the insurance requirements and limits set forth in this Agreement be construed to limit CONSULTANT's indemnification obligation or other liability hereunder. The terms of this Agreement are contractual and the result of negotiation between the parties hereto. Accordingly, any rule of construction of contracts (including, without limitation, California Civil Code Section 1654) that ambiguities are to be construed against the drafting party, shall not be employed in the interpretation of this Agreement.

## **23. DUTY TO DEFEND**

The duty to defend hereunder is wholly independent of and separate from the duty to indemnify and such duty to defend shall exist regardless of any ultimate liability of CONSULTANT and shall be consistent with Civil Code Section 2782.8. Such defense obligation shall arise immediately upon presentation of a Claim by any person if, without regard to the merit of the Claim, such Claim could potentially result in an obligation to indemnify one or more Indemnified Parties, and upon written notice of such Claim being provided to CONSULTANT. Payment to CONSULTANT by any Indemnified Party or the payment or advance of defense costs by any Indemnified Party shall not be a condition precedent to enforcing such Indemnified Party's rights to indemnification hereunder. In the event a final judgment, arbitration, award, order, settlement, or other final resolution expressly determines that the claim did not arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONSULTANT, to any extent, then the DISTRICT will reimburse CONSULTANT for the reasonable costs of defending the Indemnified Parties against such claims.

CONSULTANT's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until such time as action against the Indemnified Parties for such matter indemnified hereunder is fully and finally barred by the applicable statute of limitations.

#### **24. CONSULTANT PERFORMANCE**

The CONSULTANT's performance shall be evaluated by the SANITATION DISTRICT. A copy of the evaluation shall be sent to the CONSULTANT for comment. The evaluation, together with the comments, shall be retained by the SANITATION DISTRICT and may be considered in future CONSULTANT selection processes.

#### **25. COMPLIANCE WITH SANITATION DISTRICT POLICIES AND PROCEDURES**

CONSULTANT shall comply with all SANITATION DISTRICT policies and procedures including the OCSD Safety Standards, as applicable, all of which may be amended from time to time.

#### **26. CLOSEOUT**

When the SANITATION DISTRICT determines that all Work authorized under the Agreement is fully complete and that the SANITATION DISTRICT requires no further work from CONSULTANT, or the Agreement is otherwise terminated or expires in accordance with the terms of the Agreement, the SANITATION DISTRICT shall give the Consultant written notice that the Agreement will be closed out. CONSULTANT shall submit all outstanding billings, work submittals, deliverables, reports or similarly related documents as required under the Agreement within thirty (30) days of receipt of notice of Agreement closeout.

Upon receipt of CONSULTANT's submittals, the SANITATION DISTRICT shall commence a closeout audit of the Agreement and will either:

- i. Give the CONSULTANT a final Agreement Acceptance: or
- ii. Advise the CONSULTANT in writing of any outstanding item or items which must be furnished, completed, or corrected at the CONSULTANT's cost.

CONSULTANT shall be required to provide adequate resources to fully support any administrative closeout efforts identified in this Agreement. Such support must be provided within the timeframe requested by the SANITATION DISTRICT.

Notwithstanding the final Agreement Acceptance the CONSULTANT will not be relieved of its obligations hereunder, nor will the CONSULTANT be relieved of its obligations to complete any portions of the work, the non-completion of which were not disclosed to the SANITATION DISTRICT (regardless of whether such nondisclosures were fraudulent, negligent, or otherwise); and the CONSULTANT shall remain obligated under all those provisions of the Agreement which expressly or by their nature extend beyond and survive final Agreement Acceptance.

Any failure by the SANITATION DISTRICT to reject the work or to reject the CONSULTANT's request for final Agreement Acceptance as set forth above shall not be deemed to be acceptance of the work by the SANITATION DISTRICT for any purpose nor imply acceptance of, or agreement with, the CONSULTANT's request for final Agreement Acceptance.

## **27. ENTIRE AGREEMENT**

This Agreement constitutes the entire understanding and agreement between the Parties and supersedes all previous negotiations between them pertaining to the subject matter thereof.

IN WITNESS WHEREOF, this Agreement has been executed in the name of the SANITATION DISTRICT, by its officers thereunto duly authorized, and CONSULTANT as of the day and year first above written.

**CONSULTANT: LEE & RO, INC.**

By \_\_\_\_\_  
Date \_\_\_\_\_  
\_\_\_\_\_  
Printed Name & Title

**ORANGE COUNTY SANITATION DISTRICT**

By \_\_\_\_\_  
David John Shawver  
Board Chairman  
Date \_\_\_\_\_

By \_\_\_\_\_  
Kelly A. Lore  
Clerk of the Board  
Date \_\_\_\_\_

By \_\_\_\_\_  
Ruth Zintzun  
Purchasing & Contracts Manager  
Date \_\_\_\_\_

Attachments: Attachment "A" – Scope of Work  
Attachment "B" – NOT USED  
Attachment "C" – NOT USED  
Attachment "D" – Allowable Direct Costs  
Attachment "E" – Fee Proposal  
Attachment "F" – NOT USED  
Attachment "G" – NOT USED  
Attachment "H" – NOT USED  
Attachment "I" – Cost Matrix and Summary  
Attachment "J" – NOT USED  
Attachment "K" – Minor Subconsultant Hourly Rate Schedule  
Attachment "L" – OCSD Safety Standards

LRL:ms

# **ATTACHMENT “A”**

## **SCOPE OF WORK**

## **ATTACHMENT A**

### **SCOPE OF WORK**

#### **Seal Beach Pump Station Replacement** **Project No. 3-67**

### **TABLE OF CONTENTS**

<b>I. SUMMARY .....</b>	<b>3</b>
<b>II. BACKGROUND, GENERAL PROJECT DESCRIPTION, AND PROJECT ELEMENTS.....</b>	<b>3</b>
<b>BACKGROUND.....</b>	<b>3</b>
<b>GENERAL PROJECT DESCRIPTION .....</b>	<b>3</b>
<b>DESCRIPTION OF PROJECT ELEMENTS .....</b>	<b>4</b>
Project Element 1 – NEW PUMP STATION .....	4
Project Element 2 – Modifications to Existing Gravity Sewers and Force Mains .....	7
Project Element 3 – Demolition and Abandonment of Existing Pump Station and Force Mains.....	7
Project Element 4 – Onsite Odor Control Facilities .....	8
Project Element 5 - Temporary Facilities During Construction.....	8
Assumptions for Level of Effort .....	8
<b>Design Considerations.....</b>	<b>10</b>
<b>ABBREVIATIONS .....</b>	<b>11</b>
<b>III.PROJECT SCHEDULE.....</b>	<b>12</b>
<b>IV.PROJECT EXECUTION .....</b>	<b>14</b>
<b>PHASE 1 – PROJECT DEVELOPMENT .....</b>	<b>14</b>
<b>PHASE 2 – PRELIMINARY DESIGN .....</b>	<b>14</b>
Task 2.1 – NOT USED .....	14
Task 2.2 - Preliminary Design Production .....	14
Task 2.3 –Value Engineering Assistance .....	39
Task 2.4 – NOT USED .....	40
Task 2.5 - Permitting Assistance.....	40
Task 2.6 - Project Management.....	43
Task 2.7 - Risk Management.....	48
Task 2.8 – Preliminary Design phase Workshops and Meetings .....	49
Task 2.9 - Quality Control.....	54
Task 2.10 – Community Outreach .....	56
<b>PHASE 3 – DESIGN .....</b>	<b>56</b>
Task 3.1 - Bid Documents.....	56
Task 3.2 - Design Support Documentation .....	61
Task 3.3 - Specialty Services .....	64

Task 3.4 - Design Submittals .....	70
Task 3.5 - Bid Support Services .....	72
Task 3.6 - Project Management.....	72
Task 3.7 - Risk Management Assistance.....	72
Task 3.8 - Workshops and Meetings .....	73
Task 3.9 - Quality Control.....	80
Task 3.10 – Permitting Assistance .....	82
<b>PHASE 4 – CONSTRUCTION AND INSTALLATION SERVICES.....</b>	<b>82</b>
<b>PHASE 5 – COMMISSIONING SERVICES .....</b>	<b>82</b>
<b>PHASE 6 – CLOSE OUT .....</b>	<b>82</b>
<b>V. GENERAL REQUIREMENTS.....</b>	<b>82</b>
<b>GENERAL .....</b>	<b>82</b>
OCSD Engineering Design Guidelines and Strategic Plan .....	82
<b>PROJECT SPECIFIC DEVIATIONS FROM OCSD DESIGN GUIDELINES.....</b>	<b>88</b>
ENGINEERING DESIGN GUIDELINES, CHAPTER 11, “INSTRUMENTATION AND CONTROL” .....	88
<b>Additional Design Criteria .....</b>	<b>88</b>
<b>VI. STAFF ASSISTANCE .....</b>	<b>89</b>
<b>EXHIBITS: .....</b>	<b>90</b>



## I. SUMMARY

Provide professional engineering services for the project described herein including the following:

1. Preliminary Design Report
2. Permitting assistance
3. Preparation of bid documents

## II. BACKGROUND, GENERAL PROJECT DESCRIPTION, AND PROJECT ELEMENTS

### BACKGROUND

Seal Beach Pump Station (SBPS) is located in the City of Seal Beach, California, on the corner of Seal Beach Boulevard and Westminster Boulevard and was initially constructed in 1970 (Project No. 3-12). The pump station was expanded in 1973 and 1980 (Project Nos. 3-12-1 and 3-12-2 respectively) and consists of two wet wells that share a common below grade pump room where eight pumps are located. The eight motors are located in an above-ground building directly above the pumps. Currently, two force mains extend easterly within Westminster Boulevard for about 3 miles. The north force main has a nominal diameter of 30-inches and was constructed in 1978 (Project No. 3-13-1). The force main extends 14,290 feet from the pump station until it reaches Rancho Road/Hammon Place. The south force main parallels the north one and has a nominal diameter of 42-inches (Project No. 3-36R). The south force main was constructed in 1995 with a total length of 14,335 feet and replaces the 30-inch force main that was originally constructed under Project No. 3-13. These two existing force mains will be replaced with two new 36-inch force mains by Westminster Blvd. Force Main Replacement, Project No. 3-62, prior to the construction of this project.

A detailed description of the pump station can be found in the 1999 report prepared by MacDonald Stephens, Engineers entitled "Rehabilitation of Outlying Pump Stations". This report assessed the condition of the SBPS and identified deficiencies in the pump station and the force mains. This report is included in **Exhibit 03** – "Project Reference Material". Project No. 3-62 originally intended to rehabilitate SBPS; however, in evaluating the pump station as part of the preliminary design it was determined that full replacement is needed. Hence, the replacement of Seal Beach Pump Station is now designated as Project No. 3-67 (the force mains are still being replaced as part of Project No. 3-62). Record Drawings for the SBPS initial construction and subsequent expansions and the force main construction projects are included in **Exhibit 03**.

The purpose of the project is to replace the existing SBPS, eliminate the need for the upstream Westside Pump Station and meet current and future flow demands to 2040.

### GENERAL PROJECT DESCRIPTION

The project involves the completion of the preliminary design and final design phases of the replacement of the SBPS. The replacement pump station includes demolition, civil,

mechanical, structural, architectural, HVAC, electrical, instrumentation, and control systems. Site improvements include above ground buildings, underground vaults, manholes, paving, walls, facilities for drainage, landscaping, irrigation, perimeter wall and security as well as water, storm drain, and other utilities. The work is split into an evaluation phase, a preliminary design phase, a final design phase, and a bidding phase.

## **DESCRIPTION OF PROJECT ELEMENTS**

Detailed descriptions of the Project Elements are presented below.

### **PROJECT ELEMENT 1 – NEW PUMP STATION**

The new pump station and associated facilities will include the items listed below and all other components required to provide a fully functionally pump station.

#### **Main Sewage Pumps**

Vertically driven with non-clog impellers or extended shaft motor. Pumps will convey flows for the design wet weather event, and to minimize or eliminate fill and draw cycling during the nighttime/early morning low flow periods. Pump motors will be controlled by variable frequency drives (VFDs) with constant speed bypass. The VFDs will be fitted with anti-ragging technology.

#### **Wet Well**

Self-cleaning trench type designed to minimize backwater conditions in the upstream system. The wet well design shall include a control panel for a manually initiated cleaning cycle. The goal of the wet well size and configuration is to provide ~~one hour of storage capacity (including upstream collection system capacity with appropriate freeboard) during typical peak daily flows.~~ maximum extra storage capacity possible, in conjunction with the optimum configuration of the pump station structure. There shall be drain lines from the force mains (FMs) to the wet well(s) with multiple ports on the discharge line (one per pump intake).

#### **Dry Well**

Contains pumps, sump pumps, discharge header piping, flow meter, a bridge crane, a pressure washer, lighting, and ventilation. The bridge crane will be sized and located to accommodate removal of the pumps, motors, valves, and other large equipment within the dry well. The dry well will be rated for Class I Division 2 service; except the sump which is rated Class 1 Division 1. Ventilation system shall maintain a slight negative pressure in the dry well. Pump station and controls will be designed so pumps can be operated from the electrical room in the event the dry well floods. Devices not rated for submergence will be operator-accessible and located above the flood level.

#### **Electrical Room and Equipment**

The new electrical building will house the electrical equipment and will have air conditioning for protection of electrical and control equipment. The equipment will be located to provide proper working clearances per NEC and OCSD standards. The building will contain the following equipment:

- 480V arc-resistant switchgear with a main-tie-tie-main breaker configuration, complete with an automatic, open-transition transfer scheme per OCSD standards. Provide one main breaker for the incoming source from an externally accessible SCE transformer and metering/main breaker switchboard. The other main breaker shall be fed from a permanent standby generator and a portable generator via a stand-alone manual transfer control. The switchgear will feed loads such as motor control centers (MCCs) and VFDs.
- 480V MCCs will be double-ended and arc-resistant with a key-interlocked, main-tie-tie-main breaker configuration. The MCCs will feed power to loads such as a UPS, 480-208/120V lighting transformer and panelboard(s) with primary and standby source, sump pumps, odor control, HVAC, etc.
- The UPS 120Vac panel will feed loads such as the PLCs, RIOs, local human machine interface (HMI), network communication equipment, CCTV, fire alarm system, and security systems. The UPS will have an external bypass switch.
- HVAC equipment and associated controls. A 120Vac weatherproof convenience receptacle will be provided near the unit(s).
- 125Vdc flooded cell, lead acid batteries for the 480V switchgear will be located in a separate battery room equipped with climate control equipment and ventilation. A battery disconnect switch will be located in the battery room. The associated battery charger and 125Vdc panel will be located in the electrical room.
- Provide system grounding configuration and coordinate with SCE.

### **Influent Structure**

A flow-combining structure upstream of the wet well, preferably out of traffic, and connection points downstream of the pump station to accommodate bypassing equipment and plugs so future wet well shut downs can be performed. Influent structure to accommodate existing sewer connections and future connection to newly designed deep sewer. The structure will have means to isolate flow from wet well and provide access for Maintenance staff to draw sewage and bypass the pump station.

### **Temporary Pumping Provisions**

Means for pump station bypass from influent structure using portable pumps to the downstream force mains. Provisions shall include means of safely isolating incoming flows upstream of the wet well, and above-grade manifold of smaller pipe connections that connect to and feed into the dual force mains by way of buried yard piping with associated valves, clean-outs, and appurtenances.

Provide grade level access to dry well with provisions to connect to submersible pump-to-pump-out the dry well in the case of flooding.

### **Piping and Utilities**

All on-site pump suction and discharge piping and associated motorized and manual valves and appurtenances including valve vaults. New potable water service and piping for wash down, the restroom, irrigation, and fire hydrant. Drainage, sewer, and utility piping. All buried steel piping must be catholically protected.

### **Lighting**

All luminaire shall be LED type. Exterior luminaire shall be dark-sky compliant and controlled via photocell and timeclock. Provide emergency egress lighting and illuminated exit signs along the path of egress and at each exit door.

### **Southern California Edison (SCE) Power Service**

SCE will supply 480-volt incoming power to the pump station via its own outdoor step-down transformer. Provide a meter and service entrance switchboard in a dedicated room with exterior access for OCSD and SCE. Coordination with SCE, determining the required size of the transformer to handle peak wet weather flow conditions, available fault current, transformer location, transformer installation requirements, and configuration and location of the incoming metering section, and service entrance switchboard.

### **Restroom**

Restroom will include a toilet and sink. The drain will be connected to an off-site gravity sewer isolated from wet well pressures and possibly surcharged gravity sewers. The restroom may be a part of the electrical building but must have an exterior door (no interior door to electrical room).

### **Site & Perimeter Wall**

Fully secured site with fencing and perimeter wall, gates, video cameras outside and inside all structures, and door security systems. Landscaping must be provided where needed to minimize visual impacts and be compatible with the surrounding development. Necessary modifications and improvements to the adjacent hardscape (curb, gutter, driveway access, drainage culvert, etc.). Site drainage must not leave the site. All onsite stormwater must drain into an upstream gravity sewer and not be affected by wet well pressures. Vehicle and equipment access gates will accommodate all maintenance activities. Architectural style of perimeter wall and buildings should be California Mission.

### **Onsite Standby Generator**

Permanently installed, diesel powered generator set fully enclosed in its own building to meet City noise ordinance standards. Generator will be sized for maximum anticipated load demand during peak wet weather conditions. Fuel tank capacity will be sized for 24 hours of operation at peak load. Provide fuel polishing system and dry disconnect on tank.

### **Portable Generator Connections**

Cam-lok style plug/receptacle connections will be provided for a roll-up “portable” generator(s) sized to support critical loads on each switchgear bus in the event the permanent generator fails or to provide power during electrical equipment maintenance.

### **Fire Protection**

A fire alarm system will be installed within all enclosed rooms. System shall have the ability to remotely notify OCSD.

### **Instrumentation and Control (I&C)**

Instrumentation and control in accordance with OCSD design guidelines and standards. Communications services from pump station to OCSD ICS network.

### **Safety**

Guard rails, tie off points, arc flash labeling, safety features, signage and railings around open shafts, shower and eye wash station, wash basin, etc. Flammable gas (both heavier than air and lighter than air), low/high oxygen, H<sub>2</sub>S, sensors in wet well and dry well while low oxygen and CO shall be monitored in the generator building. Additional gas monitoring as appropriate for odor control systems.

## **PROJECT ELEMENT 2 – MODIFICATIONS TO EXISTING GRAVITY SEWERS AND FORCE MAINS**

In association with the work involved to install the new pump station, new gravity sewer and new force main segments will need to be constructed. Tie new force main segments into existing force mains constructed under OCSD Project 3-62. Tie into existing Seal Beach gravity sewer and provide provisions to connect to future deeper sewer. This will require sidewalk/curb, paving, striping, gutter, traffic control systems, existing utilities, and public landscaping to be restored. All facilities in the public streets shall be abandoned in place per OCSD Standards.

## **PROJECT ELEMENT 3 – DEMOLITION AND ABANDONMENT OF EXISTING PUMP STATION AND FORCE MAINS**

The demolition and abandonment of the existing pump station will occur following complete commissioning and testing of the new pump station. All above-ground features will be removed and disposed of, including trees, shrubs, chemical storage and dosing equipment, equipment pads and buildings. Equipment, piping and appurtenances, and mechanical and electrical components will be removed and disposed of. Programmable logic controller modules will be turned over to OCSD. Below grade structures/improvements will be removed/abandoned as required. The hole created by the removal, and remaining portions of any structure or improvements, would then be cleaned of all wastewater and/or hazardous materials and filled with cement slurry. Remove all onsite piping and utilities. Remove all temporary facilities.

## **PROJECT ELEMENT 4 – ONSITE ODOR CONTROL FACILITIES**

The onsite odor control facilities will consist of upstream vapor phase odor control and liquid-phase odor control for downstream odor management. *Liquefied Oxygen (LOx) system with the required injection equipment will be designed for the pump station effluent force mains. Appropriate* with liquid and vapor phase sampling and monitoring *will be provided*. Proposed mechanical facilities shall be housed within buildings to mitigate noise. The building will be designed to minimize visual impacts and blend into California Mission architectural style. Components that don't match the architectural theme shall be screened from view. Design odor control mitigation measures for sewage bypassing and other stages of construction.

## **PROJECT ELEMENT 5 - TEMPORARY FACILITIES DURING CONSTRUCTION**

In certain cases, construction sequencing constraints may require the contractor to implement a temporary facility to be used during a certain portion of the construction period.

CONSULTANT shall identify in what instances such facilities are required or reasonably warranted and present those instances with implementation plans and construction sequencing constraints to OCSD for consideration. When such facilities are found to be either required or reasonably warranted, CONSULTANT shall provide sufficiently detailed drawings and specifications to be included in the Bid Documents that bidders understand what is required to provide and potentially operate the temporary facilities and that the reliability and performance of the facilities will meet OCSD's needs and reasonably mitigate construction risks. Examples of potential facilities include:

- Temporary odor control facilities
- Temporary noise abatement
- Temporary connections to facilitate start-up and testing
- Temporary piping to phase the replacement of the utilities
- Temporary standby power or temporary electrical equipment to accommodate modifications to SCE incoming power feed, relocation or replacement of the existing SCE transformer.
- Temporary communications.
- Temporary handling of flow

## **ASSUMPTIONS FOR LEVEL OF EFFORT**

For the purpose of estimating the predesign and design phase levels of effort, the CONSULTANT shall make the following assumptions regarding the project elements:

- Deeper sewer will be approximately 6,200 linear feet in length, 54-inch diameter FRP or RCP pipe at a depth of approximately 35 feet, with four or more manhole structures, running from Westside PS to SBPS. Include approximately 600 linear feet of casing. This assumes the existing 51-inch pipeline will remain in service and carry partial flows,

while the new pipeline carries only those flows that were previously pumped through Westside Pump Station.

- The new pump station will have one, self-cleaning wet well, connected to the upstream structure by a 60-inch diameter pipe.
- The construction of the new pump station will be constructed such that the Navy contamination plume will not expand.
- The pump station will be equipped with six pumps (5 duty, 1 spare) with extended shaft motors. Assume pumps are two different sizes to accommodate the range of flows.
- The existing pumps station will remain in service for the duration of construction and commissioning of the new pump station.
- New odor control measures will consist of onsite LOx storage and dosing station with injection to the force mains, and onsite two-stage (bio trickling filter plus carbon polishing) air scrubbing system on the upstream side of the pump station. Chemical storage must include secondary containment, capable of holding the full storage volume of the tank.
- Temporary liquid phase odor control facilities for the duration of construction.
- Remove existing SCE transformer and provide temporary power for the duration of construction.
- The on-site structure that combines Los Alamitos flows and Seal Beach flows will be cast-in-place concrete with a concrete cover and manhole cover.
- The new standby generator will be housed in its own building.
- A concrete block building will be constructed to house electrical and control equipment.
- All above-ground structures visible from the road will be designed with California Mission architectural style.
- The electrical building will be provided with air conditioning.
- Communications will be maintained to OCSD control network.
- Access to the bottom of the dry well will be provided by two staircases.
- New security fence, gate, and personal access gate and access road on navy property 30 feet parallel to the existing fence at the rear of the SBPS property per Navy standards.
- New perimeter walls along the west and south sides of the property with a secured and automated vehicle gate, 32-ft in width. A personal secured access gate should be provided on each wall.

- Onsite stormwater retention includes trench drains to capture hardscape and driveway runoff and infiltration to softscape and drainage to wet well.

## **DESIGN CONSIDERATIONS**

The following design considerations shall be implemented from Preliminary Design through Final Design.

With each design submittal, the CONSULTANT shall address operational and maintenance issues including access, safety, and security issues and how they have been addressed. The goal is to provide safe and adequate access to all equipment and instrumentation for operation, maintenance, repair, and replacement purposes. Maintain comprehensive data sheets of all equipment, valves, instrumentation etc. Data sheets should identify how these components will be accessed for operation, maintenance, and removal, which will later be used for development of the EID and SAT and Project Commissioning Dashboard. It is expected that updates within each design submittal will be triggered by changes from the previous.

### Operations and Maintenance

The goal is to provide sufficient access to all equipment that requires daily or regular operation or maintenance located on the floor or an elevated level using access steps/stairs with elevated platforms and elevated mezzanine type walkway with proper working space. In areas where it is impractical or not feasible to provide such platforms or access for operation or maintenance from the floor level or mezzanine level, the CONSULTANT is to bring this to OCSD's attention. In these cases, provide alternatives for operation or maintenance for OCSD to review. Equipment that requires significant force to operate such as valves shall be designed ergonomically to minimize the effort involved. Automate valves on the main sewage pump suction and discharge piping and valves located within confined space. Design piping systems so valves, pumps, flowmeters and other critical equipment can be removed while maintaining service. Provide means to bleed off pressure and drain components between isolation points required for operation or maintenance. Provide means for positive physical isolation for the replacement of each pump, the replacement of each isolation valve between the wet well and the pump, and the replacement of each isolation valve between the pump and the discharge manifold. Provide means to drain isolated suction or discharge piping to sump. Provide connections or accommodation for skillets, blinds, blanks, spectacle blinds, or spades for isolation of these areas and at other critical points. Provide bypass piping around the flowmeter.

Mechanical systems shall be ergonomically designed and have sufficient access for maintenance, removal, and replacement.

Provide a traveling bridge crane at the top of the pump room for lifting and removal of pumps, motors, valves, pipe segments and other heavy equipment, skids, or appurtenances. Equipment shall be located within the travel limits of the bridge crane. The system shall be designed so all pieces over 50 pounds can be removed with a maximum of two picks. One pick from the bridge crane and the other from a vehicle crane that is at grade level.

Provide heavy-duty floor-loading dumbwaiter that travels from grade level to mezzanine and ground floor of dry well for transport of tools and maintenance equipment.



Provide mechanical workstation at ground floor of dry well with stainless steel work table, chairs, wall-mounted LED lighting, power, compressed air supply, utility sink/potable water source, tool storage, and a selection of tools.

Provide equipment access hatch from grade to drywell such that man entry isn't required if the drywell gets flooded and to allow removal of equipment from the dry well.

### Safety

Provide Safety Data Sheets of all proposed chemicals to be utilized. The goal is to design engineering controls to mitigate or eliminate safety hazards. If the hazards cannot be engineered out of the equation, then mitigate the hazards by meeting all OSHA and OCSD standards and regulations. Ensure the status lights, signage, alarms, other instrumentation, and other safety measures are included in the design. Ensure guard rails, handrails, and other fall protection measures are put in place. Add accommodations for confined space entry including concrete inserts for davit arms, and anchor points rated for 5,000 pounds per person in strategic locations. Label mezzanines, anchor points, and lifting brackets for design load capacities.

The final flow-combining structure upstream of the wet well shall be located on OCSD property and/or not in the street, so traffic control is not required when accessing the structure for operation or maintenance.

## **ABBREVIATIONS**

The following abbreviations may be used on this project:

CEQA	California Environmental Quality Act
CPM	Critical Path Method
CSB	City of Seal Beach
Designer	The Engineering Design Consultant that shall be performing this Scope of Work
DM	Design Memo
DSX	Design Submittal X
EDG	Engineering Design Guidelines
FAT	Functional Acceptance Test
GWRS	Orange County Water District's Groundwater Replenishment System.
OCPW	County of Orange Public Works
OC Parks	Orange County Parks
OCSD	Orange County Sanitation District
ORT	Operational Readiness Test
P&ID	Process and Instrumentation Diagram
PDR	Preliminary Design Report
P1	OCSD Wastewater Treatment Plant No. 1, located in Fountain Valley
P2	OCSD Wastewater Treatment Plant No. 2, located in Huntington Beach
PRCS	Permit Required Confined Space
PRCSE	Permit Required Confined Space Entry
RAT	Reliability Acceptance Test
SAT	SCADA Administration Tool (database)
SOW	This Attachment A, Scope of Work.
RWQCB	Regional Water Quality Control Board

USACOE	U.S. Army Corps of Engineers
WoUS	Waters of the United States
WSPS	West Side Pumping Station

### III. PROJECT SCHEDULE

The table below lists the time frames associated with each major project deliverable and with OCSD's review and approval of those deliverables. CONSULTANT shall comply with the deadlines indicated in that table.

OCSD's Project Manager will issue an Administrative Notice to Proceed (NTP) that will authorize CONSULTANT to begin preparation of the Project Management Plan (PMP) specified under Task 2.6.1 Project Management Plan. The Administrative NTP does not authorize costs to be incurred for execution of the technical portion of the Work, except where specifically noted in the Administrative NTP.

Concurrent with OCSD's review and acceptance of the PMP, OCSD's Project Manager will issue a Preliminary Design NTP. OCSD's Project Manager will also issue a Final Design NTP upon OCSD's acceptance of the final Preliminary Design Report.

#### Project Milestones and Deadlines

MILESTONE	DEADLINE
Submit Project Management Plan (PMP)	10 workdays from Administrative NTP.
OCSD Review of PMP	10 working days from receipt of PMP. If the PMP is sufficient, the OCSD PM will set the date for the Kickoff Meeting. In any case, CONSULTANT shall issue a revised PMP within 5 working days of receipt of OCSD's comments for OCSD approval.
Kickoff Meeting	The kickoff meeting will be scheduled to coincide with the <b>Preliminary Design NTP</b> .
Preliminary Design NTP	
Preliminary Design Production NTP	5 working days from Preliminary Design NTP.
Submit draft Preliminary Design Report (PDR)*	140 workdays from the Preliminary Design NTP. CONSULTANT shall establish a schedule with the OCSD PM for separately submitting working drafts of each Design Memo for OCSD review prior to completing the draft PDR. This schedule shall factor in the logical sequence for completing the memos as well as both CONSULTANT and OCSD resources.

### Project Milestones and Deadlines

MILESTONE	DEADLINE
OCSD Review of draft PDR	20 workdays from receipt of Draft PDR. This review will happen concurrently with Value Engineering.
Review of Value Engineering Recommendations	20 workdays from receipt of OCSD Comments on Draft PDR and completion of Value Engineering. This effort includes OCSD and CONSULTANT.
Submit final Preliminary Design Report	40 workdays from close of Review of Value Engineering Report.
Final Design Notice to Proceed	15 working days from submittal of the final PDR to receipt of the Design Phase NTP.
Submit Design Submittal 1 (DS1)	60 workdays from Design Phase NTP.
OCSD Review of DS1	20 workdays from receipt of DS1
Submit Design Submittal 2 (DS2)	100 workdays from receipt of OCSD comments on DS1.
OCSD Review of DS2	20 workdays from receipt of DS2
Submit Design Submittal 3 (DS3)	120 workdays from receipt of OCSD comments on DS2.
OCSD Review of DS3	20 workdays from receipt of DS3
Submit Final Design Submittal (FDS)	40 workdays from receipt of OCSD comments on DS3. CONSULTANT shall stop work upon submission of DS3, except as required to participate in OCSD meetings, until receipt of OCSD comments on DS3.
OCSD Review of FDS	20 workdays from receipt of FDS
Final Technical Specifications and Plans	20 workdays from receipt of OCSD comments on FDS.

### Miscellaneous Due Dates:

Draft Groundwater Management Study	60 workdays from the Preliminary Design NTP.
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Risk Management Plan Due	120 workdays from the Preliminary Design NTP.
*DM1B Draft Preliminary Design Report	40 workdays from receipt of Draft PDR (DM1A – DM14)

The time frames specified in the table above are used to estimate the actual milestone dates based on the assumed NTP date, as shown in **Exhibit 02**.

The above schedule identifies OCSD's review period for each project submittal. The CONSULTANT shall not proceed with the design after each major milestone submittal. The CONSULTANT shall not start the Final Design until directed by OCSD.

OCSD will consider an alternative CONSULTANT-proposed schedule provided it is consistent with OCSD resources and schedule constraints and adds value to OCSD.

## IV. PROJECT EXECUTION

All OCSD projects are divided into six phases. CONSULTANT shall provide engineering services for all Project Elements listed in Section II of this Scope of Work for the following Phases:

- Phase 1 – Project Development (Not in this Scope of Work)
- Phase 2 – Preliminary Design
- Phase 3 – Design
- Phase 4 – Construction (Not in this Scope of Work)
- Phase 5 – Commissioning (Not in this Scope of Work)
- Phase 6 – Close Out (Not in this Scope of Work)

### PHASE 1 – PROJECT DEVELOPMENT

Not in this Scope of Work.

### PHASE 2 – PRELIMINARY DESIGN

#### TASK 2.1 – NOT USED

#### TASK 2.2 - PRELIMINARY DESIGN PRODUCTION

Preliminary Design Production (PDR Production) involves the preparation of design memos, drawings, calculations, and other supporting material resulting in the Preliminary Design Report (PDR).

The following requirements apply to PDR Production.

- Each design memo shall be submitted as a draft, along with any relevant associated drawings for OCSD review. Except where significant revisions are required, design memos need not be resubmitted prior to the compiled draft PDR.
- CONSULTANT shall schedule and execute the work so that draft design memos are produced and submitted early enough that OCSD comments can be addressed and the changes incorporated into the draft PDR. All significant equipment decisions are to be made before the start of Phase 3 –Design. At the end of Phase 2 – Preliminary Design, major design elements should be fixed and major equipment, building footprints, major structural elements, and process pipelines should be well defined and established. The extent of the design and the number and type of drawings should also be established.
- The design memos shall clearly document exact naming conventions to be used for all process equipment covered by the design memo.
- Each design memo shall identify any equipment and instruments that have fewer than three competitive suppliers. In those cases, the design memo shall recommend an appropriate procurement strategy compatible with California Law and OCSD policies.
- Where appropriate, OCSD will circulate design memos to permitting agencies for review. OCSD will review comments from those agencies and forwarded them to CONSULTANT. CONSULTANT shall respond to all OCSD and agency comments in writing and incorporate all comments into the final Design Memos as applicable.

### **Task 2.2.1 Preliminary Design Report (PDR) Contents and Organization**

The CONSULTANT shall combine the material specified above for the Preliminary Design Production tasks into a draft PDR. The PDR shall be structured as outlined below, with the contents corresponding to the tasks listed in this Scope of Work.

## **Volume 1 – Preliminary Design Report**

### **Table of Contents**

### **Executive Summary**

### **Design Memos**

Design Memo 1 – Los Alamitos Sub Trunk Extension Sewer Horizontal and Vertical Alignment Design and Pump Station Base Map  
 Design Memo 2 – Pump Station Alternatives and Basis of Design  
 Design Memo 3 –Geotechnical and Groundwater Management Study  
 Design Memo 4 – Structural and Architectural  
 Design Memo 5 – Civil, Landscaping, Irrigation, Noise and Utilities  
 Design Memo 6 – Mechanical  
 Design Memo 7 – Electrical and Standby Power  
 Design Memo 8 – Instrumentation and Control  
 Design Memo 9 - Odor Control and Air Quality Management  
 Design Memo 10 - Fire Protection, Security and Safety  
 Design Memo 11 – Hazardous Material Survey, Mitigation and Control  
 Design Memo 12 - Environmental, Permits, Agency Coordination, Community Outreach Program and Traffic Control  
 Design Memo 13 –Construction Phase Implementation, Constructability Issues, Cost and Schedule

Design Memo 14 – Facility Operation and Maintenance  
**List of Proposed Specification Sections**

**Volume 2 – Drawings**

General  
Civil  
Landscape  
Structural  
Architectural  
Mechanical  
Electrical  
Instrumentation & Control  
Telecom  
Demolition  
Traffic Control

**Volume 3 – Submittal Documentation**

Table of Contents  
Calculations  
Equipment Data & Catalog Cuts  
Decision Log  
Meeting Minutes

The Executive Summary shall summarize the conclusions of the Memos included in the report, and specifically include a summary construction schedule and construction cost estimate.

The draft PDR and final PDR shall be submitted in searchable PDF format legible on-screen and as a hard copy. The number of hard copies is indicated in **Exhibit 04**. The following requirements apply to the labeling and organization of the PDF submittal:

- Each design memo shall be a separate file/tab within the PDR.
- CAD Drawing files shall be submitted as a single compiled file, in accordance with the CAD & Drafting Standards Manual.
- The PDF files shall be submitted via Bluebeam in accordance with the CAD & Drafting Standards Manual, section 7.4.2 and the general Requirements contained hereon. In no case may drawings be submitted as separate PDF files for each drawing. The order of drawings in the PDF file shall match the list of drawings.
- These requirements do not affect the organization, naming, and submittal of native files for CAD or MS Office files specified elsewhere in this Scope of Work and OCSD Engineering Design Standards.

The OCSD Project Manager may request that the CONSULTANT submit an electronic proof set of the Draft PDR and Final PDR prior to hard copy production to initially confirm that the submittal is ready for printing.

### **Task 2.2.1.1 Design Memo 1 – Los Alamitos Sub Trunk Extension Sewer Horizontal and Vertical Alignment Design and Pump Station Base Map**

Design Memo 1 shall ultimately validate the depth needed in the new SBPS wet well by designing the Los Alamitos Sub Trunk Extension pipeline to a level that confirms the elevation in the pipe throughout its entire length. The northern portion of pipe shall be designed for a peak wet weather (PWW) flow rate of 16.50 MGD from three feed points near Westside Pump Station. The new pipe will be approximately 6,200 linear feet in length from Yellowtail Drive north of Westside Pump Station, to the upstream combining structure near the SBPS site.

A Peak Wet Weather Flow (PWWF) of 11.63 MGD will continue to flow through the existing 51-inch Seal Beach Sewer Interceptor, assuming it will remain in service and flows from the 51-inch will combine with the new Los Alamitos Sub Trunk Extension near the SBPS site.

A final length of new pipe shall convey the total combined Los Alamitos Sub Trunk flows, Seal Beach Interceptor flows and City of Seal Beach flows (34 MGD) from the upstream combining structure to the wet well inlet at the proposed Seal Beach Pump Station. This final length of pipe will be designed and built under the 3-67 project.

This design memo is broken into two parts. Design Memo 1A will consist of the following:

- Aerial and Topographical Survey.
- Development of a utility base map based on record drawings and visible indicators (valve cans, MH lids, etc.).
- Three proposed horizontal and vertical alignments. However, because proposed alignments will only be confined to currently established and available easements or right-of ways, a reduced number of options, will be considered with justification.
- One recommendation of a horizontal and vertical alignment, along with a suitable construction methodology for each major segment of its construction.

Consideration should be given to the known soil and groundwater conditions including the Navy's contamination plume in making a recommendation. Include in the recommendation, the material of construction of pipe and appurtenances, size, capacity, velocity, and access methods. If facilities are determined necessary outside the project boundaries, indicate the recommended improvement. The alternatives shall be presented with life cycle costs and consideration to operation and maintenance issues. The CONSULTANT shall submit this memo to OCSD for review and acceptance before proceeding with Design Memo 1B.

Design Memo 1B will further refine the selected alignment's plan and profile by proposing location of manholes and points of connection and confirming utility locations and depth through potholing and geophysical investigations. (Note: DM1B draft PDR is due 40 workdays following the remainder of the draft PDR)

The parameters required for preliminary and final design shall be developed, though final design of the pipeline will be completed under a separate project.

### **Easements, Property Boundaries and Work Area Limits (DM 1A)**

The CONSULTANT shall identify easement and property boundary requirements and prepare all easement legal descriptions, including performing any field investigations, and surveys required to identify and prepare easements.

Unless otherwise directed, the CONSULTANT shall identify, survey, and show all property and city boundaries, and all existing and proposed easements, within and/or adjacent to the project boundaries.

CONSULTANT shall show and explicitly identify the limits of work for all portions of the project, including any restrictions to the work allowed in any area, e.g., whether the area can be used for parking or laydown.

All survey research and survey field work shall be performed by a Professional Land Surveyor licensed by the State of California.

### **Aerial Photography (DM 1A)**

Review historical aerial photography as far back in time as possible. Document locations of prior structures that could affect earthwork required for force main preferred alignment. Use this data for pump station DM. Investigate via potholing as necessary.

### **Utility Research (DM 1A)**

CONSULTANT shall perform a thorough search of all utilities and all other facilities above or below ground that may be impacted by the work for all applicable Project Elements. OCSD and non-OCSD data and records shall be researched and on-site inspections shall be completed. Utilities include all those on-site and those in the public right of way including, utility company-owned and public agency-owned piping, duct banks, facilities, structures, and other interferences. Emphasis shall be given to document abandoned structures and utilities. The search shall include utilities within the public right-of-way, and those located on public or private property and OCSD property impacted by the proposed project. The search shall include the records and plans of OCSD and all public and private companies and utilities.

### **Review of OCSD Records (DM 1A)**

OCSD's "As-built/Record" plans may be incomplete or inaccurate with respect to the routing of individual utilities, pipelines, etc. in the vicinity of the project. CONSULTANT shall check OCSD records against those of the other agencies, companies, and utilities. These may include, but not be limited to, oil, gas, fuel, water, reclaimed water, sewer pipelines, traffic control facilities, telephone and electrical conduit and duct banks, storm drains, manholes, and other structures. Provide ground penetrating radar at all critical locations to verify utility locations and check for unknown utilities. Emphasis shall be given to document abandoned structures and utilities.

### **Review of Outside Agency Records (DM 1A)**

Investigation of existing utilities shall be in accordance with the respective ASCE guidelines, except as amended by this Scope of Work. Refer to CI/ASCE 38-02, Standard Guidelines for



Collection and Depiction of Existing Subsurface Utility Data for details. Subsurface investigation for all utilities in and around the work area shall be performed to Quality Level D and Quality Level C. All utilities shall be plotted both in plan and profile on a scaled drawing

CONSULTANT shall contact, in writing, all jurisdictional agencies and utilities owners to inform them of OCSD's project. CONSULTANT shall request plans showing any of the agency's or utility's facilities, pipelines, etc. in the project area. CONSULTANT shall also request plans and schedules for any proposed construction in the project areas.

CONSULTANT shall meet with applicable field staff from each agency to confirm the completeness of their research. Abandoned utilities and subsurface structures shall also be considered. CONSULTANT shall document the contacts and information requested and received, including that from Underground Service Alert (USA). OCSD shall be copied on all correspondence between CONSULTANT and public and private agencies, and utility companies. CONSULTANT shall submit a copy of all documentation to OCSD with an itemized submittal letter. CONSULTANT's Project Manager shall sign the transmittal cover letter and the cover letter shall confirm that CONSULTANT has sent a representative to each agency/company/utility, performed on-site inspections for each utility, and has listed the utilities.

CONSULTANT shall contact USA and request a substructure listing for the project area. CONSULTANT shall follow through with due diligence on utilities that do not participate in the USA program, unknown owner of a facility and/or abandoned utilities.

#### **Utilities for Adjacent Properties (DM 1B)**

CONSULTANT shall investigate all utilities serving properties adjacent to the work and submit a spreadsheet at the end of the utility research accounting for all anticipated utilities for OCSD review, with the following information:

- List all utilities anticipated or each adjacent property.
- Whether or not each such utility was found on as-built drawings of any agency, with an identification of the agencies identifying such utility.
- Whether or not the utility was field located by utility through USA process, and if so by which agency.

#### **Potholes and Geophysical Investigation (DM 1B)**

CONSULTANT shall submit, for acceptance by OCSD, recommendations on which utilities should be investigated to Quality Level A and where Quality Level B investigations should be performed. A potholing plan and geophysical investigation plan shall be developed including proposed pothole locations and type of geophysical investigation.

CONSULTANT shall then "pothole" and perform geophysical investigation on all utilities described and shown in the accepted Potholing Plan/Geophysical Investigation Plan. CONSULTANT's staff shall be on-site during potholing to provide direction to potholing crew. OCSD staff may also be present during potholing.

CONSULTANT shall provide all work necessary, including, but not limited to:

- Documentation of information
- Notification of USA's "Dig Alert"
- Providing field survey
- Obtaining required permits
- Submission of traffic control plans
- Provide traffic control
- Soft dig potholing
- Excavating
- Backfilling
- Repairing pavement to local jurisdiction requirements

"Soft" excavation potholing methods such as vacuum extraction is preferred; however, excavation methods shall be chosen to adequately define the utility. Crosscut trenches may be preferred for defining some utility locations. Hydro-jetting soft dig should be avoided in sandy, wet or contaminated soil conditions.

Potholing subcontractor shall measure and document the depth of pavement and of base material at each pothole, and every five feet along crosscut trenches. Potholing activity shall meet all Stormwater Pollution Prevention requirements.

CONSULTANT shall provide a licensed land surveyor or hire a licensed survey subcontractor(s) to field locate the actual horizontal and vertical location of the constructed potholes. Survey controls shall be set and coordinated with the survey controls used on previous construction drawings. City and County control points shall be checked; northing, easting and elevation data for each pothole shall be shown on the Contract Drawings; and physical tie-ins provided in order to easily re-establish pothole locations after construction.

CONSULTANT shall supply and supervise survey work and subcontractors needed to perform the pothole work. Survey datum differences shall also be reconciled. CONSULTANT shall backfill and repair potholes consistent with the requirements of the local jurisdiction. If CONSULTANT is unable to determine local jurisdiction requirements prior to the proposal, CONSULTANT shall assume the following requirements:

- The materials removed from the excavation may not be used for backfill.
- Hauling off and disposing of excavated pothole material. In this case, excavation holes shall be filled with a cement slurry mix from the bottom up. The excavated materials shall be tested for hazardous materials and disposed of offsite accordingly. Testing shall be the minimum required for classifying the materials. The potholing samples

shall be tested by a California Environmental Laboratory Accreditation Program (ELAP) certified laboratory to identify characteristics of hazardous waste. A substance shall be considered hazardous if it possesses properties of toxicity, ignitability, corrosivity and/or reactivity per California Code of Regulations Title 22, Section 66261. In addition, the laboratory testing shall include an on-site Organic Vapor Analyzer (OVA) test for potential hydrocarbon contaminants. Should the OVA reading be equal to or greater than 45 ppm, further laboratory testing shall be performed to include Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) test per EPA guideline 8020 and Total Hydrocarbons (TPH) tests per EPA guideline. All testing results shall be provided to OCSD with a location map.

- AC pavement shall be replaced to full depth or the structural section (AC & Base) plus two inches with hot mix asphalt unless otherwise required by the City or Caltrans. Cold mix shall only be allowed when the patch will be replaced by the project and where approved by the City or Caltrans.
- Concrete pavement shall be replaced to full depth plus two inches with Portland cement unless otherwise required by the City or Caltrans.
- Underground Service Alert paint markings shall be removed within 90 days.

CONSULTANT's fee proposal shall include the cost for potholes (base) and unit cost for additional potholes.

- The cost (base) shall provide for 50 potholes. Potholes on the pump station site shall not exceed 10 and the remaining shall be in the public right of way. The CONSULTANT shall plan for two mobilizations at the pump station and up to six in the public right of way and channel crossing. Potholes shall fulfill Quality Level A requirements.
- CONSULTANT's fee proposal shall include a cost for geophysical investigation. The cost shall provide for geophysical (Level B) during preliminary design. Coverage areas shall be for the pump station site and along the entire Los Alamitos Sub Trunk Extension alignment. The intent is to help locate utilities prior to potholing and to identify undisclosed utilities that will later be potholed to confirm presence.

All utilities encountered during the preliminary design shall be shown on the Plans. Project work that requires other agencies to relocate existing utilities shall be coordinated during the design by CONSULTANT. Each subsurface utility shown on the drawings shall include the Quality Level to which it was investigated as required by CI/ASCE 38-02. Pothole locations shall be shown on drawings with survey information.

The CONSULTANT shall identify easement, right of way boundaries, and property boundary requirements. Property boundaries and easements shall be shown on drawings.

The CONSULTANT shall identify work area limits on drawings and include any restrictions to the work area including its use as laydown and storage area.

OCSD Maintenance will **not** provide any support to perform the work described in this section. The CONSULTANT shall provide the following:

- Personnel to open manhole lids and test for flammable gases before opening
- All traffic control required to perform the work described in this section
- Prepare traffic control plans, apply for encroachment permits, and pay for all associated fees. Fees will be reimbursed as a direct cost.

#### **Task 2.2.1.2 Design Memo 2 – Pump Station Alternatives and Basis of Design**

The purpose of this memorandum is to document the work to be completed by the CONSULTANT regarding the preliminary design of the pumps and wet well, performance of hydraulic calculations, and the development of the basis of design including pump type alternatives, pump configuration and mechanical layout, preliminary site plan and layout drawings, and life cycle costs. This memorandum shall focus on the pump configuration, layout, pump type and sizing alternatives, the wet well, and the electrical (major equipment, conduit runs and cable tray runs, location of panels) and mechanical configurations (pipe, HVAC, bridge crane and dumbwaiter) within the pump station structures. Other design issues will be addressed in other memoranda or studies. Work required to satisfy other portions of the scope of work shall be incorporated into the alternative development. The CONSULTANT shall consider all aspects of pump station design such as building layouts and OCSD Design Guidelines.

#### **Pump Alternatives**

Pump Station Alternatives shall include; 1) immersible vertically driven with 2-vane non-clog or screw impellers or, 2) extended shaft motor.

Pump selection will include; 1) pumps of all the same size/capacity, and 2) pumps of two different sizes to accommodate the full range of flows.

#### **Pump Analysis**

For each pump alternative, the CONSULTANT shall perform hydraulic calculations to size and select the pumps, motors, and drives including NPSH calculations. The hydraulic analysis shall include graphical representation showing the performance for each combination of pumps, high and low wet well levels and various FM system pressures with one or two force mains in operation. System pressures shall include the range of the Hazen-Williams or Manning's coefficients. The analysis shall include a summary of the dynamics of the wet well level and pump speeds with the starting or stopping of a pump including fill and draw calculations. Detailed calculations and graphic representation of each hydraulic case shall be submitted. The analysis shall look at fill and draw operation during the lowest flow conditions and the number of pumps starts and stops per hour. The analysis shall also include a summary of the dynamics of the wet well level and pumps speeds during a cleaning cycle.

Utilize the design flow rates developed from the hydraulic modeling study performed under Project 3-62 to properly size the pumps and determine the quantity of pumps. Use the following design parameters: a) Peak Wet Weather Flow (1-hour average, using a 10-year storm event, year 2040) 34 MGD; b) Peak Dry Weather Flow (1-hour average, year 2040) 10.9 MGD; c) Average Daily Dry Weather Flow (daily average, year 2016-17 from recent flow

monitoring) 8.0 MGD; and d) Minimum Daily Dry Weather Flow (1-hour average, year 2016-17) 3.3 MGD.

The pumps shall be selected to pass suspended solids, rags, fibrous material, and floatables as well as grit and heavy material. Rags must also be passed at minimum speeds by the pump, valves, meter, and piping and appurtenances. The CONSULTANT shall determine how the facility will operate under minimum daily flows for each alternative and shall delineate how often the pumps cycle on and off during the fill and draw cycles. Establish motor and pump vibration tolerances and acceptance criteria. Ensure adequate motor cooling is provided at minimum speeds.

The CONSULTANT shall present, in tabular form, each alternative describing its merits, advantages, disadvantages, life cycle costs, and operation and maintenance issues. CONSULTANT shall make one recommendation based on analysis, including a discussion of why the proposed configuration is preferred over another likely configuration.

The CONSULTANT shall provide a single wet well that shall be of the self-cleaning trench style. Wet well design shall meet the intent of Hydraulic Institute (HI) guidelines and minimize odors and corrosion. Determine the size/configuration of the wet well. The goal of the wet well size and configuration is to provide one hour of storage capacity (including upstream collection system capacity) before spilling during typical future peak daily flows. If this size is not feasible per the site restrictions, provide alternative recommendations.

In development of the design alternatives and configurations the CONSULTANT shall consult extensively with OCSD's staff. OCSD may authorize the CONSULTANT to eliminate pump alternatives during analysis if the CONSULTANT and OCSD conclude that an alternate configuration is not cost effective or constructible.

### **Basis of Design**

The CONSULTANT shall provide recommendations for the most advantageous alternatives in a draft memorandum. Once OCSD has selected the preferred alternative, the CONSULTANT shall complete the remaining calculations and assessments required to establish all final design parameters for the pumps and station configuration and layouts and present these in the final memorandum (part of the PDR). The requirements in the most current EDGs shall be met. Any deviations or exceptions to the EDGs shall be pre-approved by OCSD before submitting. Pump hydraulics shall be finalized and complete detailed hydraulic calculations provided that include developing graphics that plot system curves, pump performance curves, NPSH curves, power curves, and efficiency curves at all the various operating conditions and for each sequence of pump operation. Graphics shall be designed to be easily read and interpreted. Samples shall be provided to OCSD for review prior to presentation of final graphics. NPSH margin shall be in accordance with the EDG, which is more restrictive than HI Standards. All the equations and calculations and data used to develop the data for the curves shall be provided along with the narrative explaining the methodologies used.

In preliminary design, the CONSULTANT shall develop harmonic factors for the concrete structure.

A limited analysis on operating levels shall be performed for this DM's alternatives for both the current (no deeper sewer) and future (with Los Alamitos Sub Trunk sewer installed) flow and

water level conditions. Operating philosophies shall be determined for the selected pumps and types within the Facility Operation and Maintenance DM.

CONSULTANT shall determine the “flood” level in the dry well, and what equipment should be above/below this level, and where a spill would occur for various system failures.

Design parameters for ancillary features, such as designing ventilation facilities and the sump pumps for the pump room drainage shall be calculated and established.

Corrosion control requirements; identify corrosive environments and recommend galvanic protection requirements, materials for piping, conduits, gates, covers, grating, and structural elements. Identify protective coating requirements for corrosive and non-corrosive areas.

### **Validation of Wet Well Configuration**

After OCSD’s acceptance of the draft Design Memo 2, a physical model in accordance with the Hydraulic Institute standards shall be constructed of the pump station wet well including the first reach of the upstream gravity system and any appurtenances on or in the suction piping. This is to confirm that favorable flow conditions would be created over the full range of flow rates. The physical model shall be reasonably large geometric scale to minimize viscous and surface tension scale effects, and to reproduce the flow pattern in the vicinity of the pump intake, and to be large enough to allow visual observations of flow patterns, accurate measurements of swirl and velocity distribution and sufficient dimensional control. The model shall be scaled and constructed in accordance with Hydraulic Institute recommendations with all pertinent sump structures and/or piping features that affect the flow. In addition, the Influent Structure for the incoming, existing and future connections to the pump stations will be modeled to verify the effects of the cascading flows.

This project scope includes that physical modeling and testing. The physical model of the pump station shall further refine wet well and piping dimensions. The physical model findings shall be incorporated into the PDR Executive Summary and in the Final Design.

### **Task 2.2.1.3 Design Memo 3 - Geotechnical and Groundwater Management Study**

CONSULTANT shall secure the services of a qualified Geotechnical Engineering firm to prepare a desktop study Preliminary Geotechnical Design Report and ~~Geotechnical Baseline Report~~ that addresses geotechnical concerns for all applicable Project Elements of the project Scope of Work. The Geotechnical Design Report shall be prepared during the Preliminary Design Phase and the ~~Geotechnical Baseline Report~~ shall be prepared during Final Design Phase (see Task 3.3).

### **Review of Existing Data**

CONSULTANT shall review all known soils and inspection reports, including 3-62 Evaluation Memo 2 Appendix 2 N&M Prelim PGR Force Mains. The review shall include all relevant reports.

## **Desktop Study Geotechnical Data Report**

The desktop study Geotechnical Data Report (GDR) shall summarize the review of existing data and make recommendations regarding the provisions to be included in the construction specifications and regarding the Design of facilities. Specification recommendations shall be prepared for the following topics: dewatering, trench shoring, backfill, compaction, and road repairs. Design recommendations shall include active, at-rest, passive and dynamic earth pressures, foundation type, allowable bearing pressure, coefficient of friction between the foundation and soils/subgrade, pile or mat foundation design data, settlement potential, pipe bedding, trench shoring/maximum cut slope requirements, soil contamination/corrosion potential, structural needs, pipe stability, expected earthquake displacement, and other CONSULTANT design requirements. The GDR shall also make recommendations regarding the demolition of the existing pump station.

## **Delivery of Desktop Study**

The draft and final desktop study GDR shall be submitted to OCSD for review and comment. All comments received regarding the GDR shall be addressed.

Refer to the Engineering Design Guidelines, Chapter 1 for further requirements. Some of the related design requirements can be found in the Engineering Design Guidelines, Chapter 2, Chapter 8, and Chapter 9.

## **Groundwater Management Study**

The CONSULTANT shall provide options and a final recommendation for building the pump station and the future deeper sewer while avoiding any movement of the Navy's contamination plume during construction activities. The CONSULTANT shall document the contaminants of concern, map the plume concentration boundaries, and provide the assumptions for each option proposed.

The CONSULTANT shall provide a study outlining each option with cost, schedule/duration, permit requirements and risks associated with each option. The hydrogeologic investigation conducted under 3-62 shall be reviewed and evaluated if CONSULTANT proposes dewatering requirements for inclusion in the specifications. Additional information regarding the Navy's groundwater research may be found on the following websites:

[https://www.cnic.navy.mil/regions/cnrsw/installations/nws\\_seal\\_beach/om/environmental\\_support/environmental\\_cleanup/seal\\_beach/documents.html](https://www.cnic.navy.mil/regions/cnrsw/installations/nws_seal_beach/om/environmental_support/environmental_cleanup/seal_beach/documents.html)

[https://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=DOD100355700](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=DOD100355700)

The accepted option shall be full developed during Final Design Phase.

A draft Groundwater Management Study outlining plausible construction options shall be submitted to OCSD for consideration 60 working days following Preliminary Design NTP.

#### **Task 2.2.1.4 Design Memo 4 - Structural and Architectural**

The purpose of this memorandum is to document the work to be completed by the CONSULTANT regarding the structural and architectural elements of the project. Alternatives shall be developed for site layout.

The architectural design shall be for:

- Motor/Pump Room
- Electrical Building
- Generator Building
- Chemical Storage/Dosing and Air Scrubber Building
- Landscaping (See Design Memo 5)
- Perimeter Wall, fencing and screening of equipment and appurtenances
- Security features (see Design Memo 10)
- Include conceptual layout of a future replacement Pump Station in the current proposed PS layout.

A restroom shall be provided onsite. Install the restroom door on the exterior wall. The walls within the restroom must be sealed from the pump or electrical room.

The architectural design shall use building exterior features, size, orientation, site layout, hardscape and landscaping to accomplish the architectural goal for the site. Exposed mechanical and electrical features on the exterior of the buildings shall be kept to the absolute minimum and those required shall be recessed and/or covered to blend into the architectural features. Mechanical feature like chemical tanks shall be screened with hardscape, buildings or architectural facades. Civil, electrical, and structural design shall not advance to Final Design until an architectural site layout, perimeter wall concept and exterior building features have been approved by OCSD.

The CONSULTANT shall develop three preliminary layouts with different building combinations and orientations. Once the quantity and general layout of buildings is approved, the CONSULTANT shall develop multi-viewed renderings. Architectural renderings and preliminary and final design shall be completed by California licensed Architects. A Public/Commercial Architect shall work with a Landscape Architect to develop all renderings. The architects shall consult with OCSD Security layering requirements before beginning any renderings.

The chosen rendering shall undergo four revisions that include checks against each final design submittal to ensure all appurtenances, piping, conduit, and all other industrial elements are strategically screened from public view.



Provide structural engineering and design for the entire pump station facility. Detailed drawings to be generated in Phase 3. The harmonic factors for the concrete structure developed during DM2 – Pump Station Alternatives and Basis of Design shall be incorporated into the final design and into the Contract Documents as vibrations parameters.

Use the reinforcing distribution factor for severe sanitary exposure for wet well analysis. Design shall ensure water tightness of the structure.

Provide a finite element computer aided structural and dynamic analysis for proposed design. Determine the natural frequency of the structural support systems for rotating equipment and piping. Ensure that pumps and motors and valves can be removed from building via a bridge crane or other method without going through the electrical and control room.

#### **Task 2.2.1.5 Design Memo 5 – Civil, Landscaping, Irrigation, Noise, and Utilities**

The purpose of this memorandum is to document the work to be completed by the CONSULTANT regarding the civil, landscape, irrigation, and utility design elements of the project. Alternatives for landscaping and hardscape shall be prepared to support the building architectural alternatives. Landscaping and hardscape shall be designed in conjunction with the building architecture to provide an overall aesthetically pleasing site that screens facilities from public view and meets City of Seal Beach criteria.

#### **Civil Improvements**

Design facilities to maintain separation of off-site drainage from on-site drainage. On-site drainage shall be contained on-site and shall percolate into the ground or be conveyed by gravity to the wet well. Include flap gates to contain odors. Design hardscape and grade the site to allow percolation of rainwater where feasible. Design on-site facilities to contain 24-hour 85<sup>th</sup> percentile rain event and force larger flows off-site to City facilities. Design facilities to meet agency requirements with regards to pervious areas and other pertinent criteria. Recommend permanent Best Management Practices for incorporation to the final design.

Design storm drains to eliminate ditches along southern and western edges of property. Connect to existing inlet at City storm drain on the northeast corner of the intersection of Seal Beach Boulevard and Westminster Boulevard. Backfill and compact the existing ditches to grade.

Design to prevent releases of industrial stormwater (process/chemical area) and sanitary sewer overflow releases, to meet NDPES permit conditions.

Review maintenance vehicle and chemical deliver truck sizes and design site and building layout and access roads to accommodate. The largest vehicle to access the site will be a full length chemical delivery truck. OCSO Maintenance vehicles will need access to clean the wet wells and remove equipment (via a crane). Maintain separation between chemical loading area and wet well access manholes, so that chemical delivery does not disrupt maintenance operations.

Paving shall be designed to handle H-20 loading and loads from delivery trucks and cranes. The two entry points shall be maintained to allow drive through access. Provide design of all

utilities required for the project including City water, natural gas (if required), electricity, storm drain, fiber optic, sewer, cable, telephone, and as required for the project. The sewer lateral from the restroom shall be routed to the next upstream manhole. Include back flow prevention devices and meet cross connection requirements. Coordinate with utility providers to ensure service can be provided. Provide all parameters required for civil preliminary and final design.

Design Navy security fence 30-feet offset from existing fence at rear of SBPS property. During 3-62 Preliminary Design, preliminary plan layouts were prepared showing how the new station and Navy security fence improvements may exist on the property. These preliminary plan layouts are provided to the CONSULTANT. See **Exhibit 15**.

Electrical and generator building foundations shall be located above the 100-year storm event elevation.

In conjunction with the geotechnical studies, indicate the limits of excavation and shoring requirements.

### **Landscaping and Irrigation Improvements**

Landscaping shall be completed by a Landscape Architect, duly registered in the State of California. Landscaping shall be coordinated to blend in with the California Mission architectural style. Landscaping shall be incorporated into architectural renderings. Conduct soil tests and recommend amendments as necessary. Minimize the amount of irrigation and maintenance required by softscape.

### **Noise**

Provide noise attenuation measures within the standby generator room, odor control system, and ventilation fans. Provide noise attenuation on the inlet and exhaust sides of the generator system. Provide critical hospital grade silencers on the generator. Assess the need to place noise attenuation on the ventilation systems of the other buildings. Prepare a written noise report as part of this memorandum that includes:

- Visiting the site and conduct ambient noise measurements to establish baseline.
- Identify external sources of noise.
- Identify potential methods for defining noise impacts.
- Develop noise model consistent with noise impact assessment methods.
- Determine exterior noise levels and compliance with assessment standards.
- Determine noise impacts of the proposed improvements.
- If required, develop mitigation measures to meet design standards.
- Determine compliance with City ordinance.

## **Utilities**

CONSULTANT shall determine all required utilities and coordinate acquisition of service and coordination with utilities.

### **Task 2.2.1.6 Design Memo 6 – Mechanical**

The purpose of this memorandum is to document the work to be completed by the CONSULTANT regarding the Mechanical elements of the project (except for the main pumps which are covered in Design Memo 2). The mechanical elements include sump pumps, HVAC, ventilation, air compressor, and miscellaneous appurtenances. Mechanical design shall meet currently adopted building code requirements.

Mechanical systems shall be ergonomically designed and have sufficient access for maintenance, removal and replacement (See Design Memo 14). Indicate how access will be provided for operation and maintenance.

## **HVAC**

Provide preliminary calculations, and equipment and material recommendations for those facilities that require air conditioning or ventilation. Ventilation levels shall conform to NFPA 820 requirements for the dry well for reducing the area classification level even though the dry well will be designed for Class I, Division 2. Design shall be completed by a California registered Mechanical Engineer.

## **Sump Pumps**

Document the basis of sump pump sizing. Develop a reasonable design approach to maintain pump reliability even when pump room floods. Design the sump dimensions to adequately handle the explosion proof submersible pumps while minimizing fluid volume after shut off. Design the sump pump system with a standby pump. All sump pumps shall be the same size and type. Sump pumps shall be submersible, non-clog sewage pumps with chopper blades. Power and control cable connections shall be plug in type.

## **Pump Room Accessories**

Document basis of the sizing and selection of the following equipment.

Cranes and hoists. Size a traveling bridge crane at the top of the pump room for lifting and removal of pumps, motors, valves, pipe segments, and other heavy equipment, skids, or appurtenances. Design the pump room layout and crane system such that the hoist can be moved directly over the centerline of each pump, pump and motor combination, valves, and piping. The capacity of the system shall be designed to lift two times the weight of the heaviest pump and motor combined or the heaviest piece of equipment. Add lifting brackets to walls and slabs to accommodate lifting of equipment other than the equipment described above. Design the facility configuration such that removal of items from the pump room can be accomplished without making openings into the electrical or control room or other unclassified building areas. Design the system to remove items with a maximum of two lifts.

Heavy-duty floor-loading dumbwaiter that travels from grade level to mezzanine and ground floor of dry well for transport of tools and maintenance equipment.

Compact, sound attenuated air compressor system to run pneumatic tools for operation and maintenance of the station.

### **Miscellaneous**

Document sizing and selection criteria for motorized vehicle entry gates.

### **Plumbing Fixtures**

Restroom fixtures shall be institutional heavy duty and stainless-steel construction. Provide stainless steel emergency shower for chemical areas. Design the restroom in a separate enclosed room as part of the building over the pump room or one of the other buildings.

### **Task 2.2.1.7 Design Memo 7 – Electrical and Standby Power**

CONSULTANT shall obtain and adhere to OCSD's most recent Electrical Design Guidelines on the following subjects before proceeding with the preliminary electrical design. Particular subjects of concern include the following:

- Electrical equipment naming conventions and tagging
- Switchgear automatic transfer scheme
- Arc flash mitigation measures

CONSULTANT shall provide the following:

- Preliminary Load List with motor horsepower. This list shall show all major and auxiliary electrical loads for each voltage level. Load lists shall be provided for dry weather and wet weather conditions.
- Preliminary standby power requirements (see Engineering Design Guidelines, Chapter 10, Section 10.7 "Distribution System Requirements"). Include general requirements and preliminary equipment sizing.
- OCSD will perform preliminary calculations for the short circuit analysis, load flow/voltage drop study, motor starting study, preliminary settings for the protection device and coordination study, and preliminary arc flash analysis and approach recommendations. The CONSULTANT shall provide OCSD with the SCE incoming short-circuit information and a single line diagram with circuit breaker ratings and cable sizes and lengths.
- Hazardous Area Classification requirements (see Engineering Design Guidelines, Chapter 10, Section 10.6.1 "Hazardous Areas" and NFPA 820 requirements).
- SCE Coordination. Size SCE transformer to handle peak wet weather flow condition. Coordinate with SCE for available fault current, location, and sizing of new transformer,

installation requirements and configuration of metering section, and service entrance switchboard.

- Anticipated maximum demand load on the SCE service when the existing pump station is operating, and the new pump station is being commissioned and recirculating the flows within the new pump station wet well.

#### **Task 2.2.1.8 Design Memo 8 –Instrumentation and Control**

CONSULTANT shall recommend instrumentation and control solutions to support this Scope of Work.

#### **I&C Design Requirements for Existing Facilities**

OCSD has established standards for Programmable Logic Controller (PLC) Programming, Operator Interface (OI) programming, a database propagation system and register addressing. The CONSULTANT shall incorporate OCSD's standards in the P&ID drawings and in all control strategies. Control logic diagrams are not required for this project. **Exhibit 12** in this Scope of Work presents an example of the Process and Instrumentation Diagrams (P&ID's).

Non-ISA standard symbology is used to depict the OCSD's standard logic templates in the P&ID. Control strategies shall call out appropriate OCSD standard logic templates and describe interconnecting and custom logic. CONSULTANT shall provide attention to the following:

- Tag Numbering System. Provide the basis for equipment tag numbers as developed from numbers provided by OCSD. CONSULTANT shall develop proposed Area Numbers for all major equipment for OCSD review and approval. The development shall follow OCSD tagging procedures. (see Design Standards, the Tagging Procedure standard)
- Process & Instrumentation Diagrams (P&ID). Each P&ID shall be coordinated with other design memos and shall show all major and most auxiliary equipment, final elements, and instrumentation. The P&IDs shall be coordinated with the operating philosophies.
- Control cabinet locations, quantity, sizes, and configuration. Cabinet sizes shall be based on the largest components available from OCSD approved manufacturers and shall conform to the OCSD's standard PLC cabinet layout for pump stations. These layout dimensions will be carried out through the final design.
- Coordinate vendor proposals for any integrated systems (including vapor-phase odor control and liquid-phase odor control).
- De-ragging controls shall be added to pumps and system description shall be included.
- Preliminary Communications Block Diagrams including data network block diagram, preliminary CCTV block diagram, and preliminary telephone block diagram. (see Engineering Design Guidelines, Appendix A, Section A.2.21 "Network Block Diagram" for requirements)

- Interim Control Plan describing how the existing and new pump stations will be controlled and will communicate with the Plant 1 Control Center when the new pump station is in RAT. Interim Control Plan shall be integrated into and become a part of the Implementation Plan.

The CONSULTANT shall evaluate the project area systems (I&C and the related systems) and the respective proposed system philosophy. E.g.:

- Control schematic requirements per OCSD Design Guidelines Appendix B including hardware interlocks, local control stations, and I/O upgrades.
- Requirements for field instrumentation.
- Control panel rack layout.
- Software requirements for manual and automatic control capabilities, control interlocking, and upgrades to full automation with unattended operation as required per OCSD Design Standards (unless otherwise determined by OCSD and CONSULTANT during the design period).
- I&C requirements due to the new Electrical distribution equipment discussed in DM 7 - Electrical.
- I&C requirements for fire protection and the HVAC system discussed in DM 6 – Mechanical and DM 10 – Fire Protection, Security and Safety.

#### **Task 2.2.1.9 Design Memo 9 –Odor Control and Air Quality Management**

CONSULTANT shall review the odor control evaluation memo and mechanical design memo provided by project 3-62. These documents evaluated multiple types of liquid and vapor phase odor control for permanent installation as well as temporary installation during construction activities. The original evaluation was done with respect to the original design intent of rehabilitating the Seal Beach Pump Station. The updates below shall incorporate the updated flow rates and changes due to the replacement of the pump station.

The CONSULTANT shall augment the existing evaluation report that investigated the site-specific issues regarding odor control, established odor control strategies, and produced design parameters for odor control facilities. Augmentation shall include:

- Calculating foul air volume and sizing the facility with the updated volume determination
- Determining and using the correct dilution factor used for foul air calculation
- Preparing a safety evaluation and discussion of risks associated with the selected treatment options

- Discussing 2 vendor options for liquid oxygen injection into the system, including a discussion of procurement options and more detailed layouts and operational philosophies.
- Comparing the options of LOx delivery versus on-site generation
- Performing a high level feasibility review to reuse the existing pump station dry well and/or wet well for odor control facilities following the decommissioning and demolition/abandonment of the existing pump station

#### **Task 2.2.1.10 Design Memo 10 - Fire Protection, Security and Safety**

CONSULTANT shall prepare a Fire Protection and Safety Requirements Report packaged in a design memo that evaluates fire protection and safety requirements for both proposed facilities and existing facilities within the project area.

##### **Fire Protection**

The Fire Protection portion of the report shall identify locations of fire hydrants and potable water piping that can be used to supply hydrants and possible sprinkler systems. The report shall also include a Field Findings Report on fire protection test results. This report shall summarize the potable water system pressure and available volume for fire protection and shall identify if a booster pumping system is required.

For purposes of the proposal, CONSULTANT shall assume that the existing potable water system has adequate pressure and volume to supply the required sprinkler systems and hydrants.

##### **Security**

Assess security issues at the pump station site. Determine what level of security is required per DHS guidelines. Interview OCSD security personnel and review internal documents and provide recommend products for interior and exterior CCTV for the site, intrusion switches that transmit alarm signals to the SCADA system on all exterior gates and panels, doors, and hatches and into any hazardous or classified areas, and cyber locks on building doors and site gates.

Provide preliminary exterior lighting schedule and layout. Bear in mind, the exterior lighting shall be balanced with architectural landscape elements and methods to prevent lighting from being a nuisance issue with local neighbors. Implement OCSD security standards and protocols.

##### **Design Safety Requirements**

The Safety Requirements portion of the memo shall identify all potential safety issues for Contractor, public, and OCSD staff affecting the construction of all equipment, process areas, and buildings. As a minimum, the CONSULTANT shall consider the following and provide respective recommendations:

- Fall hazards, pits, and confined spaces

- Excavation and trenching hazards
- Electrical hazards
- Site access
- Hazardous substances

The CONSULTANT shall identify all potential safety issues affecting the operation and maintenance of all equipment, process areas, and buildings. As a minimum, the CONSULTANT shall consider the following and provide respective recommendations:

- Floor openings and hatches
- Floor holes
- Roofs (access and equipment maintenance)
- Walking-working surfaces (buildings, stairwells, tunnels, and outdoor equipment areas)
- Noise
- Ergonomics (including equipment operation)
- Clearance and passageways (for installing devices, panels, or valves).
- Cranes and other hoisting equipment
- Barricades for protection of electrical panels or gas/water line connections
- Atmospheric alarm device for locations where there is potential for hazardous atmosphere, which includes warning lights.
- Locations of equipment that may lead to a safety issue.
- Applicable safety issues and solutions included in OCSD Safety Standards.

#### **Task 2.2.1.11 Design Memo 11 - Hazardous Material Survey, Mitigation and Control**

The CONSULTANT shall review the hazardous material surveys found in the PDR of Project No. 3-62, and otherwise provided by OCSD (OCSD SBPS Asbestos Lead Hazardous Survey Report 2015 and OCSD SBPS Asbestos Lead Hazardous Survey Report 2019). See **Exhibit 08**.

The design memo shall address how the hazardous materials mitigation and control should be handled, the estimated cost for removing the material and placing it into OCSD-furnished containers, and a separate cost for final disposal of the material in the containers by an OCSD-hired Contractor.



The hazardous material surveys and this DM shall be utilized in Task 3.1.1.3 – Technical Specifications to edit the project’s specification for Hazardous Materials Mitigation and Controls.

#### **Task 2.2.1.12 Design Memo 12 – Code, Environmental, Permits, Agency Coordination, and Traffic Control**

The purpose of this Design Memo is to document the work to be completed by the CONSULTANT regarding the environmental, permitting, agency coordination, and traffic control elements of the project. This design memo shall document what requirements apply to the design and operation of the proposed facilities.

##### **Code Requirements**

Identify the following that apply to the project:

- Building codes and other regulations
- State and federal accessibility requirements (e.g. ADA)
- State and federal safety standards and regulations.
- Ventilation requirements in accordance with NFPA 820
- Seismic design criteria used based on a literature review of existing geotechnical information; evaluation of proximity to faults, seismic classification assigned to each structure, and seismic calculations.

##### **Environmental and Regulatory Requirements**

This portion of the Design Memo shall include the Mitigation, Monitoring and Reporting List required by OCSD’s CEQA – Facilities Master Plan. A number of mitigation measures required by existing CEQA documentation are included in OCSD’s General Requirements, which will be included in the bid documents. CONSULTANT shall provide a matrix identifying what portion of the General Requirements addresses the requirement.

Other mitigation measures necessary for this project that are not already included in OCSD’s General Requirements shall be listed in a similar matrix.

##### **Permitting Management Plan**

CONSULTANT is responsible to identify all agencies that require permits to design, install, construct, maintain, and operate the new force mains or that have jurisdiction or who could place constraints on the project. Within this Design Memo, provide a Permit Management Plan in tabular form, including a list of required documents by each permitting agency, the actual permit required, applicable agency contacts, deadlines to submit completed applications, anticipated processing durations, anticipated costs, major concerns/issues, etc. The permitting management plan is to be developed by the CONSULTANT to keep track of all permits. This document shall be updated throughout the permit acquisition process.

CONSULTANT shall participate in meetings with the staff of the applicable agencies as necessary to ensure that the design of facilities is consistent with the agency requirements. Suggested attendees are the Specialist, Project Manager, and either the Principal Engineer or the Project Engineer. OCSD staff shall attend all meetings. Minutes of meetings and documentation of phone calls and other communication shall be prepared and submitted with the design submittals.

CONSULTANT is also responsible for obtaining permits required to complete the design phase of the project including permits for soil borings, surveying, geophysical testing, testing, potholing, flow monitoring and/or odor sampling. Traffic control is required when in the public right-of-way and shall be provided by the CONSULTANT.

### **Agency Coordination**

Coordination between agencies, including but not limited to City of Seal Beach, the Navy, and OC Healthcare Agency, will be necessary throughout the project. Coordination may include but is not limited to: attending design, landscaping and architectural coordination meetings and reviewing others design plans to insure they do not conflict or restrict the use of or access to the new pump station.

### **Traffic Control**

CONSULTANT shall prepare and submit all traffic control plans and obtain applicable encroachment permits to support investigative activities such as potholing, sampling, exploratory excavations, geophysical, geotechnical investigation, land surveying, access to manholes, and obtain approval from the governing agency/city.

### **Task 2.2.1.13 Design Memo 13 - Construction Phase Implementation, Constructability Issues, Cost and Schedule**

This Design Memo shall address issues affecting and affected by the implementation of the proposed project. Contents of the Design Memo shall include the following issues:

#### **Identification of Adjacent Projects**

The CONSULTANT shall identify and describe projects which might impact or be impacted by this project. Adjacent projects may include OCSD and any other known non-OCSD project that might require coordination with the project. The description shall document spatial aspects of the adjacent projects, their schedule, and any other interdependencies. The Design Memo shall describe the type of coordination required to minimize negative impacts on all of the projects.

#### **Preliminary Construction Sequencing Plan.**

The plan shall include the following material:

- Description of sequencing constraints and the reasons for those constraints.
- Implementation alternatives that might expedite construction and commissioning, avoid sequencing constraints, and/or mitigate schedule and cost risks.

- A detailed narrative describing a likely sequence for how construction and commissioning would be completed. The purpose of the narrative is not to decide exactly how the project should be completed, but to demonstrate that there is at least one viable method to complete the work, and to clarify what risks may be associated with that plan. The narrative should include sequential graphics clearly describing how the work can be phased.
- A CPM construction schedule showing in the interrelationships of the elements of the project. The schedule shall be prepared using software intended for schedule projects. Examples of acceptable software packages include Microsoft Project and Primavera.

### **Review of Constructability Issues**

The Design Memo shall describe all project-specific issues that might impact bidding, construction, and commissioning. The Design Memo shall describe the following aspects of each issue:

- The consequence of the issue occurring.
- The likelihood that the issue will occur, including what factors would cause it to occur, or not.
- Suggested mitigation measures and when mitigation measures might be implemented.
- Potential project changes and approaches that may be warranted to address the issue.

### **Temporary Facilities During Construction**

CONSULTANT shall identify in what instances such facilities are required or reasonably warranted and present those instances with implementation plans and construction sequencing constraints to OCSD for consideration. CONSULTANT shall provide drawings and recommend specifications to be included in the Bid Documents that bidders understand what is required to provide and potentially operate the temporary facilities and that the reliability and performance of the facilities will meet OCSD's needs and reasonably mitigate construction risks. Examples of potential temporary facilities include:

- Temporary odor control facilities
- Temporary noise abatement
- Temporary connections to facilitate start-up and testing
- Temporary piping to phase the replacement of the utilities
- Temporary standby power or temporary electrical equipment to accommodate modifications to SCE incoming power feed, relocation or replacement of the existing SCE transformer, the transfer of electrical loads from existing electrical equipment to new electrical equipment and the phasing of the electrical equipment installation.
- Temporary communications

### **Temporary Handling of Flow**

CONSULTANT shall design measures for the temporary handling of flows to be implemented by the Contractor during construction considering OCSD's goal of zero sewage spills. This design memo shall describe any pumped bypasses, gravity bypasses, diversions, plugs, shutdowns, connections/tie-ins, etc.

If existing facilities such as valves, gates, stop logs, etc. are being considered for use for shutdowns or diversions, this design memo shall include a plan for testing those facilities during Phase 3 - Design to verify that they will function adequately for the purpose. If testing cannot be performed, CONSULTANT shall identify the risks associated with using the facility for bypassing, along with contingency plans and mitigation measures to be implemented if they are found not function adequately during construction.

The design memo shall include the following information for each identified bypass:

- Bypass pipe size, material, redundancy, location, protection, traffic issues, etc.
- Bypass pump sizing requirements, redundancy, monitoring, operation, maintenance, etc.
- Plugging and flow-through plug sizing.
- Diversion requirements including manhole level monitoring requirements.
- Any other descriptions required to confirm that the proposed bypassing approach is viable and ready for further development during detailed design.

### **Preliminary Design Construction Cost Estimate**

The CONSULTANT shall prepare an AACE International Class 3 cost estimate per OCSD's Engineering Design Guidelines, Chapter 01. A sample construction cost estimate format is provided in **Exhibit 05**.

Data used to prepare the cost estimate, including vendor quotations, shall be included as an attachment to this Design Memo.

### **Demolition of Equipment and Instrumentation Databases (EIDs)**

CONSULTANT shall identify all equipment and instruments listed in the existing EIDs that will be demolished. The identification shall be noted in the MS Excel spreadsheets to be submitted with the PDR.

#### **Task 2.2.1.14 Design Memo 14 - Facility Operation and Maintenance**

This design memo shall include the following material:

- Sampling provisions, with references to the Process Flow Diagrams, including the proposed nature of the sampling (grab, composite, flow-weighted composite), and the

anticipated frequency of sampling. This topic will require the involvement of OCSD Operations and Environmental Compliance staff.

- Operating Philosophies which include process control descriptions with information on normal, abnormal, and emergency operating criteria including an additional operating philosophy to be used during the interim period prior to new Los Alamitos Sub Trunk Extension pipe construction. See Engineering Design Guidelines, Appendix A, Section A.3.7 “Operating Philosophy” for requirements.
- System failure mitigation analysis. This analysis shall look at different failure modes of the critical mechanical, electrical, instrumentation, and control systems. Critical systems are those systems that would prevent the pumps from pumping if they failed. For each failure mode, a strategy to respond and remedy the failure shall be proposed. This list of failure modes shall be carried into final design, updated, modified, and submitted with each submittal.
- Develop a strategy for removal and replacement of each piece of equipment and pipe segment with regards to pump room layout and crane system. Include strategy for accessing equipment safely during routine maintenance.
- Standard Operating Procedure for future planned total pump station bypass. Include list of all material and equipment necessary as well as recommendation for equipment and material purchases necessary to achieve total bypass.
- Preliminary assessment of O&M staffing requirements, consisting of identifying labor hours and types of staff (see Engineering Design Guidelines, Appendix A, Section A.3.11 “Asset Management Plan” for requirements).
  - Include list of anticipated maintenance schedules for equipment
  - Include required provisions and access areas for equipment maintenance

#### **Task 2.2.2 Preliminary Design Drawings**

Preliminary Design drawings shall be bound into a separate volume. Drawing requirements by discipline are described in **Exhibit 01**.

#### **TASK 2.3 –VALUE ENGINEERING ASSISTANCE**

CONSULTANT shall participate in a Value Engineering (VE) program as described in the EPA publication entitled “Value Engineering for Wastewater Treatment Works”, dated September 1984. The workshop will be managed primarily by an independent VE consultant hired by OCSD.

Examples of topics that may be covered in the Value Engineering Study include: project concepts, operations requirements, maintenance requirements, user friendliness and safety, possible project improvements, cost saving measures, public nuisance issues, site access, safety, and constructability.

### **2.3.1 Workshop Participation**

The VE workshop will be held by the VE Consultant at an off-site location in or around the City of Fountain Valley, California, over a period of three (3) days as follows:

- CONSULTANT shall prepare all documentation to be reviewed at the workshop and mail the materials to all VE workshop participants at least one (1) week prior to the workshop.
- The morning of Day One (1) shall involve a detailed presentation by CONSULTANT to the VE Consultant and OCSD staff regarding the design and construction project to cover the design concepts for each project element. The presentation shall be followed by a site walk. A question and answer session shall follow and continue through lunch which will be arranged for and provided by the VE Consultant. OCSD stakeholders may also be available to answer questions.
- During the afternoon of Day One, CONSULTANT shall give a detailed presentation to the VE Consultant and OCSD staff regarding the design and construction project schedule and a history of the decisions which limit the project and its sequencing. A question and answer session for this presentation shall follow. OCSD stakeholders may also be available to answer questions.
- Day Two (2) will be a work day for the VE Consultant. At least one designated individual from the CONSULTANT shall remain to answer questions and gather additional information that the VE Consultant might need. OCSD stakeholders may also be available to answer questions.
- The morning of Day Three (3) will be reserved for the VE Consultant to formulate their recommendations in preparation of their presentation that afternoon to CONSULTANT and OCSD staff. At least one designated individual from CONSULTANT shall be available again to help the VE Consultant in their efforts. OCSD stakeholders may also be available for a discussion. The afternoon presentation by the VE Consultant will outline their recommendations that are anticipated to be the body of the VE report. A designated individual from VE Consultant will record the comments and take notes from the workshop to document the process.

### **Task 2.3.2 Review of Value Engineering Recommendations**

CONSULTANT shall evaluate the VE Report recommendations, conduct additional engineering analyses as determined by OCSD, and meet with OCSD to discuss the results of the engineering analyses and incorporation of all additional recommendations into a Final VE Report. CONSULTANT shall assume an allowance of 200 hours for this task.

### **TASK 2.4 – NOT USED**

### **TASK 2.5 - PERMITTING ASSISTANCE**

CONSULTANT shall provide all the labor and services to obtain all required permits and signatures from affected agencies on OCSD's behalf prior to the bidding phase. CONSULTANT shall prepare all permit applications, including plans and exhibits required by the issuing agency, and shall furnish the required number of copies of all plans and exhibits,

and attend meetings with permitting agencies at the request of OCSD. OCSD staff will sign all applications.

CONSULTANT shall obtain the services of a Permitting/Right-of-Way Specialist (Specialist) who will be responsible for coordinating, negotiating, advising, and overseeing the entire process. Multiple Specialists for different permits are acceptable. Each Specialist must have experience in the applicable area. The Specialist will be responsible for coordinating and communicating with the granting entity, and ensuring the CONSULTANT is providing all of the required information at each phase of a submittal. The CONSULTANT shall provide full support to the Specialist and will be involved in face to face meetings during each design phase (Preliminary and Final Design Phases). The CONSULTANT's Project Manager shall be responsible for managing the Specialist. Below, the use of the word CONSULTANT also implies the Specialist. It is not required that a Specialist be a subconsultant. However, an "in house" Specialist must display extensive experience in the area of importance and should not be the Project Manager.

CONSULTANT services related to Permitting Assistance may span across Phase 2 – Preliminary Design and Phase 3 - Design. For all applicable Project Elements of this Scope of Work, CONSULTANT shall provide Bid Documents that ensure that the facility features and the facility performance, and construction procedures comply with all conditions of existing permits and permits required to construct this project.

With the exception of construction contractor-furnished permits, OCSD staff will execute all applications. All permit fees will be paid directly by the OCSD and will not be part of CONSULTANT's fee.

#### **Task 2.5.1 SCAQMD Permitting**

CONSULTANT shall provide assistance to OCSD in obtaining the South Coast Air Quality Management District (SCAQMD) permits for the project. The CONSULTANT shall provide completed SCAQMD permit application forms and supplemental information packets for an onsite generator, a chemical dosing system, and onsite odor treatment.

##### **2.5.1.1 Demonstration of Compliance with New Source Review for Criteria Pollutants (SCAQMD Reg. XIII)**

Emissions Estimation: CONSULTANT shall estimate emissions of criteria pollutants in terms of both concentrations and mass rates to determine if there is an increase in "uncontrolled" emissions (mass rates) from the project. CONSULTANT may utilize air sampling data previously collected by OCSD. If OCSD's data is not adequate, CONSULTANT shall perform source tests and/or conduct fate-transport modeling. CONSULTANT shall submit the emission estimates to OCSD for approval prior to proceeding with the subsequent work.

Best Available Control Technology (BACT): If there is an increase in "uncontrolled" emissions (any amount for NO<sub>x</sub> and CO and greater than 1 lb./day each for VOC, NH<sub>3</sub>, and PM<sub>10</sub>), CONSULTANT shall evaluate and determine BACT for the affected pollutant(s).

Air Dispersion Modeling: If the net increase (uncontrolled or controlled if air pollution control system is employed) in NO<sub>x</sub>, CO, and PM<sub>10</sub> emissions are greater than the allowable emissions as established in the SCAQMD Rule 1303 Appendix A: Table A-1, CONSULTANT

shall conduct air dispersion modeling to demonstrate that the project will not exceed the ambient air quality standards as listed in the SCAQMD Rule 1303 Appendix A: Table A-2. Prior to conducting this task, CONSULTANT shall submit the proposed modeling methodology for OCSD's acceptance.

CONSULTANT shall use EPA's AERMOD dispersion software. OCSD has an existing ISCST model built for a previous odor modeling project which requires substantial revisions to correct deficiencies and to update structures built since the model was last updated. CONSULTANT may use the data in the existing model, provided CONSULTANT verifies the accuracy of the data.

#### **2.5.1.2 Demonstration of Compliance with New Source Review for Air Toxics (SCAQMD Rule 1401)**

Emissions Estimation: CONSULTANT shall estimate emissions of Toxic Air Contaminants (TACs) in terms of both concentrations and mass rates for each of the TAC listed in SCAQMD Rules 1401 and 1402 – "Proposed List of Air Toxic Target Compounds for POTW." CONSULTANT shall submit the emission estimates to OCSD for acceptance prior to proceeding with the subsequent work.

Air Dispersion Modeling and Health Risk Assessment: If there is an increase in emissions of any TAC, CONSULTANT shall conduct air dispersion modeling and health risk assessment to demonstrate that the project will not result in an increased Maximum Individual Cancer Risk (MICR) greater than one-in-one million ( $1.0 \times 10^{-6}$ ). Prior to conducting this task, CONSULTANT shall submit the proposed modeling methodology for OCSD's acceptance prior to conducting the work.

Best Available Control Technology for Toxics (T-BACT): If the MICR from the project is greater than one-in-one million ( $1.0 \times 10^{-6}$ ), CONSULTANT shall evaluate and determine the T-BACT.

The air dispersion modeling shall be conducted using the EPA's AERMOD dispersion software. The health risk assessment shall be conducted per SCAQMD's latest "Risk Assessment Procedures for Rule 1401 and 1402.

#### **2.5.1.3 Demonstration of Compliance with SCAQMD Rule 1403**

If the Hazardous Material Surveys determine the presence of asbestos, CONSULTANT shall adhere to AQMD Rule 1403 to limit asbestos emissions during building and demolition activities.

#### **2.5.1.4 Demonstration of Compliance with Odor Nuisance (SCAQMD Rule 402)**

The results of the foul air characterization and odor dispersion modeling conducted under this task may be used to demonstrate that the project complies with SCAQMD Rule 402.

#### **2.5.1.5 Planning and Design Strategies for Air Pollution Control System**

If an air pollution control system is required for BACT, T-BACT, and/or Odor, CONSULTANT shall be responsible for planning and design strategies to meet regulatory and OCSD



standards and perform any additional air dispersion modeling to determine the efficacy of the proposed air pollution system. All exhaust stacks, vents, and sample ports required shall meet SCAQMD's Guidelines for Construction of Sampling and Testing Facilities.

#### **2.5.1.6 Demonstration of Compliance with SCAQMD Rule 212**

If there is a K-12 school within 1,000 feet of the project, CONSULTANT shall notify OCSD for further instruction.

#### **Task 2.5.2 Navy Permitting**

CONSULTANT shall provide assistance to OCSD in obtaining the permits for the project (license for non-federal use of Dept of the Navy Real Property for survey aerial targets along Seal Beach Blvd and perhaps geotechnical borings, construction permit, right-of-entry permit for secondary security fence, groundwater management, etc.).

#### **Task 2.5.3 City of Seal Beach Permitting**

CONSULTANT shall provide assistance to OCSD in obtaining the City of Seal Beach encroachment permits for project construction, as well as permits for survey work, potholing, and geophysical investigations. The project shall be processed through the City of Seal Beach to ensure Planning, Environmental, Utilities, Landscape Maintenance, Fire, and Public Works concerns are incorporated. Obtain an encroachment permit. The CONSULTANT shall assume a minimum of four submittals. The first preliminary submittal shall be at the Draft PDR stage. Formal submittals with traffic control plans shall be at DS3.

#### **Task 2.5.4 Coastal Commission Permitting**

CONSULTANT shall provide assistance to OCSD in obtaining the Coastal Commission permit for the project. Assume submission of Coastal Commission Exemption Request including preparation of application form, cover letter and plans, and making follow up calls until permit exemption is received.

#### **Task 2.5.5 Stormwater Permitting**

CONSULTANT shall provide assistance to OCSD in obtaining the Stormwater permit for the project. CONSULTANT shall determine and specify the preliminary Risk Level and Project Type using the California State Water Resources Control Board's Storm Water Multiple Application and Report Tracking System (SMARTS) based on the R-Factor obtained from US EPA's online Rainfall Erosivity Factor Calculator for Small Construction Sites. CONSULTANT shall determine which OCSD master specification is appropriate for use.

### **TASK 2.6 - PROJECT MANAGEMENT**

CONSULTANT shall be responsible for managing CONSULTANT's project execution, schedule, budget, subconsultants, and coordination with other projects. The following project management requirements apply to both Phase 2 – Preliminary Design and Phase 3 - Design.

### **Task 2.6.1 Project Management Plan**

CONSULTANT shall prepare a Project Management Plan (PMP) prior to beginning technical work on the project. The purpose of the PMP is to ensure that the work is properly planned so that:

- The resources are efficiently used to complete the project scope accomplish the project objectives.
- The work is planned to meet the specified schedule while providing appropriate opportunities for OCSD input.
- Quality control and quality assurance measures are planned and implemented to meet OCSD's expectations.

The PMP shall focus on project-specific information and be as concise as possible to document the required information. Where CONSULTANT has a standard procedure for some activity, that procedure shall be referenced, and not repeated in detail.

### **Task 2.6.2 Project Management Progress Meetings**

CONSULTANT shall conduct monthly project management meetings with OCSD's Project Manager and the CONSULTANT's Project Manager. The purpose of the meetings will be to review CONSULTANT's Progress Report. Meetings should be arranged so that the most recent Progress Report is available for the meeting. Other meetings shall be scheduled on an as-needed basis.

### **Task 2.6.3 Project Schedule**

CONSULTANT shall create a detailed project schedule using a Critical Path Method approved by OCSD Project Manager. The schedule shall be cost loaded and capable of calculating earned value. The schedule shall include milestones for all dates listed in Section III – Project Schedule. The schedule shall be based on the same work breakdown structure used for estimating earned value as described in Progress Reports. Schedule updates shall be submitted with the monthly Progress Report.

At a minimum, the schedule shall indicate the following:

- Projected start date and finish date for each activity
- Each project task and subtask in the WBS with predecessors and successors
- Major meetings and workshops
- Physical percent complete for each activity in the WBS and percent complete by Phase

CONSULTANT shall prepare planned, actual and earned value curves for the Baseline Schedule and for monthly updates. Monthly updates shall also include Cost Performance Index (CPI) and Schedule Performance Index (SPI) calculations.

#### **Task 2.6.4 Project Logs**

CONSULTANT shall produce and maintain the following logs through the course of the project:

Project Decision Log. The project decision log shall track decisions made during workshops and meetings, and as a result of OCSD review of deliverables. The log shall include the date of the decision, the title of the meeting where it was made (if applicable), a description of the decision, and a brief summary of the impacts.

Action Item Log. The action item log is used to track action items generated during meetings. Action items may only be assigned to members of the OCSD or CONSULTANT teams. If action is required by a different party, the action item shall be assigned to the person on the team to track who will track the action item with that person. The action item log is not intended to include normal CONSULTANT tasks, nor to include comments on deliverables. The Action Item log shall include a tracking number coded to the date, a date it was created, a description of the action required, the lead person, and the date it was resolved. If action is required by more than one person, the person who will be asked to coordinate that action shall be listed.

Design Issues Log. The Design Issues log shall list general comments and concerns raised by OCSD staff during project meetings. An example of a design issues would be a request raised during Preliminary Design for a particular type of hose bibb to be used during construction. Such detail is not usually provided during Preliminary Design, so the comment would be tracked on the Design Issues Log to be verified prior to completion of the detailed design. This log is not intended to track OCSD comments on submittals. The log shall include a very short description of how the design issue will be addressed. The Design Issues log will be used during review of major submittals to confirm that the issue has been appropriately addressed.

Meeting Log. See Task 2.8 Workshops and Meetings, Workshop and Meeting Planning.

Risk Management Log. See Task 2.7 – Risk Management, Risk Mitigation Measure Log

#### **Task 2.6.5 Progress Reports**

CONSULTANT shall submit monthly progress reports at the same time as monthly invoices that include the following contents:

- Work activities completed to date, in the current reporting period, and projected for the coming month.
- A brief description of outstanding issues and their potential for impact on scope, schedule (design and construction), budget (design and construction) and quality.
- Potential changes in the project scope or design scope.
- Budget status including estimates of actual costs to date, earned value, costs to complete, and costs at completion. The budget status over time shall be presented on a graph with associated tabular data indicating for each month the actual costs incurred, earned value, and planned value.

- A discussion of corrective actions to be taken to avoid or mitigate cases where estimated costs at completion exceed budgets.
- Schedule status, including an updated project schedule as a color hardcopy and as a native format electronic file.
- A discussion of corrective actions to be taken to avoid or mitigate cases where the project schedule is expected to be delayed.
- Updated Project Decision Log
- Updated Action Item Log
- Updated Design Issues Log
- Updated Meeting Log
- Updated Risk Management Log
- Summary of the status of CONSULTANT invoices, including identification of invoices not yet submitted and submitted but unpaid invoices.
- Overall project budget and schedule completion in graphical format on the same graph. Show actual budget used, original schedule completion, and actual estimated project completion on the graph.
- The approved WBS shall form the basis for reporting the status of each Scope of Work task in the monthly project Progress Report and the project Invoices.

All calculations of earned value and estimates to complete shall be made at the same level of detail as included in the Cost Matrix and Summary submitted with CONSULTANT's proposal. Furthermore, for estimating earned value, tasks shall be further broken down to subtasks as approved by the Project Manager. Progress reports shall include the basis for estimating earned value for each task and subtask.

#### **Task 2.6.6 Project Invoices**

CONSULTANT shall prepare and submit monthly invoices to OCSD no later than the first Wednesday of the following month. Invoices shall be submitted for every month that work is being performed, unless OCSD's Project Manager has provided prior approval for combining the work of two months into a single invoice.

The invoices shall document the man-hours and billing rate for each person that works on the project. Overhead, profit and any direct costs shall also be shown for each task. As part of the summary section of the invoice, CONSULTANT shall also include the following information:

- Budget
- Current billing period invoicing

- Previous billing period “total invoiced to date”
- Budget Amount Remaining
- Current billing period “total percent invoiced to date”

Although CONSULTANT is required to track costs at the same level of detail as in the Cost Matrix and Summary for monthly Progress Reports, costs for invoicing shall be grouped into the following work packages.

Work Package	Description	Tasks
3146	Preliminary Design	All Phase 2 tasks, except those listed above.
3158	Environmental Documentation	Task 2.2.1.12
3250	CONSULTANT Services During Design	Tasks 3.6 through 3.10
3251	Design Submittal 1	Tasks 3.1 through 3.4, divided into effort by design submittal. FDS is charged against DS3.
3252	Design Submittal 2	
3253	Design Submittal 3	
3254	Bid Support Services	Task 3.5

Approval of an invoice by OCSD requires a Progress Report for the period covered by the invoice. Payment of an invoice will be delayed until the Progress Report is submitted.

OCSD will provide a sample invoice structure to CONSULTANT at the beginning of the project.

#### **Task 2.6.7 Management of Subconsultants**

The CONSULTANT shall be responsible for managing all subconsultants, including the assignment of scope, management of deliverables and schedules, reporting of progress, invoicing, and quality control.

#### **Task 2.6.8 Coordination with Other Projects**

The project shall be a complete and fully functional facility that is integrated with existing facilities and coordinated with other construction projects. CONSULTANT shall review reports, plans and specifications to identify potential conflicts with the following adjacent projects.

The following projects may impact or require coordination with this project:

- 3-62 Westminster Blvd Force Main Replacement Project. This project established some basis for design of the Seal Beach Pump Station, including peak wet weather

design flow, architectural style, liquid and vapor phase odor control, and establishing that the new SBPS will be built on the existing site, and the existing SBPS will remain in use for the duration of construction.

- J-120 Process Control Systems Upgrades. This future project will upgrade the existing Supervisory Control and Data Acquisition (SCADA) Systems for the treatment plants and pump stations which includes Human Machine Interface (HMI) hardware and software, SCADA servers, historian, and a select number of Programmable Logic Controllers (PLCs).

## **TASK 2.7 - RISK MANAGEMENT**

OCSD staff will develop a project-specific Risk Management Plan (RMP) and update the plan at key points in the project. CONSULTANT shall assist OCSD in managing risks per the tasks described below. The RMP is intended to cover preliminary design phase, design, and construction phase risks.

OCSD staff will prepare and manage the RMP documents. CONSULTANT's responsibilities for preparing the RMP consist of participation in the risk Workshops, maintaining a log of risk mitigation measures, and providing risk updates in monthly progress reports.

### **Task 2.7.1 Risk Mitigation Measure Log**

Following OCSD's completion of the RMP, CONSULTANT shall prepare a log of all the mitigation measures recommended in the plan to be implemented. The log is likely to include measures to be taken during preliminary and final design, as well as during bid phase and construction. The log is not intended to track mitigation measures that would be implemented only if and when a particular risk occurs.

The log shall include the following information for each recommended mitigation measure:

- A brief description of the mitigation measure and the risk it is intended to address.
- A description of who has the lead to implement the measure.
- What components of the project design, specification, plans and other documents would need to incorporate or address the measure.
- The time frame for completing the measure.
- A brief summary of the status of the measure, to be used in on-going updates.

The Risk Mitigation Measure Log will be used for on-going risk management and as a basis of reviewing CONSULTANT submittals.

### **Task 2.7.2 Risk Monitoring Updates**

Prior to monthly Project Management Meetings, CONSULTANT shall review the RMP and update the Risk Mitigation Measure Log. The monthly Progress Report shall include a discussion of the following risk issues:

- Identification of all risks included in the RMP that have occurred since the last monthly report
- Identification of all risks included in the RMP that have been resolved or are no longer a risk
- Identification of new risks that have occurred or been identified since the last progress report.
- An update of the Risk Mitigation Measure Log reflecting the status of each recommended mitigation measure.

The risk discussion in the monthly progress report shall be included in the agenda of the monthly project management progress meeting.

## **TASK 2.8 – PRELIMINARY DESIGN PHASE WORKSHOPS AND MEETINGS**

CONSULTANT shall hold meetings and workshops throughout the project to keep OCSD apprised of the job, review work-in-progress, share information, discuss project submittals, present findings of technical analyses, receive and resolve comments, and obtain decisions and direction by OCSD staff. This task defines the major meetings and workshops to be held by the CONSULTANT in accordance with the requirements of OCSD's Engineering Design Guidelines. CONSULTANT shall also hold additional meetings as required to keep OCSD apprised of the job, to review work-in-progress, and to receive and resolve comments.

When informal meetings or conference calls are held during the course of the project, the CONSULTANT shall document all conclusions reached in those meetings by an email to the OCSD Project Manager and Project Engineer describing the context of the meeting, the discussions, and the conclusions. The email shall be sent within three workdays of the information meeting or conference call. Discussions and decisions made without documentation from an email will not be recognized as having occurred.

### **Workshop and Meeting Planning**

Due to limited OCSD staff availability, some meetings may need to be scheduled up to four weeks in advance to find a time when all the required OCSD team members are available. On projects with many meetings, there is also a potential that a meeting will not be held until it is too late. To prevent this, the CONSULTANT Project Manager shall create and maintain a log of all anticipated meetings. The log shall also be used to track submission, review and finalization of agendas and minutes.

The log shall include, as a minimum, the following information for each meeting:

- Subject of meeting. If the meeting is specifically included in the scope, use that title. Provide enough of a description that no two meetings have the same exact subject description.
- Scheduling Reference. Examples might include "four weeks after Kickoff Meeting", "Upon submittal of DM 5", or "one week after receipt of the draft DM."

- Date. If the meeting is too far in the future to schedule, indicate that this date is tentative.
- Date Minutes Drafted. This should be the date that the draft minutes were transmitted to OCSD.
- Date Minutes Reviewed. This should be the date that OCSD transmitted its comments on the minutes or indicated that there were no comments on the minutes.

### **Workshop and Meeting Agendas**

CONSULTANT shall submit an agenda to OCSD for review at least one week prior to each meeting and workshop. The agenda shall include the following:

- Topics: A listing of each topic to be covered with sufficient detail so that OCSD attendees can reasonably determine if their participation is needed or not. A one-line description is not typically sufficient for the purpose. The topic description shall include what information will be presented, and what decisions will be needed.
- Timing: The proposed timing of each topic on the agenda including the projected start and stop time for the subject. The purpose of this item is to allow OCSD staff who cannot attend the entire meeting to attend the portions where they are needed.
- Attendees. The agenda shall include both OCSD and CONSULTANT team members. The OCSD Project Manager will add the OCSD staff attendees to the agenda prepared by the CONSULTANT, based on the CONSULTANT's Agenda and the CONSULTANT's recommendation of which OCSD staff members should attend.
- Meeting time and place. The CONSULTANT shall work with the OCSD PM to set the meeting date and time. Most meetings will be held at OCSD offices. The OCSD PM will reserve the conference room.
- A preliminary list of material to be provided at the meeting.

Materials to be used by the meeting attendees to prepare for the meeting shall be sent with the meeting agenda.

The CONSULTANT shall transmit to the OCSD Project Manager the following by the time of the meeting:

- Hard copies of the agenda, one for each attendee
- One sign-in sheet with the names of attendees pre-listed.
- Native electronic files used for the presentation. With the exceptions noted below, hard copies of presentation materials will generally not be required. The OCSD Project Manager will make the electronic files available to the OCSD project team internally.
- Hardcopies of all materials that cannot be easily viewed when projected on a screen. Examples might include design drawings and spreadsheets.



## **Meeting Minutes**

CONSULTANT shall transmit the minutes to the OCSD Project Manager within three business days of the meeting in MS Word format using OCSD's template, or an approved substitution. CONSULTANT shall also update and transmit the Action Item Log, Decision Log, and Design Issues Log with the minutes.

The OCSD Project Manager will distribute the minutes for internal review. If there are no OCSD comments on the minutes, they will be considered final. If there are comments, the OCSD Project Manager incorporate all appropriate OCSD comments on the MS Word file with changes tracked. The updated MS Word file will be transmitted back to CONSULTANT. If CONSULTANT has no comments on the OCSD edits, the minutes will be considered final. If CONSULTANT has further comments on the OCSD edits, those comments should be discussed with the OCSD Project Manager.

## **Informal Meeting Requirements**

Informal meetings such as office meetings shall be recorded as follows:

- CONSULTANT shall notify the OCSD Project Manager/ Project Engineer prior to the meeting.
- CONSULTANT shall prepare minutes for the meeting.
- The minutes shall be submitted to the OCSD Project Manager/Project Engineer.
- After review and modification, the minutes will be filed as a formal record of the meeting.
- Meetings that do not follow this procedure will not be recognized as having occurred

CONSULTANT shall prepare for all telephone and teleconferencing meetings in the same manner as outlined above.

A copy of all comments on project issues obtained by CONSULTANT from OCSD staff without direct OCSD Engineering Project Manager's involvement shall be submitted for the Project Manager's approval within three business days of receipt.

## **Task 2.8.1 PDR Production Workshops**

### **Task 2.8.1.1 Predesign Kickoff Workshop**

A four-hour project kick-off meeting shall be held with OCSD staff to introduce principal members of OCSD and CONSULTANT's teams. The discussion topics shall include: OCSD responsibilities, CONSULTANT's responsibilities, invoice procedures, personnel badges, parking, site access, CONSULTANT's Scope of Work, detailed project schedule with milestones, Work Breakdown Structure requirements, and OCSD confined space and other safety policy training.

CONSULTANT shall also establish contact with OCSD Project Team participating in this project. CONSULTANT shall work in partnership with the Project Team which shall provide the information and input the CONSULTANT shall use to perform the engineering services per the Scope of Work.

#### **Task 2.8.1.2 – Preliminary Design Risk Management Workshop**

A Preliminary Design Risk Management Workshop will be held at least 4 weeks prior to submittal of the Draft Preliminary Design Report. The Workshop will be utilized to:

- Identify key project-specific risks
- Characterize the nature of the impact of each risk should it occur
- Characterize how likely the risk is to occur
- Identify potential mitigation strategies that should be implemented or be ready to be implemented to address each risk.

The Workshop shall be planned and scheduled for a duration of four hours and will be held at OCSD offices. CONSULTANT or Moderator shall prepare the agenda, all appropriate presentation materials, and minutes for the Workshop. The minutes shall include sufficient information for OCSD to populate the project risk register to be included in the RMP.

#### **Task 2.8.1.3 PDR Constructability Workshop**

A constructability workshop shall be held prior to the submittal of the draft PDR to identify any fatal flaws in the design relative to constructability. Some of the subjects that shall be covered in this workshop include the following: conflicts between design disciplines, geotechnical considerations, construction sequencing, power outages, equipment shutdowns, viability of equipment relocation, safety, operational requirements, access for maintenance, size-critical equipment requirements and constraints, permitting, public nuisance issues, other local conditions and constraints.

This workshop shall be held at OCSD facilities and shall generally be four to six hours in length. OCSD and CONSULTANT staff shall attend this workshop.

CONSULTANT shall be responsible for completing the following tasks relative to the workshop:

- Prepare package for constructability review workshop participants. The package shall consist of detailed plans and specifications and other information selected by CONSULTANT.
- Prepare presentation on the project.
- Summarize the constructability review workshop comments and action taken on each comment in a memorandum.

- All comments and recommendations of the workshop shall be incorporated into Design Memo 13 - Pump Station Construction Phase Implementation, Constructability Issues, Cost and Schedule and the Bid Documents at no additional cost to OCSD.

#### **Task 2.8.1.4 PDR Review Workshops**

The following workshops will be held to review the draft Preliminary Design Report

##### **Draft PDR Presentation Workshop**

This workshop shall be held immediately following delivery of the Draft PDR. The purpose of the meeting is for the CONSULTANT to describe the various findings in the report, with a particular emphasis on the organization of the PDR, and anything that is new or has changed from earlier submittals and meetings.

The CONSULTANT staff required at this workshop shall include:

- Project Manager
- Project Engineer
- Lead Mechanical Engineer
- Lead Electrical
- I&C Engineer
- Lead Structural Engineer

##### **PDR Validation Workshop**

This workshop shall be held after OCSD has transmitted its comments on the Draft PDR and the CONSULTANT has had sufficient time to prepare preliminary responses to each comment. The workshop shall cover all comments where:

- The CONSULTANT needs additional direction.
- The comment was a question requiring an answer.
- The CONSULTANT does not recommend making the revision suggested by the comment.
- The comment would impact the project's or CONSULTANT's scope or schedule.

Following the PDR Validation Workshop, the CONSULTANT shall input their responses to OCSD comments and submit to OCSD.

## **Task 2.8.2 Preliminary Design Phase Meetings**

### **Task 2.8.2.1 Technical Progress Meetings**

Technical Progress Meetings shall be held via conference call every two weeks to review various issues with OCSD's project team. The CONSULTANT shall prepare an agenda and email it along with the updated Action Log and Decision Log prior to each meeting. Assume each meeting shall be 1 hour in duration.

### **Task 2.8.2.2 Project Management Progress Meetings**

Refer to Task 2.6.2.

### **Task 2.8.2.3 PDR Phase Focused Meetings**

Focused meetings shall be held throughout preliminary design to discuss specific issues in detail and generate comments and direction from OCSD staff. For bidding purposes, assume four 2-hour PDR Phase Focused Meetings.

Meeting lengths shall be as required to cover the topic in question. Depending on subject matter and attendees, one meeting may cover multiple subjects. CONSULTANT shall determine how many meetings will be needed to cover these topics. CONSULTANT may suggest additional topics as necessary. Supplementary meetings may be scheduled with OCSD staff, as necessary to allow coordination between CONSULTANT and OCSD staff.

### **Task 2.8.2.4 Stormwater Compliance Meeting**

A formal meeting shall be held with OCSD's stormwater compliance staff to review the project scope and identify all issues during and after construction affecting compliance with stormwater regulatory requirements and OCSD's policies and practices. Assume one 1-hour meeting.

### **Task 2.8.2.5 Project Coordination Meeting**

A formal meeting shall be held with OCSD's project teams associated with projects 3-62, 3-64 and J-120, to review and identify all issues in which the other projects may impact how this one is designed. Assume one 4-hour meeting.

### **Task 2.8.2.6 Permit Agency Coordination Meetings**

Meetings shall be held with OCSD's project team and various permitting agencies on an as-needed basis. Assume four meetings at one hour each.

## **TASK 2.9 - QUALITY CONTROL**

Quality control activities during Design should be budgeted for and charged to the Phase 3 quality control budget.

Submittals that contain gross deficiencies or errors requiring a significant amount of OCSD staff time for checking will be returned without review until OCSD is satisfied that a thorough

CONSULTANT's review, checking and correction for coherence, consistency, spelling, etc. has been performed.

### **Quality Control Requirements**

The CONSULTANT shall develop a Quality Assurance/Quality Control (QA/QC) Plan for implementation of the Scope of Work. The CONSULTANT's QA/QC Plan shall be reviewed and approved by OCSD Project Manager and shall include or reference all the controls necessary for implementation. As a minimum, the QA/QC Plan shall include the following:

1. Purpose and objective
2. QA/QC Team – Roles and Responsibilities
3. Independent Quality Control (IQC) Team – Roles and Responsibilities
4. The In-house Quality Process
5. QC coordination with OCSD
6. Technical Memo QC process
7. Design submittal QC process
8. Final design documents QC process

QA/QC documentation shall include, but not be limited to, the following:

1. Design Guidelines
2. Calculation Log
3. IQC Comments
4. Discipline Drawing IQC Checklists
5. QC Validation Forms

On a periodic basis, OCSD will conduct an audit of CONSULTANT's work to ensure conformance with the QA/QC Plan. OCSD shall notify CONSULTANT when these audits will occur. CONSULTANT shall respond to any OCSD comments made during the audit within two weeks. If comments are extensive, OCSD may schedule a follow-up audit after the comments are received.

Acceptance of CONSULTANT professional services shall be based on the result of audits conducted on the elements of the approved QA/QC Plan and the incorporation or resolution of comments resulting from these audits. Major elements of the QA/QC Plan shall include the following:

- CONSULTANT shall be responsible for the technical adequacy and quality control of his or her work.
- CONSULTANT controls shall assure that planning and design inputs are correctly translated into planning and design documents such as drawings, procedures, specifications, reports, and calculations.
- CONSULTANT shall be responsible for the physical control, security, and distribution of controlled documents required for performance of the Scope of Work.
- CONSULTANT's planning and design activities shall be controlled through the review workshop process, including discipline checks, inter-discipline cross-checks, and multidiscipline review workshops by an Independent Project Review Team.

## **TASK 2.10 – COMMUNITY OUTREACH**

CONSULTANT shall support OCSD staff during preliminary design utility research (potholing, geophysical investigations and surveying). Assist with providing graphics, tables and PowerPoint slides for Community Outreach efforts.

## **PHASE 3 – DESIGN**

All changes in OCSD's Engineering Standards, OCSD's Design Guidelines, and/or changes in design concepts and facility layouts as a result of OCSD comments that may occur up to transmittal of OCSD comments on Design Submittal 1, shall be incorporated into the Design by CONSULTANT with no increase in CONSULTANT's not-to-exceed upper limit on fees. Current OCSD Design Standards can be found through the following link: <http://www.ocsd.com/about-us/engineeringstandards>

## **TASK 3.1 - BID DOCUMENTS**

CONSULTANT shall provide engineering services to prepare biddable plans, technical specifications, and other Bid Documents as required based on the design concepts and criteria developed during Phase 2 - Preliminary Design. In this Scope of Work, construction documents include specifications; drawings; cable, conduit and cable tray schedules; commissioning plan materials; equipment and instrumentation databases (EIDs); SCADA access tables (SATs); and bypassing plans

### **Task 3.1.1 Specifications**

#### **Task 3.1.1.1 Contract Agreement, General Conditions and Special Provisions**

CONSULTANT shall review OCSD's standard Contract Agreement, General Conditions, and Special Provisions, and General Contractor warranty requirements. The CONSULTANT shall prepare the initial draft of the Bid Submittal Forms – Attachment A Schedule of Prices, and the Special Provisions, Appendix A Work Completion schedule including the definition of contract milestones, the number of calendar days to be allowed for each, and a recommended amount of liquidated damage for not meeting the schedule requirements.

CONSULTANT shall identify all proposed changes or additions to OCSD's standard warranty requirements. Any proposed changes and additional warranties will be allowed only upon review and acceptance by OCSD.

#### **Task 3.1.1.2 General Requirements and Additional General Requirements**

OCSD will prepare the General Requirements (GRs) for the project, which will be updated by OCSD throughout the project. The CONSULTANT shall prepare the Additional GRs which take the form of Division 01 technical specifications. CONSULTANT shall be responsible for preparing the Additional GRs and all other technical specifications so that they are consistent with the GRs provided by OCSD.

In addition, CONSULTANT shall review OCSD's standard GRs and propose revisions via Additional GRs. OCSD's standard Contract Agreement sets the order of precedence in which plans and specifications in Divisions 01 through 17 supersede the GRs. Where minor changes to and deletions of certain GRs are warranted due to particular needs of the project, CONSULTANT may propose specific revisions to the GRs, subject to acceptance by OCSD's Engineering and Construction Division Manager.

Specific requirements in OCSD's GRs shall not be duplicated in Additional GRs Specifications. Only deviations from the GRs and project-specific requirements not addressed in OCSD's standard GRs shall be included in Additional GRs.

Additional GRs Specifications shall be developed by the CONSULTANT for specific project requirements and the numbering convention shall be per OCSD's template project Table of Contents. The following are the minimum Additional GRs topics required for this project:

- Summary of the Work
- Work Restrictions
- Environmental Restrictions and Controls
- Sequence of the Work
- Permits
- Measurement and Payment
- Seismic Design Criteria (for those restraints, supports, etc. to be design by the Contractor)
- Temporary Facilities
- Site Access
- Mobilization/Demobilization
- Construction photographs and videos

- Equipment Shipping, Storage, and Handling
- Hazardous Materials Mitigation and Mold Removal

#### **Task 3.1.1.3 Technical Specifications**

CONSULTANT shall be responsible for contents of all technical specifications (Divisions 01 through 17), including edited OCSD Master technical specifications. OCSD's master technical specifications shall be reviewed in detail, and changes, deletions and additions required by the project shall be provided by CONSULTANT. CONSULTANT shall be responsible for developing specifications required by the project that are not found in OCSD's Master Specifications.

Refer to the "Procurement Alternatives" portion of this Scope of Work regarding sole-source specification requirements.

#### **Task 3.1.2 Drawings**

The CONSULTANT shall prepare construction drawings per OCSD Design Standards including CAD Manual, Design Guidelines, Master Specifications, and Tagging Procedures.

#### **Task 3.1.3 Building Information Model (BIM)**

CONSULTANT shall provide survey and CADD services as required to provide three-dimensional (3D) building information model (LOD 300) for the drywell that is below ground and the room directly above the drywell, valve vault if external to the drywell, wetwell, and electrical room and other areas that are congested with conduits, ductwork and pipes, and other obstructions. In these areas show all equipment and systems that have a diameter or minimum cross-sectional dimension of one inch or larger including the mechanical, electrical, lighting, HVAC, conduits and cable trays, instrumentation, piping, and fire alarm equipment along with other systems. Show all systems to scale. Three dimensional demonstrations shall be performed at Workshops. Demonstrations will be for maintenance personnel to display that all equipment is accessible, operable, serviceable and removable.

#### **Task 3.1.4 Commissioning Plan Materials**

The CONSULTANT shall edit OCSD's commissioning specification (Master Specification section 01810) and prepare the following material to be included in the Bid Documents:

- Operational Readiness Testing (ORT) procedures using OCSD's Commissioning Procedures Tool (CPT)
- Functional Acceptance Testing (FAT) procedures testing Remote and local automatic operation
- Reliability Acceptance Testing (RAT) procedures

The CONSULTANT shall also estimate in detail the durations required for pre-commissioning and commissioning activities.



#### **Task 3.1.4.1 ORT Procedures**

ORT forms are required for every piece of equipment and instrument to be provided on the project to test Local and Remote Manual operation. OCSD has developed an automated process to generate ORT procedures using a Commissioning Procedures Tool (CPT). CPT uses three different documents SAT, Commissioning Design Spreadsheet (CDS) and OCSD Equipment ORT Templates to produce the ORT procedures. The CDS is an Excel spreadsheet listing all major equipment and their associated I/O signals, instruments and ORT templates. During the one-hour training session on the use of SAT which will be provided by OCSD, OCSD will also train on the use of CDS. **Exhibit 09** includes examples of a final ORT procedure, final CDS and a list of OCSD Equipment ORT Templates.

The CONSULTANT shall complete the SAT and CDS. The finalized documents will be used by OCSD to generate the ORTs need in FDS. If there is no OCSD Equipment ORT Template for a unique piece of equipment or instrument, a unique ORT procedure shall be developed by the CONSULTANT. The unique ORT form shall include the step-by-step procedures for completing the testing and including indication of what the result of each test should be. These shall include electrical, communication, security, mechanical, HVAC, Fire Protection, network, and process equipment testing.

#### **Task 3.1.4.2 FAT Procedures**

The CONSULTANT shall develop detailed FAT procedures to be conducted during commissioning. Development of FAT procedures may require the use of temporary equipment and / or piping. The design of such facilities shall be prepared by the CONSULTANT and included in the construction drawings and specifications (as P&ID mark-ups, flowing conditions) identified per commissioning package.

FAT procedures shall be developed for each system impacted by the project to test Remote and local automatic operation. FAT testing shall be broken into separate procedures based on the configuration of the system as commissioning packages.

The breakdown and grouping of FAT procedures shall be planned so that all aspects of a single system can be tested,

- Each step-in procedure shall include required results and sign-off areas.
- Procedures shall include breakdown into systems and sub-systems.
- Include setup requirements for each procedure including valve/gate positions.
- Include text description of each test and check-off forms developed for each test.
- Include description of clean water testing requirements.
- Include temporary equipment required for testing (generators, bypass pumping, pipes, valves, etc.)
- Include temporary chemicals required for testing.

- Include description of where and how the Contractor is to obtain and discharge clean water.
- Include failure mode testing.
- Systems and sub-systems shall include electrical, air, plant water, plumbing, drains, telephone, intrusion, fire alarm, CCTV, lighting, etc.
- Include minimum time required for each test.

A sample FAT procedure has been included in **Exhibit 10**.

Specific tag numbers, process values, and ranges, and expected numeric outcomes shall be included in the FAT procedures. Each step in the procedures shall include required results, actual results and sign-off areas.

#### **Task 3.1.4.3 RAT Procedure Specification**

The RAT procedures shall include Contractor requirements for supporting the RAT. Procedures shall include all possible operating modes. Procedure shall include failure mode testing and fail-over testing. Each step-in procedure shall include required results, actual results, and sign-off areas. Include text description of each test. Include temporary equipment required for testing (generators, bypass pumping, pipes, valves, etc.). Include temporary chemicals required for testing and specify which party (OCSD or Contractor) will provide any chemicals that might be required.

A sample RAT procedure has been included in **Exhibit 11**.

#### **Task 3.1.5 Equipment and Instrumentation Databases (EIDs)**

OCSD will provide a truncated copy of the EID database for CONSULTANT to begin populating by completing the CONSULTANT-furnished fields for each device. The database shall identify all new equipment and instruments and all existing equipment and instruments to be deleted and/or modified under this project. CONSULTANT shall submit the EID database for the project with information that is typically included in equipment data sheets. (see Engineering Design Guidelines, Appendix A for Equipment and Instrument Database (EID) requirements.

#### **Task 3.1.6 SCADA Access Tables (SAT)**

OCSD uses SAT files to list all analog and discrete monitoring points on the project, filed by PLC. When existing PLCs are to be modified on a project, the CONSULTANT shall modify a copy of the database provided by OCSD to reflect the new equipment and demolition of existing facilities. (see Engineering Design Guidelines, Appendix A, Section A.3.14 "SCADA Administration Tool (SAT)" for requirements). A one-hour training session on the use of SAT will be provided by OCSD.

## **TASK 3.2 - DESIGN SUPPORT DOCUMENTATION**

### **Task 3.2.1 Design Information**

CONSULTANT shall include the following material with each Design Submittal:

- CONSULTANT shall maintain the Project Logs specified under Phase 2 Project Management through Phase 3 as well. Current copies of all logs shall be included with each Design Submittal.
- Written response log to OCSD comments on the previous submittal.
- CEQA and Regulatory Compliance Matrix. This matrix shall list each applicable CEQA mitigation requirement and all known permit requirements with the corresponding description of how each requirement is to be satisfied. Measures to satisfy requirements might be in the GRs, Additional GRs, particular specification requirements, or actions taken separately from the construction contract.
- Calculations
- Draft or final Geotechnical Reports not submitted in the previous submittal and those revised since the previous submittal.
- Proposed list of suppliers to be named in the specifications for major equipment
- Draft or final Fire Protection Reports not submitted in the previous submittal and those revised since the previous submittal.
- Draft or final Field Findings Reports not submitted in the previous submittal and those revised since the previous submittal.
- Equipment data sheets
- Instrument data sheets
- Equipment catalog cuts and vendor quotations.
- All memos that may be been prepared since the previous submittal was delivered.
- The CONSULTANT shall develop language in the Division 11 Technical Specifications that requires the pump manufacturers to utilize computerize analysis to validate that their proposed pumps operate within an acceptable harmonic frequency range, prior to fabrication.

### **Task 3.2.2 Facility Operation and Maintenance**

The CONSULTANT shall update operating philosophies as the design progresses. Operating philosophies are anticipated to be utilized for the electronic Operations and Maintenance Manuals to be prepared during construction. See Engineering Design Guidelines, Appendix A, Section A.3.7 "Operating Philosophy" for requirements.

The CONSULTANT shall update estimates of Operations and Maintenance staffing requirements per Engineering Design Guidelines, Appendix A, Section A.3.11 "Asset Management Plan."

The CONSULTANT shall prepare sketches of the proposed graphic screens for each process area. OCSD will develop the SCADA screens from these sketches at a later date.

### **Task 3.2.3 Electrical Design Documentation**

CONSULTANT shall provide the following electrical design information:

- OCSD will update the calculations for the short circuit analysis, load flow/voltage drop study, motor starting study, preliminary settings for the protection device and coordination study, and preliminary arc flash analysis and approach recommendations. The CONSULTANT shall provide OCSD with any revisions to the SCE incoming short-circuit information, single line diagram, circuit breaker ratings, and cable sizes and lengths.
- Updated Load List for all equipment.
- For all motor control centers and switchgear include documentation from at least three suppliers clearly showing each manufacturer's space requirements for their equipment. The purpose of this requirement is to confirm that sufficient space has been provided in electrical rooms for the largest equipment that might be supplied. If the largest equipment cannot be accommodated in the available space, CONSULTANT shall specify space restrictions in the technical specifications, provided the space restriction does not unduly limit the number of suppliers who can supply the required equipment.
- Lighting calculations.
- Standby generator sizing calculations.
- Duct bank cable pulling tension, derating and cable tray fill calculations.
- Plans that show electrical, electronic, alarm, and telephone conduit and cables that pass through an existing area to be demolished but serve facilities which remain in service after the project is completed.

### **Task 3.2.4 Instrumentation and Controls**

The Process and Instrumentation Diagrams (P&IDs) are to act as a "master document" in that the P&ID is assumed to be correct and all other documents are synchronized to them. (see **Exhibit 01** - Engineering Design Guidelines, Appendix A, Section A.2.18 "Process and Instrumentation Diagrams (P&IDs)" for requirements). Example P&IDs are presented in **Exhibit 12** of this Scope of Work.

Process control strategies shall be written and revised to match the latest P&IDs. An example Control Strategy is provided in **Exhibit 13**. Control strategies/operating levels shall be determined for standard PLC control, and for occasions when PLC control is lost.

Datasheets for major instruments, final control elements & safety critical instrumentation shall be provided. Typical datasheets with tables for all other instrumentation shall be included with the associated instrument specifications.

### **Task 3.2.5 Construction Cost Estimates**

CONSULTANT shall provide Construction Cost Estimates with each Design Submittal starting with Design Submittal 2 per OCSD's Engineering Design Guidelines, Chapter 01, Section 01.4.6 "Construction Cost Estimate."

### **Task 3.2.6 Construction Schedule**

The CONSULTANT shall provide a Preliminary Construction Schedule in Gantt chart format using scheduling software such as Primavera Project Planner (P3) or Microsoft Project.

For DS1, the construction schedule prepared for the Preliminary Design Report may be updated based on changes since the PDR, but at the same level of detail.

For DS2 and later submittals, more information shall be included in the schedule. The goal is to develop a realistic schedule based on project information, not a "rule of thumb". The construction schedule shall be based on the commissioning documents prepared for the project as well. CONSULTANT shall engage the services of a least one construction individual to review the quantity takeoffs from CONSULTANT staff and use this information to assist in the development of the detailed construction schedule. CONSULTANT may use their own staff if they are qualified or hire a Subconsultant to assist in this activity.

### **Task 3.2.7 Procurement Alternatives**

Specifications shall comply with state law concerning limiting product sources for all equipment and material to be procured for construction of this project. Unless indicated otherwise in the Engineering Design Guidelines or in OCSD's Master Specifications, the Project Specifications shall not be written in a manner that limits a Contractor to a sole source. This shall mean that, unless indicated otherwise in the Engineering Design Guidelines, in OCSD's Master Specifications or in Section V of this Scope of Work "Project-Specific Deviations...", CONSULTANT shall specify for each product "EITHER" no specific manufacturer "OR" at least two supplier's products and an "or equal". CONSULTANT shall provide recommendations regarding the items that should be base bid (e.g., selected pieces of equipment and materials).

When a single manufacturer is known and there is no known "equal", it shall be so stated in the design documents.

OCSD may elect to obtain equipment from a sole-source supplier. CONSULTANT shall develop a scope of supply for the sole-source equipment and obtain a not-to-exceed price from the equipment supplier. This information shall be included in the Bid Documents.

Equipment that may be needed to be obtained from a sole source supplier for this project includes:

- Pumps

- Access card readers
- Cyber key lock systems
- Composite manhole lids
- Wet well and manhole liner
- Cisco networking equipment
- Programmable logic controllers (PLCs)
- Power monitoring equipment
- Network routers

OCSD may elect to pre-qualify key equipment which is essential to the project. CONSULTANT shall delineate any products that need to be pre-qualified or pre-purchased and provide the following services to assist with the pre-qualification process:

- Research and prepare a list of known suppliers.
- Prepare a Request for Qualifications to be mailed by OCSD to all known suppliers.
- Evaluate qualifications received by OCSD for conformance with project specifications.
- Advise OCSD of suppliers who meet the qualifications.
- Assist OCSD staff in preparing materials to be presented to OCSD Board of Directors.
- Prepare a draft letter to be sent by OCSD to advise all suppliers of their qualification status.
- Assist the OCSD with response to protests by equipment vendors in the form of providing project documentation and responding to OCSD's questions.

#### **Task 3.2.8 Final Design Report**

A Final Design Report shall be added as an addendum to the PDR, addressing significant changes made during Phase 3 Final Design from that which was proposed in the finalized PDR. This Final Design Report shall include all final calculations, an updated Executive Summary and Transmittal letter.

### **TASK 3.3 - SPECIALTY SERVICES**

Specialty services shall be provided by the CONSULTANT or an appropriately qualified subconsultant. In any case, the CONSULTANT shall be responsible for managing all subconsultants, including reviewing their work products prior to submission to OCSD.

### **Task 3.3.1 Topographic Survey Services**

The CONSULTANT shall prepare topographical survey for the work required during the beginning of the preliminary design phase. Limits of the survey shall include at least Westside Pump Station property, 120-foot wide swatch extending along the gravity sewer and force main alignment from Westside PS to Seal Beach PS, where it crosses Old Ranch Parkway, private property, and CA-22/405, the entire ROW of North Gate Road and Seal Beach Blvd to the south edge of Westminster Blvd, Seal Beach PS property and eastward 50-feet into the Naval Weapons Station property and along Westminster Blvd, and 50-feet north of Seal Beach PS property into the Naval Weapons Station property.

CONSULTANT shall conduct field and aerial surveys as required. Topographic information used on the construction plans shall be generated from a field survey and an aerial mapping process. OCSD will not provide the aerial survey information to the CONSULTANT for use on the project.

Prior to beginning design, CONSULTANT shall prepare the scope of work for field and aerial surveys required for all applicable project elements. OCSD will establish both vertical and horizontal control for the project. The field survey shall be used to establish both horizontal and vertical alignment of the facilities and shall note all survey monuments, topographic features, property lines, and elevations. The basis of bearings and benchmarks shall be indicated on the drawings. Control shall meet or exceed NGVD 88 requirements and shall be based on the Plant Local Coordinate System and datum. CONSULTANT's project schedule shall account for the above.

The aerial topography shall be required to meet the following criteria:

- The final product shall be delivered in AutoCAD.
- The CAD file shall adhere to the CAD Manual. OCSD shall be given the opportunity to review and comment on the compliance to the CAD Manual.
- Site contours shall be in 0.5-foot intervals.
- Contour and spot elevations shall be 3D; all other features shall be 2D.

CONSULTANT shall include the survey-related documents with the Design Support Documentation portion of the Design Submittals as specified in the Engineering Design Guidelines, Appendix A, Section A.3.19 "Project Support Documentation (PSD)".

### **Control Surveys for Collection Systems**

General: Topographical information used on the construction plans shall be generated from an aerial mapping process. CONSULTANT shall provide for the aerial and field surveys necessary for the mapping process for all applicable Project Elements of the project Scope of Work and shall provide for the aerial mapping. Providing for the process includes paying for, coordinating and designing the aerial and horizontal/vertical control surveying for the preliminary and final design. CONSULTANT's responsibilities for the surveys include generating any subconsultant scopes of work, data interpretation and preliminary design. All

survey work is to be done under the direction and control of a Professional Land Surveyor, licensed by the State of California.

Aerial Survey: The aerial photography shall have sufficient coverage for the digital topographic mapping. The photo scale of the aerial photography shall not be more than 100 feet per inch for pipeline work or 20-feet per inch for pump stations. Stereo pairs of photographs shall be furnished to OCSD. However, due to probable restrictions, which will be imposed by the US Navy facility, photo scales maybe adjusted accordingly.

Phasing of Work: Other than the aerial and topographic survey work, the balance of the survey work shall not commence until the design phase of the project has been authorized or concurred to by OCSD.

Field Survey Aerial: A field survey shall be used to establish both horizontal and vertical control for the project. Control shall meet or exceed NGVD 88 requirements and shall be based on California State Plan Coordinates (NAD 83) including the 1995 O.C. surveyor's adjustments. A sufficient number of points shall be used to accurately complete the digital topographic modeling. No less than five control points per stereo model shall be used.

Aerial Field Survey Inclusions: The field survey shall include all survey monuments, topographic features, easements, property lines, city boundaries, culture, and elevations on the plan and profile sheets. All covers, including the existing sewer manholes, storm drain manholes, and utility and valve vaults shall be identified and marked in the field.

OCSD Review Aerial Survey Line: The general location and alignment of the survey line shall be submitted to OCSD prior to performing the field survey. Survey work shall not commence until authorized or concurred to by OCSD. CONSULTANT shall be responsible for obtaining and paying for the field survey services.

Field Survey Base Line: The field survey shall establish a base line for construction purposes for pipeline work equal to or greater than 500-feet in length. The line will be used to define the proposed design, in terms of station and offset, and to establish the bearings for right-of-way. The survey line shall be set on 100-foot stations and shall be tied to the established aerial control. The field survey shall tie in all controlling monuments within the map limits and all street centerline intersections. The ties shall be express in both State Plane Coordinates and as station and offset.

Manhole Information: The field survey shall also include the measurement of the invert and manhole rim elevations of all existing sewers within the project reach. The size, orientation and invert of any pipe connections shall also be recorded.

Base Map: The base map index contours shall be spaced at five feet (5') vertically and the immediate contours shall be spaced at one-foot (1') contour intervals. The mapping shall include digital topographic mapping. The digital format shall be compatible with OCSD Graphic Information System. All surface features, including those hidden from aerial view shall be incorporated into the digital mapping.

Plan and Profile Sheets: CONSULTANT shall prepare plan and profile sheets based upon the aerial mapping. The scale for plan and profile sheets shall be one-inch equals forty feet (1" = 40') horizontal and one-inch equals four feet (1" = 4') vertical. An aerial photographic (photo



strip) with the alignment shall be included. The plan view shall be separate from the photo strip. Intersections shall be adequately detailed at a scale of one-inch equals ten feet (1" = 10') or one-inch equals twenty feet (1" = 20'). Manholes and other details shall be drawn at a scale that is adequate to provide clarity and sufficient detail for construction. The pump station construction drawings shall be drafted at scales of 1/8" = 1' to 1" = 20', as adequate, to allow for sufficient detail to be shown. The basis of bearings and benchmarks shall be indicated on the drawings,

Survey Note Submittal: CONSULTANT shall submit two bound copies of all survey notes and data used to establish vertical and horizontal control. The information submitted shall be suitable for use to establish construction controls. If additional property and/or right-of-way are required, CONSULTANT shall identify property and/or rights-of-way to be acquired. CONSULTANT shall prepare legal descriptions and plats for easements and property to be acquired during the final design phase of the project.

### **Task 3.3.2 Fire Protection Services**

CONSULTANT shall secure the services of a Subconsultant to determine the fire protection requirements, prepare final plans and specifications for the selected plan and assist OCSD in obtaining approval from the fire authority.

### **Task 3.3.3 Utility Survey and Coordination Services**

CONSULTANT shall determine all utilities impacted by the work for all applicable Project Elements of this Scope of Work. Utilities include all utility company-owned, and public agency-owned piping, duct banks, and other interferences. All utilities encountered during the preliminary design shall be shown on the plans. Project work that requires other agencies to relocate existing utilities shall be coordinated during the design by CONSULTANT. The CONSULTANT shall prepare all easement documents including field investigations. Field investigations include visiting the project work site and each utility to verify the location of all interferences.

CONSULTANT shall secure the services of a licensed survey subcontractor to field locate potholes as necessary. Survey locations of potholes shall be tied to the sample controls as used for the Control Survey.

CONSULTANT shall also secure the services of a subcontractor to perform the pothole work. CONSULTANT shall be responsible for identifying locations where potholing will be critical to the design effort to identify the location of existing piping, duct banks, and foul air ducts. The results of potholing efforts will be summarized in a field finding report. "Soft" excavation methods (vacuum extraction or sift drilling) will be used where feasible.

An allowance shall be included in the proposal for this effort including number of borings and unit price per boring as follows:

1. An allowance shall be included in the proposal for potholing including number of potholes and unit price per pothole.
2. An allowance shall be included in the proposal for geophysical investigation including total square feet and unit price per square foot.

#### **Task 3.3.4 Landscape Architecture**

CONSULTANT shall secure the services of a Subconsultant to determine landscaping requirements, develop three landscape alternatives for review by OCSD staff and prepare final plans and specifications for the selected alternative.

#### **Task 3.3.5 Noise Evaluation Services**

CONSULTANT shall secure the services of a Subconsultant to prepare a field finding Noise Report. This report shall include the following:

- Visit site and conduct ambient noise measurements to establish baseline.
- Identify external sources of noise.
- Identify potential methods for defining noise impacts.
- Develop noise model consistent with noise impact assessment methods.
- Determine exterior noise levels and compliance with assessment standards.
- If required, develop mitigation measures to meet design standards.
- Determine compliance with OSHA's regulations.
- If needed, determine mitigation measures to meet OSHA's requirements.
- Prepare written report on findings and recommendations.

#### **Task 3.3.6 Traffic Control Services**

CONSULTANT shall secure the services of a Traffic Control Subconsultant to determine traffic control requirements and prepare plans and specifications for all investigative and construction activities performed within or adjacent to the public ROW. This includes the preparation of Traffic Control Plans for activities such as potholing, surveying (manhole dipping and field survey), geotechnical and geophysical activities. Additionally, the Traffic Control Subconsultant shall attend City, Navy, and OCSD Submittal review meetings as needed.

#### **Task 3.3.7 Additional Shoring Design**

CONSULTANT shall provide a detailed prescriptive shoring design for the pump station and related facilities. The detailed design although prescriptive shall have flexibility to allow the CONTRACTOR to exercise their means and methods, subject to the approval of the Engineer. The design as a minimum will include the following:

- Develop drawings to be included in the contract documents that illustrate a constructible shoring system (perimeter shoring wall, bottom plug and internal bracing).
- Shoring plans, which are developed for a specific sequence of structure and piping construction. This sequence would be spelled out clearly on the contract documents.

- CONTRACTOR will be required to submit shop drawings with engineering seal providing full details of the perimeter shoring wall construction, bottom plug construction (including tie-down anchors if used), and for bracing fabrication and installation. The submittal shall be in compliance with the limitations shown in the design drawings and subject to the approval of the Engineer.
- CONTRACTOR will be able to submit proven alternate means to achieve an equivalent result. As follows:
  - Although Contract Documents could be prepared for a “soil mix” perimeter wall, the CONTRACTOR will be allowed the choice of using either DSM or CSM as a methodology.
  - The design will also leave the option open for the CONTRACTOR to use secant piles or a slurry wall provided that the alternative wall is deemed equivalent to the soil-mix wall in terms of strength and water tightness.
  - Bottom plug shown on the Contract Documents could be shown generically as “soil-cement” with the CONTRACTOR given the option of using DSM or jet grouting to form the soil-cement plug, provided the prescriptive parameters are satisfactorily addressed.
  - Tiedown anchor lengths for bond capacity would be left as a contractor-design item (subject to a minimum that the CONSULTANT has specified in the Contract Documents).
  - Bracing sizes and layout for the specified construction sequence will be prescriptive.
  - CONTRACTOR would be permitted to submit an alternative construction sequence together with modifications to the shoring plans that are required based on their alternate sequence.
  - CONTRACTOR would be permitted to submit a complete alternate shoring design subject to a set of specified performance requirements and limitations on certain means and methods, without additional cost to the DISTRICT and in full compliance with the detailed design parameters shown in the Contract Documents.
- Specifications for perimeter shoring wall and bottom plug will still have “performance” components such as maximum water infiltration rates through the walls and plug and minimum strengths of the wall and plug materials.

### **Task 3.3.8 Groundwater Monitoring Design**

CONSULTANT shall design a comprehensive groundwater monitoring program in the vicinity of the project site that will be required to confirm that the pump station and deep sewer

construction is not impacting the piezometric levels in the various aquifers that underlie the site. The design all install piezometers at multiple elevations to make sure any response is captured in near real time. In addition, the design shall include inclinometers (to monitor lateral ground movement with depth) and ground surface, structure, and utility survey points, which will be parts of the monitoring program for this project.

### **TASK 3.4 - DESIGN SUBMITTALS**

Design Submittals shall be submitted for OCSD review as indicated in the Section III - Project Schedule. The contents of each submittal shall be as described in **Exhibit 01**.

CONSULTANT is expected to **continue design** work on the project while OCSD staff reviews Design Submittal 1 and Design Submittal 2. For Design Submittal 3, CONSULTANT shall stop all design work until receipt of OCSD comments on that submittal.

Design Submittals shall be delivered in hard copy, PDF format (see section "Submittal Review using Bluebeam" in Part V General Requirements), and native files. The number of hard copies is indicated in **Exhibit 04**. The following requirements apply to the labeling and organization of the PDF and native:

- Specifications shall be compiled into a single PDF file. When the specification exceeds approximately 700 pages, the specifications shall be broken into separate volumes. Divisions 16 and 17 should be kept in the same volume.
- Drawings shall be submitted as a single compiled file with size limitations defined in **Exhibit 17**. If file size exceeds the defined limits, separate files by discipline. If the file for one discipline is more than the file size limits, the file may be divided into multiple files.
- In no case may drawings be submitted as separate PDF files for each drawing. The order of drawings in the PDF file shall match the list of drawings. Bluebeam Revu provides a mechanism for reducing the size of some PDFs. This tool works by compressing bitmap images and removing non-visible document data. It does not affect vector content (see section "Submittal Review using Bluebeam" in Part V General Requirements).
- The PDF files shall be named per **Exhibit 17**.
- These requirements do not affect the organization, naming, and submittal of native files for CAD or MS Office files specified elsewhere in this Scope of Work and OCSD Design Standards.
- These requirements do not affect the organization, naming, and submittal of native files for CAD or MS Office files specified elsewhere in this Scope of Work and OCSD Design Standards.
- All native Word files used for specifications shall be submitted, combined into a single folder with the number of the specification section in the file name so that the files are

listed in the same order they would appear in a hard copy print. Attachments to specification sections should be named so that they also fall in the correct order on the file list.

- Specification sections based on OCSD master specifications shall be edited using tracked changes so changes made to the OCSD master can be readily viewed. For more information see OCSD Engineering Design Guidelines, Chapter 01, paragraph "Master Specifications."
- Native CAD files shall be submitted per the OCSD CAD Standards Manual.

The OCSD Project Manager may request that CONSULTANT submit an electronic proof set of the Draft PDR and Final PDR prior to hard copy production in order to initially confirm that the submittal is ready for printing.

The Design Submittals shall be organized per the following structure. CONSULTANT may propose an alternative organization of the submittal for approval by the OCSD Project Manager.

**Volume 1 - Submittal Documentation**

Memo to Reviewers  
Responses to Comments on Previous Submittal  
Design Information  
Facility Operations and Maintenance  
Electrical Design Documentation  
Instrumentation and Control Documentation  
Construction Cost Estimate  
Construction Schedule  
Procurement Alternatives  
CEQA & Regulatory Compliance Matrix

**Volume 2 - Specifications**

**Volume 3 - Drawings**

**Volume 4 - Project Support Documentation**

Geotechnical Report  
Noise Report  
Fire Protection Report  
Hazardous Materials Survey Report  
Topographic Survey Data  
Design Period Memos as needed to document specific design issues and their resolutions.  
Calculations  
Equipment Selection (organized by Specification Section)  
Equipment Data Sheets  
Catalog Cuts  
Vendor Quotes

**Volume 5 – Electronic Files and Databases**

The Memo to Reviewers included at the beginning of Volume 1 shall describe how the submittal is organized, include a table of contents, and list any significant changes that have

been made to the design since the last submittal, or the last time a particular issue was discussed.

### **TASK 3.5 - BID SUPPORT SERVICES**

#### **Task 3.5.1 Bid Phase Activities**

CONSULTANT shall provide the following bid period services:

- Participate in the pre-bid meeting.
- Prepare project drawing set and project specification addenda to provide clarification and resolve errors and omissions identified prior to bid opening.

#### **Task 3.5.2 Bid Evaluation Assistance**

- Participate in reviewing alternate equipment proposals from the Contractor, if applicable.
- Participate in the evaluation of the submitted bids, furnish consultation and advice to OCSD staff and assist with all the related equipment, cost, and other analyses as required to finalize the award decision.

#### **Task 3.5.3 Conformed Document Preparation**

- Within two weeks of the bid date, prepare conformed documents set (drawings, databases, specifications and other required materials) that incorporates the addenda. See Engineering Design Guidelines, Chapter 01, Design Guidelines – General Requirements, Section 01.4 “Preparation of Project Deliverables” for requirements as modified in Section V of this Scope of Work, “Project-Specific Deviations from OCSD Design Guidelines” and the requirements of the CAD Manual).

### **TASK 3.6 - PROJECT MANAGEMENT**

CONSULTANT Project Management responsibilities during Phase 3 - Design shall be as specified for Phase 2 – Preliminary Design.

### **TASK 3.7 - RISK MANAGEMENT ASSISTANCE**

The CONSULTANT’s responsibilities for risk management assistance during Phase 3 - Design shall be as specified for Phase 2 – Preliminary Design. Specific Phase 3 risk management tasks shall include the following.

#### **Task 3.7.1 Risk Management Plan**

Maintaining the Risk Management Plan and providing risk updates in monthly progress reports are required for Phase 2 shall be continued through submission of the Final Design Submittal.

## **TASK 3.8 - WORKSHOPS AND MEETINGS**

The requirements specified in Task 2.8 – Workshops and Meetings specified for Phase 2 – Preliminary Design related to Workshop and Meeting Planning and Workshop and Meeting Agendas shall also apply for Phase 3 - Design.

### **Task 3.8.1 Design Phase Workshops**

The focus of workshops is to review project progress to date and the technical decisions that have been made in focused meetings. CONSULTANT shall conduct the following workshops in Phase 3 – Design.

During final design, workshops shall be held after each design submittal. A constructability workshop shall also be held.

#### **Task 3.8.1.1 Design Submittal 1 Workshops**

##### **DS1 Review Kickoff Workshop**

The DS1 Review Kickoff Workshop shall be held immediately after DS1 is submitted. The objectives of this meeting include the following:

- Review how the submittal is organized, what material is included, and what material is not included, and how complete the various portions of the design are.
- Review significant design changes made since the previous submittal, and the reasons for those changes.
- Present key features of the submittal that OCSD staff should pay particular attention to when reviewing the submittal after the workshop.

CONSULTANT shall include at the Workshop staff members needed to present the material and directly address questions that may arise on the material. For this project, OCSD would anticipate the following CONSULTANT staff members would need to be physically present. In certain cases, CONSULTANT may propose that other team members participate by teleconference.

- Project Manager
- Project Engineer
- Lead Mechanical Engineer
- Lead Electrical
- I&C Engineer
- Architect/Subconsultant
- Geotechnical Engineer/Subconsultant

This workshop shall be two hours in length.

Immediately following the full workshop, the CONSULTANT Project Manager and Project Engineer shall present to OCSD's core engineering team the documentation of the quality control process implemented prior to delivery of the design submittal. If the quality control process does not appear to have been implemented per OCSD or CONSULTANT's quality control standards, the OCSD Project Manager may reject the submittal.

### **DS1 Validation Workshop**

The DS1 Validation workshop shall be held to review and validate the CONSULTANT's responses to OCSD's DS1 comments. This workshop shall be held after CONSULTANT has reviewed OCSD's comments on DS1 and developed suggested resolutions to the comments. The same OCSD and CONSULTANT staff that attended the kick-off workshop and design submittal review meetings should attend this workshop. The primary focus of this workshop is to resolve differences between the CONSULTANT and OCSD staff on how the comments should addressed.

This workshop shall be four hours in length.

### **Task 3.8.1.2 Design Submittal 2 Workshops**

#### **DS2 Review Kickoff Workshop**

The DS2 Kickoff Workshop shall be held immediately after DS2 is submitted and shall be conducted as specified for the DS1 Kickoff Workshop, including the review of the CONSULTANT's quality control documentation.

This workshop shall be two hours in length.

#### **DS2 Validation Workshop**

The DS2 Validation Workshop shall be conducted as specified for the DS1 Validation Workshop.

This workshop shall be two to four hours in length.

### **Task 3.8.1.3 Design Submittal 3 Workshops**

#### **DS3 Review Kickoff Workshop**

The DS3 Kickoff Workshop shall be held immediately after DS3 is submitted and shall be conducted as specified for the DS1 Kickoff Workshop, including the review of the CONSULTANT's quality control documentation.

This workshop shall be two hours in length.



### **DS3 Validation Workshop**

The DS3 Validation Workshop shall be conducted as specified for the DS1 Validation Workshop.

This workshop shall be four hours in length.

### **Task 3.8.1.4 Final Design Submittal Workshops**

#### **FDS Review Kickoff Workshop**

The FDS Kickoff Workshop shall be held immediately after FDS is submitted and shall be conducted as specified for the DS1 Kickoff Workshop, including the review of the CONSULTANT's quality control documentation.

This workshop shall be two hours in length.

#### **FDS Validation Workshop**

The DS3 Validation Workshop shall be conducted as specified for the DS1 Validation Workshop.

This workshop shall be four hours in length.

### **Task 3.8.1.5 Constructability Workshop**

A constructability workshop shall be held following the DS3 submittal and shall be a two-day workshop. The constructability review is intended to provide OCSD with an objective third party review of the Bid Documents for effectiveness in communicating information to prospective bidders. The review shall determine if the Bid Documents have sufficient information needed to bid and construct the project and avoid misunderstandings and misinterpretations that may lead to conflict, confusion or claims during construction. This review is not a comprehensive plan check, a dimensional check or a value engineering assignment. Further, it is recognized that comments may only be given on the level of detail provided at this level of design.

Constructability review participants shall include highly experienced individuals from construction companies, OCSD construction management staff and CONSULTANT design staff. Specialty Consultants and discipline engineers may also be included.

Each constructability review participant shall receive a package at least two weeks in advance. The package shall include plans and specifications, general conditions, the CPM schedule, the construction cost estimate, permits, and other pertinent information via Bluebeam Studio Session. The confirmation statements regarding the size-critical equipment as required in the Engineering Design Guidelines, Chapter 01, Design Guidelines – General Requirements, Section 01.2.15.2 "Size-Critical Equipment" shall also be included in the review package.

To avoid disturbances, the constructability review may be held on-site or off-site.

Day 1 shall start with a site visit, for the reviewers to acquaint themselves with the site conditions. After the site visit, the CONSULTANT shall make a short presentation, followed by

a question and answer period. This is anticipated to take about 1/2 day. The second half of Day 1, and the first half of day two shall be individual workdays for the Constructability Review Team. The CONSULTANT shall not attend, although one designated individual from the CONSULTANT's Design Team shall remain to answers questions and gather additional information that the constructability review team might need.

On the afternoon of Day 2, the CONSULTANT shall return and listen to comments from the Constructability Review Team. A designated individual shall record the comments, and take notes from the workshop, to document the process.

Topics the Constructability Review Team must consider shall include:

- Project consistency, discrepancies, and constructability issues
- Contradictions, bid package strategies, and biddability issues
- Power outages and equipment shutdowns
- Size critical equipment requirements and constraints
- Utility company requirements
- Construction methods and mitigating impacts
- Viability of equipment relocation
- Operational requirements
- Interim Control Plan
- Access for maintenance
- Access to make proper connections
- User-friendliness and safety
- Coordination with other projects
- Draft Commissioning Plan
- Public nuisance issues
- Risk sharing
- Construction sequencing and schedule, materials storage and work zone accessibility
- Clarity of the scope of work, and interface activities
- Impacts on existing operation
- Access

- Cost control
- Partnering with contractor
- Other local conditions and constraints

The Constructability Review Team shall provide comments in Bluebeam and the CONSULTANT shall respond to each comment, selecting those comments to be included in the final plans and specifications.

To facilitate the Constructability Review Workshop, CONSULTANT shall complete the following tasks:

- Prepare package for constructability review participants. The package shall consist of detailed plans and specifications and other information selected by CONSULTANT. The package shall be mailed to participants at least one week prior to the workshop.
- Prepare presentation on the project for the Constructability Review Team.
- Meet with Constructability Review Team to receive comments.
- Provide listing of constructability review comments and action taken on each comment. (The summary report of constructability review comments shall be prepared by the Constructability Review Team.)

All comments and recommendations of the workshop shall be incorporated into the Bid Documents at no additional cost to OCSD.

Prior to DS3, the Commissioning Team shall also conduct an additional constructability review of the final Bid Documents to review clarity of the bid package, project completeness, and other issues, as necessary.

### **Task 3.8.2 Design Phase Meetings**

#### **Task 3.8.2.1 Technical Progress Meetings**

Technical Progress Meetings shall be held via conference call every two weeks to review various issues with OCSD's project team. The CONSULTANT shall prepare and agenda and email it along with the updated Action Log and Decision Log prior to each meeting. Assume each meeting shall be 90-minutes in duration.

#### **Task 3.8.2.2 Focused Meetings**

Focused meetings shall be held throughout preliminary design to discuss specific issues in detail and generate comments and direction from OCSD staff. CONSULTANT shall assume 8 focused meetings.

Each focus meeting shall generally be 1one to two hours in length. Supplementary meetings may be scheduled with OCSD staff, as necessary to allow coordination between the CONSULTANT and OCSD staff.

### **Task 3.8.2.3 Commissioning Team Meetings**

A total of four commissioning team meetings shall be held after completion of OCSD's review of DS1.

Meetings will be two hours in length. CONSULTANT may suggest additional topics as necessary. Supplementary meetings may be scheduled with OCSD staff, as necessary, to allow coordination between CONSULTANT and OCSD staff.

The Commissioning Team meetings shall cover the following subjects:

- Provide a detailed review of the proposed construction sequencing plan and make recommendations for improvements. These recommendations shall be incorporated into the plans and specifications as appropriate. Possible incentives for the Contractor to finish the project early shall be explored.
- Identify procedures, testing requirements and sequencing for commissioning.
- Develop a detailed outline of a commissioning plan based on the results of the recommended construction sequencing plan.
- Prepare testing requirements and plan to prove process performance relative to design criteria developed in the PDR. Testing shall be performed after the RAT and supervised by the CONSULTANT.
- Identify timing within the construction contract schedule when commissioning activities are required, including hold points for testing and inspection.
- Identify roles and responsibilities of the Project Manager, Resident Engineer, Inspector, Project Engineer, PCI, Engineering support, Design CONSULTANT and Contractor.
- Develop a timeline of commissioning
- Develop a commissioning specification
- Develop standard forms for testing and commissioning documentation
- Electrical, mechanical and process tie-ins
- Startup requirements and testing
- Record drawings
- O&M training
- OMaP documentation and coordination of same with O&M Training

#### **Task 3.8.2.4 Safety and Risk Meeting**

Meet with OCSD Safety and Risk Management personnel, and OCIP (Owner Controlled Insurance Program) safety representatives, between DS2 and DS3 to review the plans and specifications in accordance with OCSD safety policies and OCSD Risk Management goals.

The design phase risk meeting shall be held per the following table:

<b>Meeting Name</b>	<b>Timing</b>	<b>Duration</b>
Safety and Risk Meeting	~4 weeks prior to submittal of DS3.	3 hours

The purposes of the workshops are to:

- Review the existing Risk Management Plan (RMP)
- Identify new key project-specific risks,
- Update the nature of the impact of each risk should it occur
- Update how likely the risk is to occur
- Update mitigation strategies that should be implemented or be ready to be implemented to address each risk.

The workshops will be held at OCSD offices. CONSULTANT shall prepare the agenda, any appropriate presentation materials, and minutes for the Workshop. The minutes shall include sufficient information for OCSD to update the RMP and for CONSULTANT to update the Risk Mitigation Measure Log.

#### **Task 3.8.2.5 CONSULTANT Office Technical Meetings (COTMs)**

OCSD has found it mutually beneficial to visit the CONSULTANT offices from time to time to observe the detailed design in process, answer detailed technical questions, and establish lines of communications with CONSULTANT staff. During the Design Phase, CONSULTANT shall arrange for OCSD staff to meet in CONSULTANT's work center and audit "over the shoulder" design reviews with CONSULTANT's staff. The reviews will be monitored by a member of CONSULTANT's Management Team. Signification decisions will be reported to CONSULTANT's Project Manager and OCSD's Project Manager and logged into the Decision Log. Action items will be identified.

The CONSULTANT shall schedule, at a minimum, the following CONSULTANT Office Technical Meetings (COTMs):

- One two-hour visit to review the QA/QC process.

- One four-hour visit to review CONSULTANT Loop Tag Number scheme and control documentation, P&ID tag extraction, basic control panel design, and Conduit, Tray and Cable Schedules.
- One two-hour visit to review the first few P&ID drawings, early Control Strategies, and the first elementary diagrams.
- One two-hour visit to review each of the SAT and EID products, including P&ID, SAT and EID coordination.

The CONSULTANT shall schedule each of the above COTMs and shall coordinate with OCSD's Project Manager to be sure the correct personnel participate in the meetings. The CONSULTANT may propose additional, eliminate, or combine COTMs as needed to support the detailed design.

OCSD may also request additional "over the shoulder" design review meetings to audit the design in other areas not listed above.

### **TASK 3.9 - QUALITY CONTROL**

The following Quality Control requirements apply both to Phase 2 – Preliminary Design and Phase 3 - Design. Quality control activities during Design should be budgeted for and charged to the Phase 3 quality control budget.

#### **Quality Control Requirements**

Acceptance of CONSULTANT professional services shall be based on the result of audits conducted on the elements of the approved QA/QC Plan and the incorporation or resolution of comments resulting from these audits.

Periodic Visits: OCSD may make periodic visits to the CONSULTANT's offices to review the progress of the technical work. These visits may include talking to CONSULTANT's personnel, reviewing drawings (both hardcopy and electronic), discussing QA/QC techniques that will be employed by OCSD in reviewing I/C drawings and assisting CONSULTANT's staff with understanding I/C requirements for such project elements as P&ID's.

Signed Affidavits: Prior to the submittal to OCSD, each Design Memo and Design Submittal identified in the Scope of Work shall be thoroughly reviewed and corrected by a member of the QC Team and the following affidavits submitted, testifying the completion of QA/QC review.

- The lead reviewer shall attest to their review in the form of a written affidavit outlining the submittal subject and identifying the corrected deficiencies.
- Each discipline reviewer shall provide an affidavit attesting to the details of the review, listing the drawings and specification sections he or she reviewed.
- Each Interdisciplinary reviewer shall provide an affidavit stating which documents he or she cross-checked for coordination between disciplines.

### **Discipline Internal Check**

CONSULTANT shall perform discipline check and review all drawings, specifications, studies, reports, calculations, and any other deliverable required by the Scope of Work. These requirements shall be implemented by those Project Team members responsible for the specific planning or design activity.

### **Discipline Integrity Check**

Immediately prior to the submittal of DS1, the CONSULTANT shall perform a drawing integrity check (plan check) for all disciplines. The DS1 submittal shall also have a coordination check between the P&IDs and Mechanical Drawings. The mechanical lead engineer shall attest to the accuracy of each P&ID and the respective mechanical drawings.

### **Interdisciplinary Coordination Check**

CONSULTANT shall perform an inter-discipline coordination cross-check immediately before each design submittal to correct discrepancies among the process and demolition plans; mechanical, structural, electrical, and instrumentation and controls drawings, and databases. Within each submittal, all documents shall have inter-discipline coordination checked and shall agree with each other.

### **Independent Multi-Discipline Design Review**

CONSULTANT shall identify an Independent Quality Control (IQC) Team consisting of qualified individuals not directly involved in the design or supervision of the work. This Team shall conduct a multi-discipline design review (check and inter-discipline cross-check) immediately before submittal of the DS3 to check discipline accuracy, provide coordination, and eliminate conflicts. A DS3 IQC workshop shall take place at OCSD. The workshop shall have a minimum duration of four days. OCSD project Team shall be invited and encouraged to attend and observe the early morning briefings.

The IQC Team shall have completed their independent review of their discipline prior to the DS3 IQC workshop. At the workshop, the IQC Team shall continue with the interdisciplinary review and cross-checking, comment generation and discussion. The comments resulting from the IQC Team review shall be documented in Bluebeam during the review process and will be reviewed by the entire IQC Team in the beginning of each subsequent day of the workshop. In terms of participation, these morning review sessions will be the most beneficial time for OCSD Staff to be in attendance. The CONSULTANT shall provide an open forum to OCSD to allow observation by OCSD Staff and a transparent QC process. The finalized IQC logs generated during the workshop will be incorporated into the QC documentation for the project and CONSULTANT shall track resolution of these comments using Bluebeam.

Each drawing shall have its own IQC checklist or drawing markup that shall be maintained throughout the workshop. These pre-prepared IQC checklists and drawing markups shall be used in addition to the IQC logs. Each discipline lead shall sign off on each drawing checklist or drawing markup to certify that the drawing was properly checked and cross-checked.

At the end of the IQC workshop, the IQC Team shall meet with CONSULTANT's QC Manager to provide insights and feedback.

After the DS3 IQC workshop, the design team shall provide responses to the IQC review comments. The IQC Team shall validate the responses to the comments prior to the DS3 submittal Using Bluebeam.

Print of the final markup list showing the status of each comment that all reviews performed, and all comments resolved, incorporated and back checked will be recorded on a QC Validation Form and submitted to OCSD for acceptance when the Design Submittal is delivered.

All submittals shall be accompanied by a transmittal letter signed by CONSULTANT's principal-in-charge or Project Manager, if appropriate, indicating that the submitted documents have been checked, and identifying the reviewer's name. Signatures of the respective checkers shall be included where appropriate. All submittals shall be checked with a goal of insuring accuracy and consistency.

#### **Documentation of Level of Effort for QA/QC**

CONSULTANT shall include man-hours for all QA/QC activities related to Preliminary Design in this task, including the development of the QA/QC Plan and review of Bid Documents either by CONSULTANT, or by the CONSULTANT in conjunction with OCSD staff in meetings and workshops.

#### **TASK 3.10 – PERMITTING ASSISTANCE**

CONSULTANT services related to Permitting Assistance on the project are specified in Phase 2 – Preliminary Design and those services shall continue during Phase 3 - Design. The CONSULTANT shall allocate the budgeted hours between the Permitting Assistance services in Phase 2 and Phase 3 based on when these services will be required.

#### **PHASE 4 – CONSTRUCTION AND INSTALLATION SERVICES**

Not in this Scope of Work.

#### **PHASE 5 – COMMISSIONING SERVICES**

Not in this Scope of Work.

#### **PHASE 6 – CLOSE OUT**

Not in this Scope of Work.

### **V. GENERAL REQUIREMENTS**

#### **GENERAL**

#### **OCSD ENGINEERING DESIGN GUIDELINES AND STRATEGIC PLAN**

The Engineering Guidelines define what design concepts/tools/methods and project management requirements shall be adhered to and in what manner they shall be



used/provided by CONSULTANTS, e.g., requirements regarding design concepts, submittals, documentation details, use of OCSD Master Specifications, and other related OCSD Standards, etc.

Refer also to Section “CONSULTANT’s Responsibilities” in OCSD Engineering Design Guidelines Chapter 01. Refer to “Master Specifications Instructions for Use” that mandates rules and conventions to be used in all OCSD project specifications.

The project Scope of Work defines whether or not each specific deliverable described in the Guidelines shall be part of the project and when each task shall take place.

The project Scope of Work also includes requirements that supplement and/or modify the Guidelines requirements for this project.

The project Scope of Work and OCSD Engineering Design Guidelines impact CONSULTANT’s project cost.

Except as specified in this Scope of Work, design of all facilities shall conform to the recommendations of the currently approved Master Plan for OCSD facilities. The project shall also incorporate all applicable mitigation measures included in associated environmental documents and site-specific local requirements.

In addition, OCSD will require the CONSULTANT to follow subsequent revisions of OCSD Safety Standards, OCSD Engineering Design Guidelines and other OCSD Design Standards up to transmittal by OCSD of comments on Design Submittal 2 (DS2).

OCSD may update OCSD’s Master Specifications and/or add new OCSD Master Specifications up to transmittal by OCSD of comments on Design Submittal 2. The CONSULTANT shall utilize the new and/or modified Master Specifications for the DS3 submittal.

The CONSULTANT shall not begin editing the project specifications until the project team meets with OCSD’s Design Standards Custodian to discuss and receive comments regarding the CONSULTANT’s proposed list of project specifications. This meeting will be used to determine which specifications are to use OCSD’s master specifications, and where other sources will be utilized.

### **Project Phases and Tasks**

Project tasks and deliverables shall include the requirements described in this Scope of Work. CONSULTANT shall also refer to Appendix A of OCSD Engineering Design Guidelines for the level of detail requirements for individual deliverables in each Phase of the project not covered in the Scope of Work.

### **Construction Sequencing and Constraints**

CONSULTANT shall develop with OCSD staff and include in the Bid Documents detailed requirements for construction sequencing and constraints. These shall ensure safe and reliable operation and maintenance of OCSD facilities. The facilities must be kept on-line and fully operational with minimal interruptions throughout construction.

## **Working Hours**

Meetings with OCSD staff shall be scheduled from Monday through Thursday between the hours of 8:00 AM and 4:00 PM.

## **Standard Drawings and Typical Details**

All the details used in the project (OCSD's Standard Drawings and CONSULTANT-developed typical details) shall be shown on the Plans.

## **Software**

The CONSULTANT is expected to develop and provide the deliverables using the standard software currently approved for use by OCSD. The standard OCSD software includes, but is not limited to, the following:

- AutoCAD Plant 3D ver 2018 (for P&ID drawings only)
- Autodesk software 2018 (AutoCAD, AutoCAD Map3D or compatible dwg file format)
- Bluebeam Revu eXtreme (version 2018.2)
- Primavera P6 for scheduling
- Microsoft Office 365

Bluebeam collaboration tools will be used on this project. The CONSULTANT shall have the proper software and licenses to collaborate with OCSD through Bluebeam Revu and Revu Studio. All submittals shall be in formats compatible with Bluebeam. CONSULTANT shall supply an external site that can be utilized by OCSD staff to access and save back all design submittal review comments. This will allow easier collaboration between OCSD and the CONSULTANT.

Any software that the CONSULTANT needs to comply with these standards shall be purchased and maintained by the CONSULTANT at no additional cost to OCSD. In the event OCSD provides the CONSULTANT with access to OCSD software and hardware at an OCSD facility in order to facilitate performance of their work, all software shall remain the property of OCSD. Only software licensed to OCSD shall be installed on OCSD equipment. In addition, only OCSD IT Department staff will perform the installation of this software.

Refer to Chapters 10 and 11 and Appendix A of OCSD Engineering Design Guidelines for requirements on preparation of Criticality Tables and ETAP, SAT, and EID databases. Refer to OCSD CAD Manual and to Chapter 11 and Appendix A of OCSD Engineering Design Guidelines for requirements regarding P&ID drawings.

## **Submittal Review using Bluebeam**

OCSD has standardized on the use of Bluebeam Revu for reviewing and providing comments to PDF files. Prior to submitting electronic PDF files, format them as indicated below

(underlined text refers to commands or functions within the Bluebeam software). See “**Exhibit 17** Designer Training for Submission” and “OCSD CAD Standards Manual” prior to submission.

1. Flatten file with Document\Flatten
2. Reduce file size with Document\Process\Reduce File Size
3. Make PDF searchable with Document\OCR
4. Create page labels with Thumbnails Toolbar\Create Page Labels
5. Create bookmarks with Create Bookmarks\Page Labels
6. Enable hyperlinks with File\Batch\Link\New

PDF files will be hosted in a Bluebeam cloud-based studio session for review. See “SOW **Exhibit 18** Designer User Training” for a detailed explanation on how Bluebeam will be used to provide, validate, and close submittal review comments.

1. The purpose of the studio session is to provide review and collaboration. The session provides multiple attendees, despite location, the opportunity to review and comment on the same PDFs in real time. All review actions are tracked and recorded.
2. OCSD staff will create the Bluebeam studio session, invite attendees, configure, and manage the Studio session.
3. Bluebeam provides reviewers with tools for annotating PDFs called a markup. OCSD provides two toolboxes for annotating PDFs: "OCSD Drawings Review" and "OCSD Report Review."
4. Markups are both graphical and tabular. When the graphic markup is placed, corresponding tabular data are created. The collection of tabular data is considered the markup list.
5. The markup is automatically populated with various properties including author, sheet number, comment, markup type, etc. to make reviewing consistent. The tabular data within the markup list are hyperlinked to the graphical markup for back-and-forth viewing.
6. The markup list may be sorted or filtered. For example, filtering markups by author makes that attendee's markups more prominent on the page by dimming everyone else's markups.
7. Within a studio session, markups may only be modified by the markup author except for the Status data field using the "Set Status" command. OCSD has customized this field for the reconciliation of comments and backcheck. Session attendees may "Reply" to the markup of other reviewers. Replying to a markup provides the responder the opportunity to explain how the markup will be incorporated.

8. The comment reconciliation steps are summarized below:
  - a. Reply – respond to OCSD provided review comment with: **Agree, Disagree, or Flag for Discussion**.
  - b. Direct – meet with OCSD to reconcile the non-agrees with either an **Incorporate** or **Do Not Incorporate** response. OCSD will work with CONSULTANT to ensure clear direction is provided.
  - c. QC Check – CONSULTANT tells OCSD that the comment has been addressed in the next submittal by responding with **Incorporated** or **Not incorporated**.
  - d. Backcheck – reconciliation of open and incorporated comments by OCSD with an **Open** or **Closed** response.
9. A one-hour training session on the use of Bluebeam and custom status menu will be provided by OCSD. All CONSULTANT team members responsible for quality control and reconciliation of submittal comments shall attend.

### **Word Track Changes**

1. Below are guidelines for the review and incorporation of MS-Word comments and revisions. Use MS-Word Track Changes to show edits to all project specifications and other MS-Word files.
2. Submit the marked-up electronic files for OCSD review, as required by the Scope of Work. OCSD's review will consist of comments and (in-text) revisions. OCSD comments and revisions shall remain visible in Track Changes throughout design.
3. OCSD will return the MS-Word files or host them in a central location.
  - a. If the files are returned, CONSULTANT will check the files back into their document management system (i.e., replace the old files with the returned files) and resume their design and review of OCSD comments using the returned files. This insures that in-text revision by OCSD are preserved.
  - b. Hosting files in a central repository is preferred because it eliminates file transfer and the potential for multiple copies. Hosted files are also protected by version control.
4. OCSD comments shall be addressed using MS-Word "Reply" and "Resolve." The CONSULTANT shall "Reply" to each OCSD comment describing how the comment will be addressed and revise the specification, as needed, to address the comment.
5. "Resolve" will be used by the reviewer or designee to confirm their comment has been addressed. "Resolve" greys out the comment showing it is closed.
6. Revisions may be "Rejected" with the concurrence of the Project Engineer or reviewing party. Concurrence is necessary because once a revision is "rejected," it is removed from MS-Word Track Changes and no longer visible.

After final design, all MS-Word comments and revisions shall be Track Changes accepted, rejected, resolved, or deleted prior to bid. The MS-Word commands to "Accept All Changes" and "Delete All Comment in Document" shall be performed just prior to preparing the IFB set. No unaddressed comments or revisions shall remain in the Bid Documents.

## GIS Submittals

CONSULTANT shall provide the following GIS deliverables propagated from approved design submittals after the design submittal is accepted. These GIS submittals will not be reviewed or presented by CONSULTANT. The purpose is to provide project specific GIS layers that could be used to visualize interproject dependencies and conflicts.

1. Electronic Submittal
  - a. Kmz files for use with Google Earth
2. Final PDR
  - a. Single project boundary (Polygon)
    - i. Boundary to encompass all new facilities and existing to be modified including:
      1. Buildings\Structures
      2. Tunnels
      3. Utilities
      4. Pavement
      5. Street boundary (ROW to ROW) of possible alignment
  - b. Structures (Polygon)
    - i. New structure outline
    - ii. Additions to existing structures
    - iii. Structure label
3. DS1
  - a. Project boundary - *updated from PDR*
  - b. Structures - *updated from PDR*
  - c. Utilities (Polyline)
    - i. Utility alignment
  - d. Manholes (Point)
  - e. Excavation of pits (Polygon)
    - i. Pits that will stay open for extended duration
    - ii. CIPP
    - iii. Tunnel - jacking and receiving
    - iv. All pits should be labeled
4. DS2, DS3, and FDS
  - a. Project boundary - *updated from previous DS*
  - b. Structures - *updated from previous DS*
  - c. Utilities - *updated from previous DS*
  - d. Manholes - *updated from previous DS*
  - e. Excavation of pits - *updated from previous DS*
  - f. Critical (as defined by Dig Alert) utility crossings (Point)
    - i. Crossing of Dig Alert critical utilities
    - ii. Critical utility label
      1. Natural gas
      2. Fuel pipeline
      3. 12 kV Electrical
  - g. Asphalt (Polygon)
    - i. Asphalt to be replaced

## **PROJECT SPECIFIC DEVIATIONS FROM OCSD DESIGN GUIDELINES**

### **ENGINEERING DESIGN GUIDELINES, CHAPTER 11, "INSTRUMENTATION AND CONTROL"**

- a. Section 11.3.1 "Requirements Study"
- b. Section 11.3.2 "Requirements Study Report"

The Requirements Study shall not be part of the Scope of Work.

### **ADDITIONAL DESIGN CRITERIA**

In addition to meeting the design criteria required in the Engineering Design Guidelines (EDG), the CONSULTANT shall design the pump station to meet the following criteria.

1. The station must be able to pump the peak (1-hour average, 10-year storm, 2040) wet weather flow with one of the pumps out of service.
2. The station shall be able to pump peak (1-hour average) dry weather flows with one of its pumps out of service.
3. The frequency range of the Variable Frequency Drives shall be maximized during average daily dry weather flow operation.
4. The pumps shall be capable of passing rags and fibrous materials and shall be capable of passing a 3-inch diameter non-compressible solid.
5. Pump station shall reliably meet design flow requirements even if flooded. All sources of flooding shall be identified and mitigated. Flooding is defined as in-flow larger than what the sump pump can handle. Electrical and control elements in the flood zone shall be able to function even after an extended amount of time under water.
6. All electrical, instrumentation, and control equipment not required to be in the pump room or wet well shall be located in a completely separate room without any connection to a classified area.
7. The pumps shall be designed to operate without cavitation or excessive vibration through all operating ranges.
8. The VFD operating range must be continuous and shall not skip any frequencies to avoid ranges where vibration resonance may occur.
9. Pump shall be designed to utilize the full frequency range of operation (typically between 30Hz to 60Hz). Range to be established and agreed upon prior to final PDR.
10. Sump Pumps shall be provided with chopper blades.
11. Ductwork between wet wells and air scrubber facility shall be buried where crossing pavement or other open areas.

12. Design ventilation systems to minimize short circuiting.
13. Mount blowers over 5 hp on vibration isolators.
14. Minimum air exchanges in pumping station shall be the largest of either 10 per hour or as required to keep the motors cool.
15. Air in the electrical room(s) shall be cleaned and kept between manufacturer's recommended temperatures.
16. Air conditioners will be required to cool the air in the electrical rooms. Air exchanges in the electrical room(s) shall be either a) six per hour; b) whatever is needed to control heat buildup; or c) as required by the equipment manufacturers whichever is greater.

## **VI. STAFF ASSISTANCE**

OCSD staff member or designee assigned to work with CONSULTANT on the design of this project is Justin Fenton at (714) 593-7386, e-mail to: [jfenton@ocsd.com](mailto:jfenton@ocsd.com).

## **EXHIBITS:**

<b>Exhibit 01</b>	<b>Design Submittal Requirements Matrix</b>
<b>Exhibit 02</b>	<b>Project Schedule Calculation</b>
<b>Exhibit 03</b>	<b>Project Reference Material</b> <ul style="list-style-type: none"><li>• 3-12 Record Dwg Set</li><li>• 3-62 Amendment 3 Docs</li><li>• 3-62 Final PDR Complete</li><li>• 3-62 GW Impacts Near SBPS TM</li><li>• Rehabilitation of Outlying Pump Stations Ch. VII – Seal Beach</li><li>• Selecting a Pump v3</li></ul>
<b>Exhibit 04</b>	<b>Deliverable Quantities</b>
<b>Exhibit 05</b>	<b>Sample Construction Cost Estimate Format</b> <ul style="list-style-type: none"><li>• Sample 1</li><li>• Samples 2 - 4</li></ul>
<b>Exhibit 06</b>	<b>Sample Full Project Safety Review Plan</b>
<b>Exhibit 07</b>	<b>Sample Risk Management Check List</b>
<b>Exhibit 08</b>	<b>SBPS Asbestos Lead Hazardous Material Survey</b> <ul style="list-style-type: none"><li>• 2015</li><li>• 2019</li></ul>
<b>Exhibit 09</b>	<b>Commissioning Docs</b> <ul style="list-style-type: none"><li>• Commissioning Design Spreadsheet</li><li>• Commissioning templates</li><li>• Sample ORT 1 of 2</li><li>• Sample ORT 2 of 2</li></ul>
<b>Exhibit 10</b>	<b>Sample FAT</b>
<b>Exhibit 11</b>	<b>Sample RAT</b>
<b>Exhibit 12</b>	<b>Sample PnID Rocky Point</b>
<b>Exhibit 13</b>	<b>Sample Control Strategy</b>
<b>Exhibit 14</b>	<b>NOT USED</b>
<b>Exhibit 15</b>	<b>Navy Security Fence Documents</b>
<b>Exhibit 16</b>	<b>NOT USED</b>
<b>Exhibit 17</b>	<b>Designer Training for Submission (2018)</b>
<b>Exhibit 18</b>	<b>Designer User Training Document (2018)</b>



**Exhibit 19     3-62 Geotechnical Data Report**

**Exhibit 20     3-62 Evaluation Memorandum No. 2**

**Exhibit 21     3-62 Evaluation Memo 3**

**Exhibit 22     Latest 3-62 DRAWING NO. C5001**

JGD:MK:dm

# **ATTACHMENT “D”**

## **ALLOWABLE DIRECT COSTS**

## ATTACHMENT “D”

### ALLOWABLE DIRECT COSTS

<b>LONG DISTANCE TELEPHONE CHARGES</b>	All long distance telephone charges incurred will be reimbursed as direct costs. Telephone charges to area codes serving Los Angeles, Orange, Riverside, and San Bernardino Counties will not be reimbursed.
<b>FACSIMILE TRANSMISSION CHARGES</b>	Facsimile transmission charges will not be reimbursed, except the long distance toll charges, as described above.
<b>REPRODUCTION AND PRINTING CHARGES</b>	In-house reproduction of records and documents will not be reimbursed by the SANITATION DISTRICT. Use of an outside copy service for specialty items and volume reproduction will be reimbursed at direct cost. Use of a professional printing service will be reimbursed at actual cost.
<b>OVERNIGHT MAIL DELIVER AND MESSENGER SERVICE</b>	Use of Federal Express, Express Mail, UPS, or such similarly-related service, as well as a messenger service, will be reimbursed at direct cost only when necessary.
<b>POSTAGE</b>	Incidental postage will not be reimbursed by the SANITATION DISTRICT.
<b>FILM PROCESSING</b>	Film processing will be reimbursed at actual cost.
<b>COMPUTER USAGE</b>	Computer use by Consultant and/or support staff will not be reimbursed.
<b>MILEAGE</b>	Per mile reimbursement will be at the current rate set by the Internal Revenue Service.
<b>TEMPORARY STAFF</b>	The use of outside temporary support staff will be reimbursed at direct cost with prior approval of the SANITATION DISTRICT.
<b>OFFICE SUPPLIES</b>	The purchase of office supplies by Consultant will not be reimbursed.
<b>LODGING</b>	<p>The cost of lodging including room and all applicable taxes will be reimbursed on a per diem basis as an allowable maximum as established by U.S. General Service Administration. Lodging incidentals as defined by IRS are included in the per diem rates. Lodging personal incidentals including movies, internet, laundry service, valet service, room service, etc., will not be reimbursed. Receipts must be provided for the actual incurred cost.</p> <p>Cancellations of the hotel reservations by the Consultant must be per the hotel policy. Late cancellations, early or late departure will not be reimbursed by the SANITATION DISTRICT.</p>
<b>GROUND TRANSPORTATION</b>	The cost of ground transportation for taxi, shuttle, train, etc., will be reimbursed. Limousine service will not be reimbursed. The Consultant shall use the most economic and practical mode of transportation that is reasonably available.

<b>AIRFARE</b>	Airline ticket cost including one bag will be reimbursed only if pre-approved by the SANITATION DISTRICT. First class tickets will not be reimbursed unless pre-approved by the SANITATION DISTRICT. Membership dues for corporate card frequent user programs or the cost of airline club membership will not be reimbursed.
<b>AUTO RENTAL</b>	Rental car cost for intermediate or standard model, mid-size car (Class "C") or the smaller car compatible with the specific need and rental car gas will be reimbursed. Receipts must be provided to substantiate requested reimbursements.
<b>PARKING FEE</b>	Parking fees for hotel, airport, rail station, etc. will be reimbursed. Consultant shall use the most economic and practical parking location as reasonably available. Excessive parking fees that are deemed unreasonable by the SANITATION DISTRICT will not be reimbursed.
<b>TRAVEL MEALS</b>	Travel meals will be reimbursed on a per diem basis as established by U.S. General Service Administration. Per diem rates include gratuities (tips) and will not be separately reimbursed by the SANITATION DISTRICT. Personal expenses such as cost of alcoholic beverages will not be reimbursed. No receipts are required for the approved meals. The daily total reimbursement for meals shall not exceed the SANITATION DISTRICT per diem rate which is available upon request.
<b>PER DIEM DAILY RATE FOR LODGING AND MEALS</b>	The SANITATION DISTRICT may utilize per diem daily rate that includes lodging, meals and incidentals (M&IE) as established by IRS and U.S. General Service administration for pre-approved travel when reasonable.
<b>RENTAL EQUIPMENT</b>	Consultant will be reimbursed at actual cost, no mark-up.
<b>OTHER DIRECT COSTS</b>	OCSD may authorize other items that may be necessitated due to modifications in scope of work resulting from field investigations and field work required by Contract. These items may include special equipment, test equipment and tooling and other materials and services not previously identified. These items will be reimbursed based on actual cost incurred. A one-time mark-up of 15% for additional equipment rentals, materials and outside services required for field work and investigations may be allowed, as applicable, if justified. No additional markup is allowed by Consultant on other direct costs resulting from work performed by its Contractors.
<b>MISCELLANEOUS</b>	Cost of miscellaneous personal items such as, but not limited to newspapers, toiletries, shoeshine, tobacco products, pay TV, movies, valet services, health club charges, in-room mini bars, clothing and footwear will not be reimbursed. ATM/bank fees incurred by Consultant while traveling will not be reimbursed. Costs for project team lunches will not be reimbursed unless pre-approved by the SANITATION DISTRICT.

# **ATTACHMENT “E”**

## **FEE PROPOSAL FORM**

## ATTACHMENT "E" FEE PROPOSAL FORM

Submitted by: LEE & RO, Inc.  
(Name of Firm)

<b>Consultant Name:</b>		LEE & RO, Inc.					
Raw Labor		\$	1,392,067				
Fringe Costs	31.00%	\$	431,541				
Burdened Labor (Raw Labor + Fringe)		\$	1,823,608				
		Overhead	110.00%	\$	2,005,969		
Note: Round all values to nearest dollar.				<b>Subtotal</b> (Burdened labor + OH)		\$	<b>3,829,577</b>
				Profit (% of Subtotal)	5.00%	\$	191,479
				Total Direct Costs, not to exceed		\$	24,200
				<b>TOTAL - "Consultant" Not to Exceed</b>		\$	<b>4,045,256</b>

<b>Major Subconsultant A Name:</b>		Atkins					
Raw Labor		\$	81,700				
Fringe Costs	34.43%	\$	28,129				
Burdened Labor (Raw Labor + Fringe)		\$	109,829				
		Overhead	103.28%	\$	113,432		
Note: Round all values to nearest dollar.				<b>Subtotal</b> (Burdened labor + OH)		\$	<b>223,261</b>
				Profit (% of Subtotal)	10.00%	\$	22,326
				Total Direct Costs, not to exceed		\$	1,100
				<b>TOTAL - Major Subconsultant A Not to Exceed</b>		\$	<b>246,688</b>

## ATTACHMENT "E"

### FEE PROPOSAL FORM

Submitted by: LEE & RO, Inc.  
(Name of Firm)

<b>Major Subconsultant B Name:</b>		Brierley and Associates			
Raw Labor		\$	170,650		
Fringe Costs	74.06%	\$	126,383		
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)		\$	297,033
		Overhead	38.64%	\$	114,773
		<b>Subtotal (Burdened labor + OH)</b>		\$	<b>411,806</b>
		Profit (% of Subtotal)	9.64%	\$	39,698
		Total Direct Costs, not to exceed		\$	5,000
<b>TOTAL - Major Subconsultant B Not to Exceed</b>					<b>\$ 456,504</b>

<b>Major Subconsultant C Name:</b>		T2 UES, Inc. (Cardno)			
Raw Labor		\$	42,436		
Fringe Costs	61.22%	\$	25,979		
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)		\$	68,415
		Overhead	118.26%	\$	80,909
		<b>Subtotal (Burdened labor + OH)</b>		\$	<b>149,324</b>
		Profit (% of Subtotal)	10.00%	\$	14,932
		Total Direct Costs, not to exceed		\$	62,000
<b>TOTAL - Major Subconsultant C Not to Exceed</b>					<b>\$ 226,256</b>

## ATTACHMENT "E"

### FEE PROPOSAL FORM

Submitted by: LEE & RO, Inc.  
(Name of Firm)

<b>Major Subconsultant D Name:</b>		NHC			
Raw Labor		\$	64,735		
Fringe Costs	59.98%	\$	38,828		
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)		\$	103,563
		Overhead	81.12%	\$	84,010
		<b>Subtotal (Burdened labor + OH)</b>		\$	<b>187,573</b>
		Profit (% of Subtotal)	10.00%	\$	18,757
		Total Direct Costs, not to exceed		\$	48,241
<b>TOTAL - Major Subconsultant D Not to Exceed</b>					<b>\$ 254,571</b>

<b>Major Subconsultant E Name:</b>		Swift Lee Architects (SLO)			
Raw Labor		\$	56,827		
Fringe Costs	9.50%	\$	5,399		
Note: Round all values to nearest dollar.		Burdened Labor (Raw Labor + Fringe)		\$	62,226
		Overhead	130.00%	\$	80,894
		<b>Subtotal (Burdened labor + OH)</b>		\$	<b>143,120</b>
		Profit (% of Subtotal)	10.00%	\$	14,312
		Total Direct Costs, not to exceed		\$	3,000
<b>TOTAL - Major Subconsultant E Not to Exceed</b>					<b>\$ 160,432</b>

Subconsultants Under \$100,000		
Subconsultant 1	Bluescape	\$ 39,130
Subconsultant 2	Collings	\$ 38,960
Subconsultant 3	Diaz Yourman	\$ 69,783
Subconsultant 4	GSI Environmental	\$ 61,405



## ATTACHMENT "E"

### FEE PROPOSAL FORM

Submitted by: LEE & RO, Inc.

(Name of Firm)

Subconsultant 5	KW Communications	\$	75,000
Subconsultant 6	NUVIS Landscape Architecture	\$	40,330
Subconsultant 7	Spec Services	\$	98,500
Subconsultant 8	Traffic Control Engineering	\$	80,400
Subconsultant 9	The Prizm Group	\$	29,205
Subconsultant 10	Venklasen	\$	25,430
<b>TOTAL - Subconsultants Under \$100,000</b>		<b>\$</b>	<b>558,143</b>

<b>SUMMARY</b>			
Consultant		\$	4,045,256
Major Subconsultant A		\$	246,688
Major Subconsultant B		\$	456,504
Major Subconsultant C		\$	226,256
Major Subconsultant D		\$	254,571
Major Subconsultant E		\$	160,432
Subconsultants Under \$100,000		\$	558,143
<b>GRAND TOTAL - Not to Exceed</b>		<b>\$</b>	<b>5,947,850</b>

# **ATTACHMENT “I”**

## **COST MATRIX AND SUMMARY**

Seal Beach Pump Station Replacement, Project No. 3-67

Attachment I - Cost Matrix

Task Item	Labor hours										Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees
	Project Manager	Project Engineer	Lead Electrical	Lead I&C Eng.	Engineer	Associate Engineer	Assistant Engineer	Sr. CAD Designer	Assoc. CAD Designer	Adm. Assistant										
Average Actual Salary Fully Burdened Hourly Rate (includes payroll costs, OH, and Profit)	99.28	89.53	99.28	89.53	70.99	63.91	55.18	75.14	55.18	33.33			31.00%		110.00%		5.00%			
PHASE 2 - PRELIMINARY DESIGN																				
2.1 Not Used																				
2.2 Preliminary Design Production																		220,000.28		
2.2.1 Design Memos																		0.00		
2.2.1.1 Design Memo 1 - Trunk Sewer Alignment and PS Base Map	24	40			40	60	80	120	80	16	460	31,017.00	9,615.27	40,632.27	44,695.50	85,327.77	4,266.39	255,461.38	1,000.00	346,055.54
2.2.1.2 Design Memo 2 - Pump Station Alternatives and Basis of Design	80	80	80	40	80	80	120	80	120	16	776	57,208.08	17,734.50	74,942.58	82,436.84	157,379.43	7,868.97	254,571.00	6,000.00	425,819.40
2.2.1.3 Design Memo 3 - Geotechnical and Groundwater Management Study	12	24			24	16	24	24	24	8	156	10,785.04	3,343.36	14,128.40	15,541.24	29,669.65	1,483.48	98,558.00	100.00	129,811.13
2.2.1.4 Design Memo 4 - Structural and Architectural	8	24	4		60	40	8	60	80	12	296	19,920.08	6,175.22	26,095.30	28,704.84	54,800.14	2,740.01	24,622.85	100.00	82,263.00
2.2.1.5 Design Memo 5 - Civil, Landscaping, Irrigation, Noise and Utilities	8	16	8	12	16	16	24	40	40	12	192	13,190.80	4,089.15	17,279.95	19,007.94	36,287.89	1,814.39	31,450.00	100.00	69,652.29
2.2.1.6 Design Memo 6 - Mechanical	16	40	8	4	40	40	40	40	40	4	272	19,271.36	5,974.12	25,245.48	27,770.03	53,015.51	2,650.78	0.00	100.00	55,766.29
2.2.1.7 Design Memo 7 - Electrical and Standby Power	12	16	80	8	16	40	80	24	40	4	320	23,533.00	7,295.23	30,828.23	33,911.05	64,739.28	3,236.96	7,241.00	100.00	75,317.25
2.2.1.8 Design Memo 8 - Instrumentation and Control	8	4	8	80	24	8	40	40	40	4	256	18,877.36	5,851.98	24,729.34	27,202.28	51,931.62	2,596.58	0.00	100.00	54,628.20
2.2.1.9 Design Memo 9 - Odor Control and Air Quality Management	8	24	4	4	16	16	24	24	24	8	152	10,575.24	3,278.32	13,853.56	15,238.92	29,092.49	1,454.62	29,415.55	100.00	60,062.66
2.2.1.10 Design Memo 10 - Fire Protection, Security and Safety	8	12	4	12	12	12	24	24	24	8	140	9,677.52	3,000.03	12,677.55	13,945.31	26,622.86	1,331.14	15,600.00	100.00	43,654.00
2.2.1.11 Design Memo 11 - Hazardous Material Survey, Mitigation and Control	8	16			40	24			16	4	108	7,616.36	2,361.07	9,977.43	10,975.17	20,952.61	1,047.63	0.00	100.00	22,100.24
2.2.1.12 Design Memo 12 - Code, Environmental, Permits, Agency Coordination and Traffic Control	24	24	8	8	40	60	60	40	40	8	312	21,506.36	6,666.97	28,173.33	30,990.66	59,164.00	2,958.20	30,000.00	100.00	92,222.20
2.2.1.13 Design Memo 13 - Construction Phase Implementation, Constructability Issues, Cost and Schedule	40	40	16	16	40	16	16	8	16	8	216	17,069.04	5,291.40	22,360.44	24,596.49	46,956.93	2,347.85	0.00	100.00	49,404.78
2.2.1.14 Design Memo 14 - Facility Operations and Maintenance	24	40	40	40	40	12	12			24	232	18,584.92	5,761.33	24,346.25	26,780.87	51,127.11	2,556.36	0.00	100.00	53,783.47
2.2.2 Preliminary Design Drawings	40	40	24	24	40	80	80	40	80		448	31,870.64	9,879.90	41,750.54	45,925.59	87,676.13	4,383.81	0.00	1,000.00	93,059.94
2.3 Value Engineering Assistance																		8,651.76		
2.3.1 Workshop Participation	16	16	16	8	8						64	5,893.60	1,827.02	7,720.62	8,492.68	16,213.29	810.66	27,048.67	100.00	44,172.63
2.3.2 Review of Value Engineering Recommendations (200 hrs allowance)	60	60	40	20	20						200	18,510.20	5,738.16	24,248.36	26,673.20	50,921.56	2,546.08	0.00		53,467.64
2.4 Not Used																		0.00		
2.5 Permitting Assistance																		0.00		
2.5.1 SCAQMD Permitting																		6,140.00		
2.5.1.1 Demonstration of Compliance with New Source Review for Citeria Pollutants (SCAQMD Reg. XIII)	16	16			40	16				8	96	7,149.76	2,216.43	9,366.19	10,302.80	19,668.99	983.45	7,980.00		28,632.44
2.5.1.2 Demonstration of Compliance with New Source Review for Air Toxics (SCAQMD Rule 1401)	16	16			40	16				8	96	7,149.76	2,216.43	9,366.19	10,302.80	19,668.99	983.45	7,600.00		28,252.44
2.5.1.3 Demonstration of Compliance with SCAQMD Rule 1403	8	8			16	4				4	40	3,035.28	940.94	3,976.22	4,373.84	8,350.06	417.50	1,640.00		10,407.56
2.5.1.4 Demonsration of Compliance with Odor Nuisance (SCAQMD Rule 402)	4	4			8	8				4	28	1,967.76	610.01	2,577.77	2,835.54	5,413.31	270.67	6,240.00		11,923.97
2.5.1.5 Planning and Design Strategies for Air Pollution Control System	24	24			40	40				16	144	10,460.72	3,242.82	13,703.54	15,073.90	28,777.44	1,438.87	6,540.00		36,756.31
2.5.1.6 Demonstration of Compliance with SCAQMD Rule 212	1	1			2		2			1	7	474.48	147.09	621.57	683.73	1,305.29	65.26	2,990.00		4,360.56
2.5.2 Navy Permitting	8	12			24	24				4	72	5,239.52	1,624.25	6,863.77	7,550.15	14,413.92	720.70	0.00	100.00	15,234.62
2.5.3 City of Seal Beach Permitting	8	12			24	24				4	72	5,239.52	1,624.25	6,863.77	7,550.15	14,413.92	720.70	400.00	100.00	15,634.62
2.5.4 Coastal Commission Permitting	8	12			24	24				4	72	5,239.52	1,624.25	6,863.77	7,550.15	14,413.92	720.70	3,935.87	100.00	19,170.48
2.5.5 Stormwater Permitting	4	4			40	20				4	72	5,006.36	1,551.97	6,558.33	7,214.16	13,772.50	688.62	0.00	100.00	14,561.12
2.6 Project Management																		9,770.40		
2.6.1 Project Management Plan	24	24	8	8	24					12	100	8,145.64	2,525.15	10,670.79	11,737.87	22,408.66	1,120.43	0.00		23,529.09
2.6.2 Project Management Progress Meetings	24	24			24					24	96	7,035.12	2,180.89	9,216.01	10,137.61	19,353.62	967.68	17,310.25		37,631.54
2.6.3 Project Schedule	24	24			24					4	76	6,368.52	1,974.24	8,342.76	9,177.04	17,519.80	875.99	0.00		18,395.79
2.6.4 Project Logs	24	24			40					8	96	7,637.68	2,367.68	10,005.36	11,005.90	21,011.26	1,050.56	0.00		22,061.82
2.6.5 Progress Reports	16	16			16					8	56	4,423.44	1,371.27	5,794.71	6,374.18	12,168.88	608.44	0.00		12,777.33
2.6.6 Project Invoices	12	12								12	36	2,665.68	826.36	3,492.04	3,841.24	7,333.29	366.66	0.00		7,699.95
2.6.7 Management of Subconsultants	40	40	24		40					40	184	14,107.92	4,373.46	18,481.38	20,329.51	38,810.89	1,940.54	0.00		40,751.43
2.6.8 Coordination with Other Projects	24	24	12		24	12					96	8,193.48	2,539.98	10,733.46	11,806.80	22,540.26	1,127.01	0.00		23,667.28
2.7 Risk Management																		7,799.81		
2.7.1 Risk Mitigation Measure Log	16	16			16					8	56	4,423.44	1,371.27	5,794.71	6,374.18	12,168.88	608.44	0.00		12,777.33
2.7.2 Risk Monitoring Updates	24	24			24					8	80	6,501.84	2,015.57	8,517.41	9,369.15	17,886.56	894.33	0.00		18,780.89
2.8 PDR Production Workshops and Meetings																		13,535.68		
2.8.1 PDR Production Workshops																		58,836.54		
2.8.1.1 Predesign Kickoff Workshop	8	12	8	8	12	8				4	60	4,875.56	1,511.42	6,386.98	7,025.68	13,412.67	670.63	0.00	100.00	14,183.30
2.8.1.2 Preliminary Design Risk Management Workshop	8	8	4	4	12	4				4	44	3,506.56	1,087.03	4,593.59	5,052.95	9,646.55	482.33	0.00	100.00	10,228.87
2.8.1.3 PDR Constructability Workshop	16	16	16	16	16	16				4	100	8,333.64	2,583.43	10,917.07	12,008.78	22,925.84	1,146.29	0.00	100.00	24,172.14
2.8.1.4 PDR Review Workshops	16	32	16	16	16					8	104	8,876.88	2,751.83	11,628.71	12,791.58	24,420.30	1,221.01	0.00	100.00	25,741.31
2.8.2 Preliminary Design Phase Meetings																		0.00		
2.8.2.1 Technical Progress Meetings	20	20	12	12	20	8				12	104	8,372.96	2,595.62	10,968.58	12,065.44	23,034.01	1,151.70	0.00		24,185.71
2.8.2.2 Project Management Progress Meetings			included in 2.6.2								0	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
2.8.2.3 PDR Phase Focused Meetings	4	4	4	4	4	4				2	26	2,116.74	656.19	2,772.93	3,050.22	5,823.15	291.16	0.00	100.00	6,214.31

Seal Beach Pump Station Replacement, Project No. 3-67

Attachment I - Cost Matrix

Task Item		Labor hours										Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees
		Project Manager	Project Engineer	Lead Electrical	Lead I&C Eng.	Engineer	Associate Engineer	Assistant Engineer	Sr. CAD Designer	Assoc. CAD Designer	Adm. Assistant										
2.8.2.4	Stormwater Compliance Meeting	1	1			1	1				1	5	357.04	110.68	467.72	514.49	982.22	49.11	0.00	100.00	1,131.33
2.8.2.5	Project Coordination Meeting	16	24	8	8	16	32				8	112	8,695.28	2,695.54	11,390.82	12,529.90	23,920.72	1,196.04	0.00	100.00	25,216.75
2.8.2.6	Permit Agency Coordination Meetings	2	4			8					2	16	1,191.26	369.29	1,560.55	1,716.61	3,277.16	163.86	10,460.00	100.00	14,001.01
2.9	Quality Control	80	40	40	40							200	19,076.00	5,913.56	24,989.56	27,488.52	52,478.08	2,623.90	25,174.94		80,276.92
2.10	Community Outreach	8	8			8					4	28	2,211.72	685.63	2,897.35	3,187.09	6,084.44	304.22	13,277.59	100.00	19,766.25
Subtotal - Phase 2 - Preliminary Design		900	1,022	492	392	1,159	781	634	564	664	366	6974	523,185.68	162,187.56	685,373.24	753,910.56	1,439,283.81	71,964.19	1,202,251.57	10,600.00	2,724,099.56
PHASE 3 - FINAL DESIGN																					
3.1	Bid Documents																		141,965.69		
3.1.1	Specifications																		0.00		
3.1.1.1	Contract Agreement, General Conditions and Special Provisions	16	16			12	12				8	64	4,906.40	1,520.98	6,427.38	7,070.12	13,497.51	674.88	0.00		14,172.38
3.1.1.2	General Requirements and Additional General Requirements	12	12			8	12				2	46	3,667.22	1,136.84	4,804.06	5,284.46	10,088.52	504.43	0.00		10,592.95
3.1.1.3	Technical Specifications	120	120	120	120	160	240	240			120	1240	89,254.00	27,668.74	116,922.74	128,615.01	245,537.75	12,276.89	0.00		257,814.64
3.1.2	Drawings	116	320	140	140	464	564	584	760	896		3984	274,356.88	85,050.63	359,407.51	395,348.26	754,755.78	37,737.79	53,812.74	5,000.00	851,306.31
3.1.3	Building Information Model (BIM)	24	24	24	16	24	40	200	160	240		752	48,908.40	15,161.60	64,070.00	70,477.00	134,547.01	6,727.35	0.00		141,274.36
3.1.4	Commissioning Plan Materials																		31,849.00		
3.1.4.1	ORT Procedures	8	8	12	16	24	16				4	88	6,993.96	2,168.13	9,162.09	10,078.30	19,240.38	962.02	0.00		20,202.40
3.1.4.2	FAT Procedures	8	8	12	16	24	16				4	88	6,993.96	2,168.13	9,162.09	10,078.30	19,240.38	962.02	0.00		20,202.40
3.1.4.3	RAT Procedure Specification	8	8	12	16	24	16				4	88	6,993.96	2,168.13	9,162.09	10,078.30	19,240.38	962.02	0.00		20,202.40
3.1.5	Equipment and Instrumentation Databases (EIDs)	4	8	8	8	24	40	40			8	140	9,357.84	2,900.93	12,258.77	13,484.65	25,743.42	1,287.17	0.00		27,030.59
3.1.6	SCADA Access Tables (SAT)	8	8	16	40	40					16	128	10,053.04	3,116.44	13,169.48	14,486.43	27,655.91	1,382.80	0.00		29,038.71
3.2	Design Support Documentation																		93,925.80		
3.2.1	Design Information	40	40	16	16	40	40				24	216	16,769.28	5,198.48	21,967.76	24,164.53	46,132.29	2,306.61	17,843.40		66,282.30
3.2.2	Facility Operation and Maintenance	8	12	12	12	24	12				8	88	6,871.64	2,130.21	9,001.85	9,902.03	18,903.88	945.19	0.00		19,849.08
3.2.3	Electrical Design Documentation	12	4	40				16			8	80	6,670.20	2,067.76	8,737.96	9,611.76	18,349.72	917.49	0.00		19,267.21
3.2.4	Instrumentation and Controls	12	4		40			16			8	80	6,280.20	1,946.86	8,227.06	9,049.77	17,276.83	863.84	0.00		18,140.67
3.2.5	Construction Cost Estimates	16	24	12	12	40	40	40			8	192	13,872.76	4,300.56	18,173.32	19,990.65	38,163.96	1,908.20	0.00		40,072.16
3.2.6	Construction Schedule	40	40	16	16	40	40				8	200	16,236.00	5,033.16	21,269.16	23,396.08	44,665.24	2,233.26	0.00		46,898.50
3.2.7	Procurement Alternatives	24	24	16	16	40	40	40			8	208	15,422.24	4,780.89	20,203.13	22,223.45	42,426.58	2,121.33	0.00		44,547.91
3.2.8	Final Design Report	8	16	4	4	16	8				6	62	4,829.06	1,497.01	6,326.07	6,958.68	13,284.74	664.24	0.00		13,948.98
3.3	Specialty Services																		0.00		
3.3.1	Topographic Survey Services		Included in Task 2.2.1.1 Design Memo 1 - Trunk Sewer Alignment and PS Base Map																0.00		
3.3.2	Fire Protection Services	8	4	4	4	4	2			4		30	2,540.10	787.43	3,327.53	3,660.28	6,987.82	349.39	23,360.00		30,697.21
3.3.3	Utility Survey and Coordination Services		Included in 2.2.1.5 Design Memo 5 - Civil, Landscaping, Irrigation, Noise and Utilities																0.00		
3.3.4	Landscape Architecture	2	4			8	8	16		8		46	2,960.20	917.66	3,877.86	4,265.65	8,143.51	407.18	28,760.00		37,310.69
3.3.5	Noise Evaluation Services	2	4			8	8	16		8		46	2,960.20	917.66	3,877.86	4,265.65	8,143.51	407.18	5,550.00		14,100.69
3.3.6	Traffic Control Services	2	2			4	4	4		16		32	2,020.82	626.45	2,647.27	2,912.00	5,559.28	277.96	40,000.00		45,837.24
3.3.7	Additional Shoring Design	40	80			40	40	40		40		280	20,944.00	6,492.64	27,436.64	30,180.30	57,616.94	2,880.85	0.00	500.00	60,997.79
3.3.8	Groundwater Monitoring Design	4	12			4	16	16		16	4	72	4,677.08	1,449.89	6,126.97	6,739.67	12,866.65	643.33	32,630.00	500.00	46,639.98
3.4	Design Submittals	8	24			24	24	24	80	80	40	304	19,263.68	5,971.74	25,235.42	27,758.96	52,994.38	2,649.72	44,907.52	5,000.00	105,551.62
3.5	Bid Support Services																		21,801.37		
3.5.1	Bid Phase Activities	8	12	4	4	24	12		8	8	8	88	6,403.72	1,985.15	8,388.87	9,227.76	17,616.63	880.83	10,142.43		28,639.89
3.5.2	Bid Evaluation Assistance	4	4	2	2	8					2	22	1,767.44	547.91	2,315.35	2,546.88	4,862.23	243.11	0.00		5,105.34
3.5.3	Conformed Document Preparation	4	4	2	2	8	8	24	40	40	16	148	9,282.46	2,877.56	12,160.02	13,376.02	25,536.05	1,276.80	0.00		26,812.85
3.6	Project Management																		9,770.40		
3.6.1	Project Management Plan	Same as 2.6.1										0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00
3.6.2	Project Management Progress Meetings	40	40			40					40	160	11,725.20	3,634.81	15,360.01	16,896.01	32,256.03	1,612.80	12,156.65	100.00	46,125.48
3.6.3	Project Schedule	24	40			40					8	112	9,070.16	2,811.75	11,881.91	13,070.10	24,952.01	1,247.60	0.00	100.00	26,299.61
3.6.4	Project Logs	40	40			80					24	184	14,031.52	4,349.77	18,381.29	20,219.42	38,600.71	1,930.04	0.00	100.00	40,630.75
3.6.5	Progress Reports	24	24			48					24	120	8,738.88	2,709.05	11,447.93	12,592.73	24,040.66	1,202.03	0.00	100.00	25,342.69
3.6.6	Project Invoices	24	24								24	72	5,331.36	1,652.72	6,984.08	7,682.49	14,666.57	733.33	0.00	100.00	15,499.90
3.6.7	Management of Subconsultants	40	40	24		40					40	184	14,107.92	4,373.46	18,481.38	20,329.51	38,810.89	1,940.54	0.00	100.00	40,851.43
3.6.8	Coordination with Other Projects	24	24	12		24	12					96	8,193.48	2,539.98	10,733.46	11,806.80	22,540.26	1,127.01	0.00	100.00	23,767.28
3.7	Risk Management Assistance																		7,799.81		
3.7.1	Risk Management Plan	24	24			12	12				8	80	6,416.88	1,989.23	8,406.11	9,246.72	17,652.84	882.64	0.00	100.00	18,635.48
3.7.2	Risk Mitigation Measure Log	16	16			24	24				8	88	6,525.20	2,022.81	8,548.01	9,402.81	17,950.83	897.54	0.00	100.00	18,948.37
3.7.3	Risk Monitoring Updates	24	24			16	16				8	88	6,956.48	2,156.51	9,112.99	10,024.29	19,137.28	956.86	0.00	100.00	20,194.14
3.8	Workshops and Meetings																		14,535.68		
3.8.1	Design Phase Workshops																		1,422.82		
3.8.1.1	Design Submittal 1 Workshops																		0.00		
3.8.1.1.1	DS1 Review Kickoff Workshop	8	8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	0.00	100.00	12,136.07
3.8.1.1.2	DS1 Validation Workshop	8	8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	0.00	100.00	12,136.07
3.8.1.2	Design Submittal 2 Workshops																		0.00		
3.8.1.2.1	DS2 Review Kickoff Workshop	8	8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	0.00	100.00	12,136.07

Seal Beach Pump Station Replacement, Project No. 3-67

Attachment I - Cost Matrix

Task Item			Labor hours									Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees	
			Project Manager	Project Engineer	Lead Electrical	Lead I&C Eng.	Engineer	Associate Engineer	Assistant Engineer	Sr. CAD Designer	Assoc. CAD Designer											Adm. Assistant
3.8.1.2.2	DS2 Validation Workshop		8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	0.00	100.00	12,136.07	
3.8.1.3	Design Submittal 3 Workshops																	0.00				
3.8.1.3.1	DS3 Review Kickoff Workshop		8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	0.00	100.00	12,136.07	
3.8.1.3.2	DS3 Validation Workshop		8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	0.00	100.00	12,136.07	
3.8.1.4	Final Design Submittal Workshops																	0.00				
3.8.1.4.1	FDS Review Kickoff Workshop		8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	5,000.00	100.00	17,136.07	
3.8.1.4.2	FDS Validation Workshop		8	8	8	8	8				2	50	4,166.82	1,291.71	5,458.53	6,004.39	11,462.92	573.15	0.00	100.00	12,136.07	
3.8.1.5	Constructability Workshop		24	24	24	24	24				4	148	12,433.80	3,854.48	16,288.28	17,917.11	34,205.38	1,710.27	5,000.00	100.00	41,015.65	
3.8.2	Design Phase Meetings																		0.00			
3.8.2.1	Technical Progress Meetings		24	24	12	12	40	16			8	136	10,925.96	3,387.05	14,313.01	15,744.31	30,057.32	1,502.87	0.00	100.00	31,660.18	
3.8.2.2	Focussed Meetings		16	16	8	8	24				4	76	6,368.52	1,974.24	8,342.76	9,177.04	17,519.80	875.99	0.00	100.00	18,495.79	
3.8.2.3	Commissioning Team Meetings		16	16	16	16	16	16			4	100	8,333.64	2,583.43	10,917.07	12,008.78	22,925.84	1,146.29	0.00	100.00	24,172.14	
3.8.2.4	Safety and Risk Meeting		4	4	3	3	4	4			1	23	1,894.60	587.33	2,481.93	2,730.12	5,212.04	260.60	0.00	100.00	5,572.65	
3.8.2.5	Consultant Office Technical Meetings (COTMs)		8	8	4	4	12				2	38	3,184.26	987.12	4,171.38	4,588.52	8,759.90	437.99	0.00	100.00	9,297.89	
3.9	Quality Control		320	200	120	120						760	72,332.80	22,423.17	94,755.97	104,231.56	198,987.53	9,949.38	28,959.43	50.00	237,946.34	
3.10	Permitting Assistance		8	12			24	40	24		8	116	7,719.72	2,393.11	10,112.83	11,124.12	21,236.95	1,061.85	69,149.89	50.00	91,498.68	
Subtotal - Phase 3 Final Design			1,330	1,510	759	751	1,668	1,486	1,340	1,048	1,356	545	11793	868,881.68	269,353.32	1,138,235.00	1,252,058.50	2,390,293.50	119,514.68	700,342.62	13,600.00	3,223,750.80
TOTAL - PHASES 2 AND 3			2,230	2,532	1,251	1,143	2,827	2,267	1,974	1,612	2,020	911	18767	1,392,067.36	431,540.88	1,823,608.24	2,005,969.07	3,829,577.31	191,478.87	1,902,594.19	24,200.00	5,947,850.36
Rounded - Use for Attach E - Fee Proposal Form													1,392,067.00	431,541.00	1,823,608.00	2,005,969.00	3,829,577.00	191,479.00	1,902,594.00	24,200.00	5,947,850.00	



Seal Beach Pump Station Replacement, Project No. 3-67  
Professional Design Services Agreement - Brierley & Associates  
Attachment I - Cost Matrix

Task Item	Labor hours													Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead Cost	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees
	Principal or Senior Consultant II	Senior Associate or Senior Consultant I	Associate or Senior Project Manager	Senior Professional II	Senior Professional I	Professional II	Professional I	Staff Professional II	Staff Professional I	BIM/VDC Manager	Senior BIM/VDC Designer	BIM Technician or Drafter	Admin										
Average Actual Salary Fully Burdened Hourly Rate (includes payroll costs, OH, and Profit)	109.00	92.00	82.00	67.00	57.00	51.00	45.00	42.00	34.00	61.00	40.00	38.00	25.10			74.06%		38.64%		9.64%			
PHASE 2 - PRELIMINARY DESIGN																							
2.1 Not Used														0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.2 Preliminary Design Production	120		120			120				60	120	120		660	42,060.00	31,149.64	73,209.64	28,288.20	101,497.84	9,784.39			111,282.23
2.3 Value Engineering Assistance	30													30	3,270.00	2,421.76	5,691.76	2,199.30	7,891.06	760.70			8,651.76
2.4 Not Used														0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.5 Permitting Assistance														0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.6 Project Management	20		16										8	44	3,692.80	2,734.89	6,427.69	2,483.66	8,911.35	859.05			9,770.40
2.7 Risk Management	12		20											32	2,948.00	2,183.29	5,131.29	1,982.73	7,114.02	685.79			7,799.81
2.8 PDR Production Workshops and Meetings	40													40	4,360.00	3,229.02	7,589.02	2,932.40	10,521.41	1,014.26	2,000.00		13,535.68
2.9 Quality Control	32				40					40				112	8,208.00	6,078.84	14,286.84	5,520.44	19,807.28	1,909.42			21,716.70
2.10 Community Outreach														0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 2 - Preliminary Design	254	0	156	0	40	120	0	0	0	100	120	120	8	918	64,538.80	47,797.44	112,336.24	43,406.72	155,742.96	15,013.62	0.00	2,000.00	172,756.58
PHASE 3 - FINAL DESIGN																							
3.1 Bid Documents	120		80			60				40	80	160		540	34,420.00	25,491.45	59,911.45	23,149.79	83,061.24	8,007.10			91,068.34
3.2 Design Support Documentation	120		120			160				20	80			500	35,500.00	26,291.30	61,791.30	23,876.16	85,667.46	8,258.34			93,925.80
3.3 Specialty Services														0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.4 Design Submittals	20		40							20	20	20	20	140	8,742.00	6,474.33	15,216.33	5,879.59	21,095.91	2,033.65			23,129.56
3.5 Bid Support Services	20		40							20	20	20		120	8,240.00	6,102.54	14,342.54	5,541.96	19,884.50	1,916.87			21,801.37
3.6 Project Management	20		16										8	44	3,692.80	2,734.89	6,427.69	2,483.66	8,911.35	859.05			9,770.40
3.7 Risk Management	12		20											32	2,948.00	2,183.29	5,131.29	1,982.73	7,114.02	685.79			7,799.81
3.8 Workshops and Meetings	40													40	4,360.00	3,229.02	7,589.02	2,932.40	10,521.41	1,014.26	3,000.00		14,535.68
3.9 Quality Control	32				40					40				112	8,208.00	6,078.84	14,286.84	5,520.44	19,807.28	1,909.42			21,716.70
3.10 Permitting Assistance														0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 3 Final Design	384	0	316	0	40	220	0	0	0	140	200	200	28	1528	106,110.80	78,585.66	184,696.46	71,366.71	256,063.17	24,684.49	0.00	3,000.00	283,747.66
TOTAL - PHASES 2 AND 3	638	0	472	0	80	340	0	0	0	240	320	320	36	2446	170,649.60	126,383.09	297,032.69	114,773.43	411,806.13	39,698.11	0.00	5,000.00	456,504.24
Rounded - Use for Attach E - Fee Proposal Form															170,650.00	126,383.00	297,033.00	114,773.00	411,806.00	39,698.00	0.00	5,000.00	456,504.00

Profit Calculations		
Min Threshold	250,000	10%
Max Threshold	2,500,000	5%
Proposed Burdened Labor & Overhead	411,806.13	9.64%

0.1

0.0964

Seal Beach Pump Station Replacement, Project No. 3-67  
Professional Design Services Agreement - Atkins  
Attachment I - Cost Matrix

Task Item	Labor hours							Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead Cost	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees
	Project Manager	QA/QC	Senior Engineer	Project engineer	Engineer III	CAD/BIM	Support										
Average Actual Salary Fully Burdened Hourly Rate (includes payroll costs, OH, and Profit)	108.02	70.20	79.49	52.85	45.71	52.67	33.34			34.43%		103.28%		10.00%			
PHASE 2 - PRELIMINARY DESIGN																	
2.1 Not Used								0	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
2.2 Preliminary Design Production	24	106	198	100	128	160	16	732	45,870.04	15,793.15	61,663.18	63,685.80	125,348.98	12,534.90		250.00	138,133.87
2.3 Value Engineering Assistance	40	0	0	16	0	0	0	56	5,166.41	1,778.81	6,945.22	7,173.03	14,118.24	1,411.82		0.00	15,530.06
2.4 Not Used								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.5 Permitting Assistance	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.6 Project Management	30	0	0	0	0	0	0	30	3,240.65	1,115.76	4,356.41	4,499.31	8,855.72	885.57			9,741.29
2.7 Risk Management	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.8 PDR Production Workshops and Meetings	40	0	32	40	16	0	0	128	9,709.88	3,343.13	13,053.01	13,481.16	26,534.18	2,653.42		500.00	29,687.59
2.9 Quality Control								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.10 Community Outreach	0							0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 2 - Preliminary Design	134	106	230	156	144	160	16	946	63,986.98	22,030.84	86,017.82	88,839.29	174,857.11	17,485.71	0.00	750.00	193,092.82
PHASE 3 - FINAL DESIGN																	
3.1 Bid Documents	8	30	88	36	26	72	0	260	16,848.96	5,801.13	22,650.10	23,393.04	46,043.14	4,604.31		250.00	50,897.45
3.2 Design Support Documentation								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.3 Specialty Services								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.4 Design Submittals								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.5 Bid Support Services								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.6 Project Management	8	0	0	0	0	0	0	8	864.17	297.54	1,161.71	1,199.82	2,361.52	236.15		100.00	2,697.68
3.7 Risk Management								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.8 Workshops and Meetings								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.9 Quality Control								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.10 Permitting Assistance	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 3 Final Design	16	30	88	36	26	72	0	268	17,713.14	6,098.67	23,811.81	24,592.86	48,404.66	4,840.47	0.00	350.00	53,595.13
TOTAL - PHASES 2 AND 3	150	136	318	192	170	232	16	1214	81,700.11	28,129.51	109,829.63	113,432.15	223,261.77	22,326.18	0.00	1,100.00	246,687.95
Rounded - Use for Attach E - Fee Proposal Form									81,700.00	28,130.00	109,830.00	113,432.00	223,262.00	22,326.00	0.00	1,100.00	246,688.00

Profit Calculations		
Min Threshold	250,000	10%
Max Threshold	2,500,000	5%
Proposed Burdened Labor & Overhead	223,261.77	10.00%

Seal Beach Pump Station Replacement, Project No. 3-67  
Professional Design Services Agreement - Northwest Hydraulic Consultants  
Attachment I - Cost Matrix

Task Item	Labor hours										Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead Cost	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees
	Principal	Principal T3	Sr. Engineer 2	Project Engineer 2	Jr. Engineer	Sr. Engineer	g Technician	GIS Analyst 2	Sr. Laboratory Technician	Sr. Document Production /Finance										
Average Actual Salary Fully Burdened Hourly Rate (includes payroll costs, OH, and Profit)	71.86	66.99	47.39	35.02	31.48	40.33		30.46	31.00	31.57			59.98%		81.12%		10.00%			
PHASE 2 - PRELIMINARY DESIGN	Axworthy, Demlow, Fehlman , Christison	Hurtig	Blezy	Lewis	Gombert, Houston	Sampson , Reynolds		Ho	Diaz, Jomal, Moon, Lemaire, Co-op	Nissim										
2.1 Not Used											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.2 Preliminary Design Production											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Physical Modeling of Pump Station	10	45			188	136		58	438	1	876	30,512.52	18,301.41	48,813.93	39,597.86	88,411.79	8,841.18		21,258.00	118,510.97
Conceptual Design Review of Pump Station (Optional)	12	6	32					6			56	2,963.50	1,777.51	4,741.01	3,845.91	8,586.91	858.69			9,445.60
Surge Analysis	34			60	90					2	186	7,440.78	4,462.98	11,903.76	9,656.33	21,560.09	2,156.01		325.00	24,041.10
Physical Modeling of Junction Box	7	41			171	112		50	294	1	676	23,818.22	14,286.17	38,104.39	30,910.28	69,014.67	6,901.47		26,658.00	102,574.14
2.3 Value Engineering Assistance											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.4 Not Used											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.5 Permitting Assistance											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.6 Project Management											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.7 Risk Management											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.8 PDR Production Workshops and Meetings											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.9 Quality Control											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.10 Community Outreach											0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 2 - Preliminary Design	63	92	32	60	449	248		114	732	4	1794	64,735.02	38,828.06	103,563.08	84,010.37	187,573.46	18,757.35	0.00	48,241.00	254,571.81
PHASE 3 - FINAL DESIGN																				
3.1 Bid Documents											11	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.2 Design Support Documentation											12	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.3 Specialty Services											13	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.4 Design Submittals											14	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.5 Bid Support Services											15	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.6 Project Management											16	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.7 Risk Management											17	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.8 Workshops and Meetings											18	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.9 Quality Control											19	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.10 Permitting Assistance											20	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 3 Final Design	0	0	0	0	0	0		0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL - PHASES 2 AND 3	63	92	32	60	449	248		114	732	4	1794	64,735.02	38,828.06	103,563.08	84,010.37	187,573.46	18,757.35	0.00	48,241.00	254,571.81
Rounded - Use for Attach E - Fee Proposal Form												64,735.00	38,828.00	103,563.00	84,010.00	187,573.00	18,757.00	0.00	48,241.00	254,571.00

Profit Calculations		
Min Threshold	250,000	10%
Max Threshold	2,500,000	5%
Proposed Burdened Labor & Overhead	187,573.46	10.00%



Seal Beach Pump Station Replacement, Project No. 3-67  
Professional Design Services Agreement - SwiftLEE Office  
Attachment I - Cost Matrix

Task Item	Labor hours							Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead Cost	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees
	Principal	Project Manager	Project Architect	Project Designer	JR. DESIGNER/ CADD	Office Manager	Administrative Support										
Average Actual Salary Fully Burdened Hourly Rate (includes payroll costs, OH, and Profit)	70.00	63.00	61.00	35.25	31.00	45.00	31.95			9.50%		130.00%		10.00%			
PHASE 2 - PRELIMINARY DESIGN																	
2.1 Not Used								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.2 Preliminary Design Production		20	60	60	60			200	8,894.52	844.98	9,739.50	12,661.35	22,400.85	2,240.08		500.00	25,140.93
2.3 Value Engineering Assistance		16	20	20	40			96	4,172.78	396.41	4,569.19	5,939.95	10,509.15	1,050.91		250.00	11,810.06
2.4 Not Used								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.5 Permitting Assistance			16		16			32	1,471.95	139.84	1,611.79	2,095.32	3,707.11	370.71			4,077.82
2.6 Project Management		40						40	2,520.00	239.40	2,759.40	3,587.22	6,346.62	634.66			6,981.28
2.7 Risk Management								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.8 PDR Production Workshops and Meetings		20	8	8			20	56	2,669.04	253.56	2,922.60	3,799.38	6,721.98	672.20		500.00	7,894.17
2.9 Quality Control			20					20	1,220.00	115.90	1,335.90	1,736.67	3,072.57	307.26			3,379.83
2.10 Community Outreach		16						16	1,008.00	95.76	1,103.76	1,434.89	2,538.65	253.86		250.00	3,042.51
Subtotal - Phase 2 - Preliminary Design	0	112	124	88	116	0	20	460	21,956.29	2,085.85	24,042.14	31,254.78	55,296.92	5,529.69	0.00	1,500.00	62,326.61
PHASE 3 - FINAL DESIGN																	
3.1 Bid Documents		20	40	40	40		8	148	6,605.31	627.50	7,232.82	9,402.66	16,635.48	1,663.55			18,299.03
3.2 Design Support Documentation		20	40	40	40			140	6,349.68	603.22	6,952.90	9,038.77	15,991.67	1,599.17		500.00	18,090.84
3.3 Specialty Services								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.4 Design Submittals		20	40	60	60		8	188	7,930.15	753.36	8,683.52	11,288.57	19,972.09	1,997.21		500.00	22,469.30
3.5 Bid Support Services		12	32		32			76	3,699.90	351.49	4,051.39	5,266.81	9,318.21	931.82			10,250.03
3.6 Project Management		40						40	2,520.00	239.40	2,759.40	3,587.22	6,346.62	634.66			6,981.28
3.7 Risk Management								0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.8 Workshops and Meetings		24	24	24				72	3,821.88	363.08	4,184.96	5,440.45	9,625.40	962.54		500.00	11,087.95
3.9 Quality Control		20	20					40	2,480.00	235.60	2,715.60	3,530.28	6,245.88	624.59			6,870.47
3.10 Permitting Assistance			24					24	1,464.00	139.08	1,603.08	2,084.00	3,687.08	368.71			4,055.79
Subtotal - Phase 3 Final Design	0	156	220	164	172	0	16	728	34,870.93	3,312.74	38,183.67	49,638.77	87,822.43	8,782.24	0.00	1,500.00	98,104.68
TOTAL - PHASES 2 AND 3	0	268	344	252	288	0	36	1188	56,827.22	5,398.59	62,225.81	80,893.55	143,119.35	14,311.94	0.00	3,000.00	160,431.29
Rounded - Use for Attach E - Fee Proposal Form									56,827.00	5,399.00	62,226.00	80,894.00	143,120.00	14,312.00	0.00	3,000.00	160,432.00

Profit Calculations		
Min Threshold	250,000	10%
Max Threshold	2,500,000	5%
Proposed Burdened Labor & Overhead	143,119.35	10.00%

Seal Beach Pump Station Replacement, Project No. 3-67  
Professional Design Services Agreement - T2 UES, Inc. (Cardno)  
Attachment I - Cost Matrix

Task Item	Labor hours											Total Hours	Raw Labor	Fringe Costs	Burdened Labor	Overhead	Burdened Labor & Overhead	Profit	Total Subs	Allowable Direct Costs	Total Fees
	Project Engineer	Sr. Project Manager	Project Manager	CAD Supervisor	CAD Tech	SUE Tech (PW)	Survey Party Chief (PW)	Survey Chainman (PW)	Project Surveyor	Admin Support	SUE Manager										
Average Actual Salary Fully Burdened Hourly Rate (includes payroll costs, OH, and Profit)	60.00	75.00	55.00	45.00	35.00	36.89	48.86	45.78	55.00	30.00	50.00			61.22%		118.26%		10.00%			
PHASE 2 - PRELIMINARY DESIGN																					
2.1 Not Used												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.2 Preliminary Design Production	40	20	32	80	80	500	80	80	16	16	60	1004	42,436.20	25,979.53	68,415.73	80,908.44	149,324.16	14,932.42	44,000.00	18,000.00	226,256.58
2.3 Value Engineering Assistance												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.4 Not Used												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.5 Permitting Assistance												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.6 Project Management												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.7 Risk Management												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.8 PDR Production Workshops and Meetings												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.9 Quality Control												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
2.10 Community Outreach												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 2 - Preliminary Design	40	20	32	80	80	500	80	80	16	16	60	1004	42,436.20	25,979.53	68,415.73	80,908.44	149,324.16	14,932.42	44,000.00	18,000.00	226,256.58
PHASE 3 - FINAL DESIGN																					
3.1 Bid Documents												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.2 Design Support Documentation												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.3 Specialty Services												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.4 Design Submittals												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.5 Bid Support Services												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.6 Project Management												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.7 Risk Management												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.8 Workshops and Meetings												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.9 Quality Control												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
3.10 Permitting Assistance												0	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Subtotal - Phase 3 Final Design	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL - PHASES 2 AND 3 Rounded - Use for Attach E - Fee Proposal Form	40	20	32	80	80	500	80	80	16	16	60	1004	42,436.20 42,436.00	25,979.53 25,980.00	68,415.73 68,416.00	80,908.44 80,908.00	149,324.16 149,324.00	14,932.42 14,932.00	44,000.00 44,000.00	18,000.00 18,000.00	226,256.58 226,256.00

Profit Calculations		
Min Threshold	250,000	10%
Max Threshold	2,500,000	5%
Proposed Burdened Labor & Overhead	149,324.16	10.00%

# **ATTACHMENT “K”**

**MINOR SUBCONSULTANT**

**HOURLY RATE SCHEDULE**

**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
(Submit with Proposal)

Submitted By: Bluescape

(Name of Firm)

Labor Category	Hourly Rate \$/hr
Senior Project Engineer/Scientist	\$135
Project Manager	\$175
Principal	\$200

In-House Non-Labor Services	Units	Billing Rate \$/unit

Instructions

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.

**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
(Submit with Proposal)

Submitted By: Collings & Associates  
(Name of Firm)

<b>Labor Category</b>	<b>Hourly Rate \$/hr</b>
Principal Engineer	195
Sr. Engineer	140
Staff Engineer	115
CADD	95
Administrative / Clerical	65

<b>In-House Non-Labor Services</b>	<b>Units</b>	<b>Billing Rate \$/unit</b>
Mileage	Per mile	0.58

Instructions

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.

**REQUEST FOR PROPOSALS**

Revision 081613

PROJECT NO. 3-67  
SEAL BEACH PUMP STATION REPLACEMENT

**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
(Submit with Proposal)

Submitted By: Diaz-Yourman & Associates

(Name of Firm)

<b>Labor Category</b>	<b>Hourly Rate \$/hr</b>
Principal	\$270
Associate II	\$242
Staff II	\$155
Staff I	\$134
CADD	\$93
Word Processor Technical Editor	\$117

<b>In-House Non-Labor Services</b>	<b>Units</b>	<b>Billing Rate \$/unit</b>
(Not Applicable)		

Instructions

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.

**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
 (Submit with Proposal)

Submitted By: GSI Environmental

(Name of Firm)

<b>Labor Category</b>	<b>Hourly Rate \$/hr</b>
Project Assistant	85
Accounting Specialist	125
Researcher	150
Environmental Technician	80
Sr. Environmental Technician	95
CADD / Graphics Specialist	105
Computer Programmer	130
Data Scientist	140
GIS Specialist / Sr. Data Scientist / Sr. Programmer / Sr. Researcher	165
Engineer / Scientist / Geologist I	115
Engineer / Scientist / Geologist II	125
Engineer / Scientist / Geologist III	145
Engineer / Scientist / Geologist IV	175
Sr. Engineer / Scientist / Geologist I	185
Sr. Engineer / Scientist / Geologist II	215
Senior Associate	230
Principal	275

<b>In-House Non-Labor Services</b>	<b>Units</b>	<b>Billing Rate \$/unit</b>
Field Vehicle	Day	120
Std. Sampling and Field Equipment	Day	80
Photoionization Detector	Day	100
Portable Generator	Day	80
Air Sampling Equipment	Day	100
Low Flow Sampling Instrumentation	Day	100
Submersible Pump	Day	200

Sampling Pumps	Day	55
Trimble T10/R1	Day	150
Level C PPE	Per Person /Day	35
Level D PPE	Day	20
HAPSITE GC/MS	Day	1000

#### Instructions

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.



**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
(Submit with Proposal)

Submitted By: KW Communications  
(Name of Firm)

Labor Category	Hourly Rate \$/hr
Principal	\$177.00
Associate	\$151.00

In-House Non-Labor Services	Units	Billing Rate \$/unit
Other Direct Costs	Printing, Distribution Supplies, Etc.	Cost
Project Hotline	Monthly	\$250.00

Instructions

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.

**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
(Submit with Proposal)

Submitted By: NUVIS  
(Name of Firm)

<b>Labor Category</b>	<b>Hourly Rate \$/hr</b>
Senior Principal	\$200
Principal	\$170
Senior Associate	\$155
Associate	\$140
CADD Tech I	\$130
CADD Tech II	\$120
Administrative	\$85

<b>In-House Non-Labor Services</b>	<b>Units</b>	<b>Billing Rate \$/unit</b>

**Instructions**

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.

**ATTACHMENT "K"**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
 (Submit with Proposal)

Submitted By: THE PRIZM GROUP  
 (Name of Firm)

Labor Category	Hourly Rate \$/hr
(example – Senior Engineer)	\$140
(example – CAD Designer)	\$95
PRINCIPAL SURVEYOR	150
ASSOCIATE SURVEYOR	100
CAD DRAFTING TECHNICIAN	100
SURVEY CREW	240

In-House Non-Labor Services	Units	Billing Rate \$/unit
(example – Concrete Compression Test)	sample	\$200
(example – Drilling Rig)	hours	\$150

**Instructions**

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.

**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
(Submit with Proposal)

Submitted By: SPEC Services Inc.

(Name of Firm)

<b>Labor Category</b>	<b>Hourly Rate \$/hr</b>
Project Manager 1	\$160
Project Manager 2	\$189
Project Manager 3	\$215
Project Controls 2	\$140
Project Controls 3	\$160
Project Admin Assistance	\$88
Engineer 1	\$118
Engineer 2	\$140
Engineer 3	\$160
Engineer 4	\$189
Engineer 5	\$215
Design 1	\$96
Design 2	\$110
Design 3	\$130
Design 4	\$144
Design 5	\$158
Design 6	\$171

<b>In-House Non-Labor Services</b>	<b>Units</b>	<b>Billing Rate \$/unit</b>
CADD Charges (Software)	Hours	\$10

Instructions

1. Include one schedule per Minor Subconsultant.

2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.

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**REQUEST FOR PROPOSALS**

Revision 081613

PROJECT NO. 3-67  
SEAL BEACH PUMP STATION REPLACEMENT

**ATTACHMENT "K"**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**

(Submit with Proposal)

Submitted By: TRAFFIC CONTROL ENGINEERING, INC.  
(Name of Firm)

Labor Category	Hourly Rate \$/hr
David Kuan - Project Manager	\$220
N. Kuan - Traffic Engineer	\$170
F. Lu - CAD/Tech	\$86

In-House Non-Labor Services	Units	Billing Rate \$/unit

**ATTACHMENT “K”**  
**MINOR SUBCONSULTANT HOURLY RATE SCHEDULE**  
(Submit with Proposal)

Submitted By: Veneklasen Associates, Inc.  
(Name of Firm)

Labor Category	Hourly Rate \$/hr
Principal/Associate I	\$250
Associate II	\$200
Associate III	\$180
Associate IV	\$150
Associate V	\$135
Associate VI	\$115
Acoustic Modeling	\$175

In-House Non-Labor Services	Units	Billing Rate \$/unit

Instructions

1. Include one schedule per Minor Subconsultant.
2. For labor charges, list all categories that might be used on the projects, whether such hours are budgeted or not. This schedule will be the only basis for compensation of labor charges during project execution.
3. In-House Non-Labor Services are for services provided by the Minor Subconsultant, but not suitable for an hour labor rate. Examples include laboratory tests and equipment rental.
4. All charges are subject to the Allowable Direct Costs requirements included as Attachment D to the RFP.
5. Allowable Direct Costs will be compensation at actual costs incurred.



OPERATIONS COMMITTEE

Agenda Report

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**File #:** 2019-624

**Agenda Date:** 12/4/2019

**Agenda Item No:** 10.

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**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT, PROJECT NO. 3-62**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Professional Construction Services Agreement with Stantec Consulting, Inc. to provide construction support services for Westminster Boulevard Force Main Replacement, Project No. 3-62, for a total amount not to exceed \$1,183,000; and
- B. Approve a contingency of \$118,300 (10%).

**BACKGROUND**

The Seal Beach Pump Station currently discharges all flow through a single 42-inch diameter ductile iron force main that is approaching the end of its useful life. A second 30-inch force main exists. This second pipe is made of a material known to fail catastrophically. It was removed from service approximately four years ago. The Orange County Sanitation District (Sanitation District) was compensated for this faulty pipe material by the original manufacturer many years ago.

This project will replace the two force mains with two parallel 36-inch high-density polyethylene pipes. These force mains run from the Seal Beach Pump Station at the intersection of Seal Beach Boulevard and Westminster Boulevard in the City of Seal Beach, to the intersection of Westminster Boulevard and Rancho Road in the City of Westminster, a distance of approximately 14,000 feet.

**RELEVANT STANDARDS**

- Ensure the public's money is wisely spent
- Comply with California Government Code Section 4526 to engage the best qualified firm "on the basis of demonstrated competence and qualifications" and "negotiate fair and reasonable fees"



**PROBLEM**

This project requires the design consultant to provide as-needed services during construction including submittal review, responding to Contractor's requests for information, reviewing construction change orders, participating in meetings, site visits, and preparing record drawings.

**PROPOSED SOLUTION**

Award a Professional Construction Services Agreement with the design consultant Stantec Consulting, Inc. to provide engineering support services during construction.

**TIMING CONCERNS**

Engineering support services will be required at the start of construction. Construction is anticipated to start in February 2020.

**RAMIFICATIONS OF NOT TAKING ACTION**

The engineering support services needed to facilitate and review construction activities would not be available by the Engineer of Record, which may negatively impact the contract execution.

**PRIOR COMMITTEE/BOARD ACTIONS**

July 2015 - Approved a Professional Design Services Agreement with MWH Americas, Inc. (subsequently acquired by Stantec Consulting, Inc.) to provide engineering design services for the Rehabilitation of Seal Beach Pump Station, Project No. 3-62, for an amount not to exceed \$6,917,175, and approved a contingency of \$691,718 (10%).

**ADDITIONAL INFORMATION**

Stantec Consulting, Inc. has successfully furnished engineering services for the design of this project and their support services during construction will provide continuity through the completion of the project. Staff negotiated with Stantec Consulting, Inc. for these support services in accordance with the Sanitation District's adopted policies and procedures. A review of the proposed price was conducted using estimated quantities of requests for information, submittals, meetings, site visits, change order review, and design revisions, as well as the level of effort for preparing record drawings. Based on this review, staff determined the negotiated fee to be fair and reasonable for these services.

**CEQA**

The project is exempt from CEQA under the Class 1, 2, 3, and 4 categorical exemptions set forth in California Code of Regulations sections 15301, 15302, 15303, and 15304 because the project involves repairs, replacement, limited construction of new facilities, and minor alteration of existing facilities involving no expansion of use or capacity. A Notice of Exemption will be filed with the OC Clerk-Recorder after the Sanitation District's Board of Directors approval of the construction contract.

**FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted (FY 2019-20 Budget Update, Appendix A, Page A-7) and the budget is sufficient for this action.

**ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Professional Construction Services Agreement

JF:dm:sa:gc

## **PROFESSIONAL CONSTRUCTION SERVICES AGREEMENT**

THIS AGREEMENT, is made and entered into to be effective the 18<sup>th</sup> day of December, 2019 by and between the ORANGE COUNTY SANITATION DISTRICT, hereinafter referred to as "SANITATION DISTRICT", and STANTEC CONSULTING SERVICES, INC., for purposes of this Agreement hereinafter referred to as "CONSULTANT".

### **WITNESSETH:**

WHEREAS, the SANITATION DISTRICT desires to engage CONSULTANT to provide Construction Support Services for **WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT, PROJECT NO. 3-62**; and,

WHEREAS, CONSULTANT is qualified to provide the necessary services for Construction Support Services in connection with these requirements; and,

WHEREAS, the SANITATION DISTRICT has adopted procedures in accordance with the SANITATION DISTRICT's Purchasing Ordinance Section 4.03(B) for the continuation of services and has proceeded in accordance with said procedures to perform this work; and,

WHEREAS, at its regular meeting on December 18, 2019 the Board of Directors, by Minute Order, accepted the recommendation of the Operations Committee pursuant to SANITATION DISTRICT's Purchasing Ordinance to approve this Agreement between the SANITATION DISTRICT and CONSULTANT.

NOW, THEREFORE, in consideration of the promises and mutual benefits, which will result to the parties in carrying out the terms of this Agreement, it is mutually agreed as follows:

#### **1. SCOPE OF WORK**

CONSULTANT agrees to furnish necessary professional and technical services to accomplish those project elements outlined in the Scope of Work attached hereto as Attachment "A", and by this reference made a part of this Agreement.

- A. The CONSULTANT shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all design, drawings, specifications, and other services furnished by the CONSULTANT under this Agreement, including the work performed by its Subconsultants. Where approval by the SANITATION DISTRICT is indicated, it is understood to be conceptual approval only and does not relieve the CONSULTANT of responsibility for complying with all laws, codes, industry standards and liability for damages caused by errors, omissions, noncompliance with industry standards, and/or negligence on the part of the CONSULTANT or its Subconsultants.
- B. CONSULTANT is responsible for the quality of work prepared under this Agreement and shall ensure that all work is performed to the standards of best engineering practice for clarity, uniformity, and completeness.

- C. In the event that work is not performed to the satisfaction of the SANITATION DISTRICT and does not conform to the requirements of this Agreement or any applicable industry standards, the CONSULTANT shall, without additional compensation, promptly correct or revise any errors or deficiencies in its designs, drawings, specifications, or other services within the timeframe specified by the Project Engineer/Project Manager. The SANITATION DISTRICT may charge to CONSULTANT all costs, expenses and damages associated with any such corrections or revisions.
- D. All CADD drawings, figures, and other work shall be produced by CONSULTANT and its Subconsultants using the SANITATION DISTRICT standard software. Conversion of CADD work from any other non-standard CADD format to the SANITATION DISTRICT format shall not be acceptable in lieu of this requirement.

Electronic files shall be subject to an acceptance period of thirty (30) calendar days during which the SANITATION DISTRICT shall perform appropriate acceptance tests. CONSULTANT shall correct any discrepancies or errors detected and reported within the acceptance period at no additional cost to the SANITATION DISTRICT.

- E. All professional services performed by the CONSULTANT, including but not limited to all drafts, data, correspondence, proposals, reports, and estimates compiled or composed by the CONSULTANT, pursuant to this Agreement, are for the sole use of the SANITATION DISTRICT, its agents and employees. Neither the documents nor their contents shall be released to any third party without the prior written consent of the SANITATION DISTRICT. This provision does not apply to information that (a) was publicly known, or otherwise known to the CONSULTANT, at the time that it was disclosed to the CONSULTANT by the SANITATION DISTRICT, (b) subsequently becomes publicly known to the CONSULTANT other than through disclosure by the SANITATION DISTRICT.

## **2. COMPENSATION**

Total compensation shall be paid to CONSULTANT for services in accordance with the following provisions:

- A. **Total Compensation**

Total compensation shall be in an amount not to exceed One Million One Hundred Eighty-Three Thousand Dollars (\$1,183,000). Total compensation to CONSULTANT including burdened labor (salaries plus benefits), overhead, profit, direct costs, and Subconsultant(s) fees and costs shall not exceed the sum set forth in Attachment "E" - Fee Proposal.

- B. **Labor**

As a portion of the total compensation to be paid to CONSULTANT, the SANITATION DISTRICT shall pay to CONSULTANT a sum equal to the burdened salaries (salaries plus benefits) actually paid by CONSULTANT

charged on an hourly-rate basis to this project and paid to the personnel of CONSULTANT. Upon request of the SANITATION DISTRICT, CONSULTANT shall provide the SANITATION DISTRICT with certified payroll records of all employees' work that is charged to this project.

C. Overhead

As a portion of the total compensation to be paid to CONSULTANT, the SANITATION DISTRICT shall compensate CONSULTANT and Subconsultants for overhead at the rate equal to the percentage of burdened labor as specified in Attachment "E" - Fee Proposal.

D. Profit

Profit for CONSULTANT and Subconsultants shall be a percentage of consulting services fees (Burdened Labor and Overhead). When the consulting or subconsulting services amount is two hundred fifty thousand dollars (\$250,000) or less, the maximum Profit shall be ten percent (10%). Between two hundred fifty thousand dollars (\$250,000) and two million five hundred thousand dollars (\$2,500,000), the maximum Profit shall be limited by a straight declining percentage between ten percent (10%) and five percent (5%). For consulting or subconsulting services fees with a value greater than two million five hundred thousand dollars (\$2,500,000), the maximum Profit shall be five percent (5%). Addenda shall be governed by the same maximum Profit percentage after adding consulting services fees.

As a portion of the total compensation to be paid to CONSULTANT and Subconsultants, the SANITATION DISTRICT shall pay profit for all services rendered by CONSULTANT and Subconsultants for this project according to Attachment "E" - Fee Proposal.

E. Subconsultants

For any Subconsultant whose fees for services are greater than or equal to one hundred thousand dollars (\$100,000), excluding out-of-pocket costs, CONSULTANT shall pay to Subconsultant total compensation in accordance with the Subconsultant amount specified in Attachment "E" - Fee Proposal.

For any Subconsultant whose fees for services are less than one hundred thousand dollars (\$100,000), CONSULTANT may pay to Subconsultant total compensation on an hourly-rate basis per the attached hourly rate schedule and as specified in the Scope of Work. The SANITATION DISTRICT shall pay to CONSULTANT the actual costs of Subconsultant fees and charges in an amount not to exceed the sum set forth in Attachment "E" - Fee Proposal.

F. Direct Costs

The SANITATION DISTRICT shall pay to CONSULTANT and its Subconsultant(s) the actual costs of permits and associated fees, travel and licenses for an amount not to exceed the sum set forth in Attachment "E" - Fee

Proposal. The SANITATION DISTRICT shall also pay to CONSULTANT actual costs for equipment rentals, leases or purchases with prior approval of the SANITATION DISTRICT. Upon request, CONSULTANT shall provide to the SANITATION DISTRICT receipts and other documentary records to support CONSULTANT's request for reimbursement of these amounts, see Attachment "D" – Allowable Direct Costs. All incidental expenses shall be included in overhead pursuant to Section 2 - COMPENSATION above.

G. Other Direct Costs

Other Direct Costs incurred by CONSULTANT and its Subconsultant(s) due to modifications to the Scope of Work resulting from field investigations and field work required by this Agreement. These items may include special equipment, test equipment and tooling and other materials and services not previously identified. Refer to attachment "D" Allowable Direct Costs for payment information.

H. Reimbursable Direct Costs

The SANITATION DISTRICT will reimburse the CONSULTANT for reasonable travel and business expenses as described in this section and further described in Attachment "D" - Allowable Direct Costs to this Agreement. The reimbursement of the above-mentioned expenses will be based on an "accountable plan" as considered by U.S. Internal Revenue Service (IRS). The plan includes a combination of reimbursements based upon receipts and a "per diem" component approved by IRS. The most recent schedule of the per diem rates utilized by the SANITATION DISTRICT can be found on the U.S. General Services Administration website at <http://www.gsa.gov/portal/category/104711#>.

The CONSULTANT shall be responsible for the most economical and practical means of management of reimbursable costs inclusive of, but not limited to, travel, lodging, and meals arrangements. The SANITATION DISTRICT shall apply the most economic and practical method of reimbursement which may include reimbursements based upon receipts and/or "per diem" as deemed the most practical.

CONSULTANT shall be responsible for returning to the SANITATION DISTRICT any excess reimbursements after the reimbursement has been paid by the SANITATION DISTRICT.

Travel and travel arrangements – Any travel involving airfare, overnight stays or multiple day attendance must be approved by the SANITATION DISTRICT in advance.

Local Travel is considered travel by the CONSULTANT within the SANITATION DISTRICT general geographical area which includes Orange, Los Angeles, Ventura, San Bernardino, Riverside, San Diego, Imperial and Kern Counties. Automobile mileage is reimbursable if CONSULTANT is required to utilize personal vehicle for local travel.

Lodging – Overnight stays will not be approved by the SANITATION DISTRICT for local travel. However, under certain circumstances overnight stay may be allowed at the discretion of the SANITATION DISTRICT based on reasonableness of meeting schedules and the amount of time required for travel by the CONSULTANT. Such determination will be made on a case-by-case basis and at the discretion of the SANITATION DISTRICT.

Travel Meals – Per-diem rates as approved by IRS shall be utilized for travel meals reimbursements. Per diem rates shall be applied to meals that are appropriate for travel times. Receipts are not required for the approved meals.

Additional details related to the reimbursement of the allowable direct costs are provided in the Attachment “D” - Allowable Direct Costs of this Agreement.

I. Limitation of Costs

If, at any time, CONSULTANT estimates the cost of performing the services described in CONSULTANT's Proposal will exceed the not-to-exceed amount of this Agreement, including approved additional compensation, CONSULTANT shall notify the SANITATION DISTRICT immediately, and in writing. This written notice shall indicate the additional amount necessary to complete the services. Any cost incurred in excess of the approved not-to-exceed amount, without the express written consent of the SANITATION DISTRICT's authorized representative shall be at CONSULTANT's own risk. This written notice shall be provided separately from, and in addition to any notification requirements contained in the CONSULTANT's invoice and monthly progress report. Failure to notify the SANITATION DISTRICT that the services cannot be completed within the authorized not-to-exceed amount is a material breach of this Agreement.

**3. REALLOCATION OF TOTAL COMPENSATION**

The SANITATION DISTRICT, by its Director of Engineering, shall have the right to approve a reallocation of the incremental amounts constituting the total compensation, provided that the total compensation is not increased.

**4. PAYMENT**

- A. Monthly Invoice: CONSULTANT shall include in its monthly invoice, a detailed breakdown of costs associated with the performance of any corrections or revisions of the work for that invoicing period. CONSULTANT shall allocate costs in the same manner as it would for payment requests as described in this section of the Agreement. CONSULTANT shall warrant and certify the accuracy of these costs and understand that submitted costs are subject to Section 11 - AUDIT PROVISIONS.
- B. CONSULTANT may submit monthly or periodic statements requesting payment for those items included in Section 2 - COMPENSATION hereof in the format as required by the SANITATION DISTRICT. Such requests shall be based upon the amount and value of the work and services performed by CONSULTANT under this Agreement and shall be prepared by CONSULTANT and accompanied by

such supporting data, including a detailed breakdown of all costs incurred and project element work performed during the period covered by the statement, as may be required by the SANITATION DISTRICT.

Upon approval of such payment request by the SANITATION DISTRICT, payment shall be made to CONSULTANT as soon as practicable of one hundred percent (100%) of the invoiced amount on a per-project-element basis.

If the SANITATION DISTRICT determines that the work under this Agreement or any specified project element hereunder, is incomplete and that the amount of payment is in excess of:

- i. The amount considered by the SANITATION DISTRICT's Director of Engineering (DOE) to be adequate for the protection of the SANITATION DISTRICT; or
- ii. The percentage of the work accomplished for each project element.

The DOE may, at his or her discretion, retain an amount equal to that which insures that the total amount paid to that date does not exceed the percentage of the completed work for each project element or the project in its entirety.

- C. CONSULTANT may submit periodic payment requests for each 30-day period of this Agreement for the profit as set forth in Section 2 - COMPENSATION above. Said profit payment request shall be proportionate to the work actually accomplished to date on a per-project-element basis. In the event the SANITATION DISTRICT's DOE determines that no satisfactory progress has been made since the prior payment, or in the event of a delay in the work progress for any reason, the SANITATION DISTRICT shall have the right to withhold any scheduled proportionate profit payment.
- D. Upon satisfactory completion by CONSULTANT of the work called for under the terms of this Agreement, and upon acceptance of such work by the SANITATION DISTRICT, CONSULTANT will be paid the unpaid balance of any money due for such work, including any retained percentages relating to this portion of the work.
- E. Upon satisfactory completion of the work performed hereunder and prior to final payment under this Agreement for such work, or prior settlement upon termination of this Agreement, and as a condition precedent thereto, CONSULTANT shall execute and deliver to the SANITATION DISTRICT a release of all claims against the SANITATION DISTRICT arising under or by virtue of this Agreement other than such claims, if any, as may be specifically exempted by CONSULTANT from the operation of the release in stated amounts to be set forth therein.
- F. Pursuant to the California False Claims Act (Government Code Sections 12650-12655), any CONSULTANT that knowingly submits a false claim to the SANITATION DISTRICT for compensation under the terms of this Agreement



may be held liable for treble damages and up to a ten thousand dollars (\$10,000) civil penalty for each false claim submitted. This section shall also be binding on all Subconsultants.

CONSULTANT or Subconsultant shall be deemed to have submitted a false claim when the CONSULTANT or Subconsultant: a) knowingly presents or causes to be presented to an officer or employee of the SANITATION DISTRICT a false claim or request for payment or approval; b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by the SANITATION DISTRICT; c) conspires to defraud the SANITATION DISTRICT by getting a false claim allowed or paid by the SANITATION DISTRICT; d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to the SANITATION DISTRICT; or e) is a beneficiary of an inadvertent submission of a false claim to the SANITATION DISTRICT, and fails to disclose the false claim to the SANITATION DISTRICT within a reasonable time after discovery of the false claim.

**5. CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION AND RECORD OF WAGES**

- A. To the extent CONSULTANT's employees and/or its Subconsultant(s) who will perform work during the design and preconstruction phases of a construction contract for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq, CONSULTANT and its Subconsultant(s) shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the work is subject to compliance monitoring and enforcement by the DIR.
- B. The CONSULTANT and its Subconsultant(s) shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776 and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a) (3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.
- C. Pursuant to Labor Code Section 1776, the CONSULTANT and its Subconsultant(s) shall furnish a copy of all certified payroll records to the SANITATION DISTRICT and/or general public upon request, provided the public request is made through the SANITATION DISTRICT, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement of the Department of Industrial Relations.
- D. The CONSULTANT and its Subconsultant(s) shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulation Section 16461(e).

## **6. DOCUMENT OWNERSHIP – SUBSEQUENT CHANGES TO PLANS AND SPECIFICATIONS**

### **A. Ownership of Documents for the Professional Services performed.**

All documents, including but not limited to, original plans, studies, sketches, drawings, computer printouts and disk files, and specifications prepared in connection with or related to the Scope of Work or Professional Services, shall be the property of the SANITATION DISTRICT. The SANITATION DISTRICT's ownership of these documents includes use of, reproduction or reuse of and all incidental rights, whether or not the work for which they were prepared has been performed. The SANITATION DISTRICT ownership entitlement arises upon payment or any partial payment for work performed and includes ownership of any and all work product completed prior to that payment. This section shall apply whether the CONSULTANT's Professional Services are terminated: a) by the completion of this Agreement, or b) in accordance with other provisions of this Agreement. Notwithstanding any other provision of this paragraph or Agreement, the CONSULTANT shall have the right to make copies of all such plans, studies, sketches, drawings, computer printouts and disk files, and specifications.

### **B. CONSULTANT shall not be responsible for damage caused by subsequent changes to or uses of the plans or specifications, where the subsequent changes or uses are not authorized or approved by CONSULTANT, provided that the service rendered by CONSULTANT was not a proximate cause of the damage.**

## **7. INSURANCE**

### **A. General**

- i. Insurance shall be issued and underwritten by insurance companies acceptable to the SANITATION DISTRICT.
- ii. Insurers must have an "A-" Policyholder's Rating, or better, and Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best's Guide Rating. However, the SANITATION DISTRICT will accept State Compensation Insurance Fund, for the required policy of Workers' Compensation Insurance subject to the SANITATION DISTRICT's option to require a change in insurer in the event the State Fund financial rating is decreased below "B". Further, the SANITATION DISTRICT will require CONSULTANT to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONSULTANT, by the SANITATION DISTRICT or its agent.
- iii. Coverage shall be in effect prior to the commencement of any work under this Agreement.

B. General Liability

The CONSULTANT shall maintain during the life of this Agreement, including the period of warranty, Commercial General Liability Insurance written on an occurrence basis providing the following minimum limits of liability coverage: Two Million Dollars (\$2,000,000) per occurrence with Four Million Dollars (\$4,000,000) aggregate. Said insurance shall include coverage for the following hazards: Premises-Operations, blanket contractual liability (for this Agreement), products liability/completed operations (including any product manufactured or assembled), broad form property damage, blanket contractual liability, independent contractors liability, personal and advertising injury, mobile equipment, owners and contractors protective liability, and cross liability and severability of interest clauses. A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement(s). If requested by the SANITATION DISTRICT and applicable, XCU coverage (Explosion, Collapse and Underground) and Riggers/On Hook Liability must be included in the General Liability policy and coverage must be reflected on the submitted Certificate of Insurance.

C. Umbrella Excess Liability

The minimum limits of general liability and Automotive Liability Insurance required, as set forth herein, shall be provided for through either a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Umbrella excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automotive liability.

D. Automotive/Vehicle liability Insurance

The CONSULTANT shall maintain a policy of Automotive Liability Insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limits of liability coverage: Combined single limit of One Million Dollars (\$1,000,000) or alternatively, One Million Dollars (\$1,000,000) per person for bodily injury and One Million Dollars (\$1,000,000) per accident for property damage. A statement on an insurance certificate will not be accepted in lieu of the actual additional insured endorsement.

E. Drone Liability Insurance

If a drone will be used, drone liability insurance must be maintained by CONSULTANT in the amount of One Million Dollars (\$1,000,000) in a form acceptable to the SANITATION DISTRICT.

F. Workers' Compensation Insurance

The CONSULTANT shall provide such Workers' Compensation Insurance as required by the Labor Code of the State of California in the amount of the statutory limit, including Employer's Liability Insurance with a minimum limit of

One Million Dollars (\$1,000,000) per occurrence. Such Workers' Compensation Insurance shall be endorsed to provide for a waiver of subrogation in favor of the SANITATION DISTRICT. A statement on an insurance certificate will not be accepted in lieu of the actual endorsements unless the insurance carrier is State of California Insurance Fund and the identifier "SCIF" and endorsement numbers 2570 and 2065 are referenced on the certificate of insurance. If an exposure to Jones Act liability may exist, the insurance required herein shall include coverage for Jones Act claims.

G. Errors and Omissions/Professional Liability

CONSULTANT shall maintain in full force and effect, throughout the term of this Agreement, standard industry form professional negligence errors and omissions insurance coverage in an amount of not less than Three Million Dollars (\$3,000,000) with limits in accordance with the provisions of this paragraph. If the policy of insurance is written on a "claims made" basis, said policy shall be continued in full force and effect at all times during the term of this Agreement, and for a period of five (5) years from the date of the completion of the services hereunder.

In the event of termination of said policy during this period, CONSULTANT shall obtain continuing insurance coverage for the prior acts or omissions of CONSULTANT during the course of performing services under the term of this Agreement. Said coverage shall be evidenced by either a new policy evidencing no gap in coverage or by separate extended "tail" coverage with the present or new carrier.

In the event the present policy of insurance is written on an "occurrence" basis, said policy shall be continued in full force and effect during the term of this Agreement or until completion of the services provided for in this Agreement, whichever is later. In the event of termination of said policy during this period, new coverage shall be obtained for the required period to insure for the prior acts of CONSULTANT during the course of performing services under the term of this Agreement.

CONSULTANT shall provide to the SANITATION DISTRICT a certificate of insurance in a form acceptable to the SANITATION DISTRICT indicating the deductible or self-retention amounts and the expiration date of said policy, and shall provide renewal certificates not less than ten (10) days prior to the expiration of each policy term.

H. Proof of Coverage

The CONSULTANT shall furnish the SANITATION DISTRICT with original certificates and amendatory endorsements effecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by the SANITATION DISTRICT before work commences. The SANITATION DISTRICT reserves the right to require complete, certified copies of all required insurance policies, including endorsements, effecting the coverage required, at any time. The following are approved forms that must be submitted as proof of coverage:

- Certificate of Insurance ACORD Form 25 (5/2010) or equivalent.
- Additional Insurance (General Liability) (ISO Form) CG2010 11 85 or  
The combination of (ISO Forms)  
CG 2010 10 01 and CG 2037 10 01  
  
All other Additional Insured endorsements must be submitted for approval by the SANITATION DISTRICT, and the SANITATION DISTRICT may reject alternatives that provide different or less coverage to the SANITATION DISTRICT.
- Additional Insured (Auto Liability) Submit endorsement provided by carrier for the SANITATION DISTRICT approval.
- Waiver of Subrogation State Compensation Insurance Fund Endorsement No. 2570 or equivalent.
- Cancellation Notice State Compensation Insurance Fund Endorsement No. 2065 or equivalent.

#### I. Cancellation Notice

Each insurance policy required herein shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days' prior written notice. The Cancellation section of ACORD Form 25 (5/2010) shall state the required thirty (30) days' written notification. The policy shall not terminate, nor shall it be cancelled, nor the coverage reduced until thirty (30) days after written notice is given to the SANITATION DISTRICT except for nonpayment of premium, which shall require not less than ten (10) days written notice to the SANITATION DISTRICT. Should there be changes in coverage or an increase in deductible or SIR amounts, the CONSULTANT and its insurance broker/agent shall send to the SANITATION DISTRICT a certified letter which includes a description of the changes in coverage and/or any increase in deductible or SIR amounts. The certified letter must be sent to the attention of Risk Management, and shall be received by the SANITATION DISTRICT not less than thirty (30) days prior to the effective date of the change(s) if the change would reduce coverage or increase deductibles or SIR amounts or otherwise reduce or limit the scope of insurance coverage provided to the SANITATION DISTRICT.

#### J. Primary Insurance

All liability policies shall contain a Primary and Non-Contributory Clause. Any other insurance maintained by the SANITATION DISTRICT shall be excess and not contributing with the insurance provided by CONSULTANT.

K. Separation of Insured

All liability policies shall contain a "Separation of Insureds" clause.

L. Non-Limiting (if applicable)

Nothing in this document shall be construed as limiting in any way, nor shall it limit the indemnification provision contained in this Agreement, or the extent to which CONSULTANT may be held responsible for payment of damages to persons or property.

M. Deductibles and Self-Insured Retentions

Any deductible and/or self-insured retention must be declared to the SANITATION DISTRICT on the Certificate of Insurance. All deductibles and/or self-insured retentions require approval by the SANITATION DISTRICT. At the option of the SANITATION DISTRICT, either: the insurer shall reduce or eliminate such deductible or self-insured retention as respects the SANITATION DISTRICT; or the CONSULTANT shall provide a financial guarantee satisfactory to the SANITATION DISTRICT guaranteeing payment of losses and related investigations, claim administration and defense expenses.

N. Defense Costs

Liability policies shall have a provision that defense costs for all insureds and additional insureds are paid in addition to and do not deplete any policy limits.

O. Subconsultants

The CONSULTANT shall be responsible to establish insurance requirements for any Subconsultant hired by the CONSULTANT. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subconsultant's operations and work.

P. Limits Are Minimums

If the CONSULTANT maintains higher limits than any minimums shown above, then SANITATION DISTRICT requires and shall be entitled to coverage for the higher limits maintained by CONSULTANT.

## 8. SCOPE CHANGES

In the event of a change in the Scope of Work, requested by the SANITATION DISTRICT, the parties hereto shall execute an amendment to this Agreement setting forth with particularity all terms of the new Agreement, including but not limited to any additional CONSULTANT's fees.

## **9. PROJECT TEAM AND SUBCONSULTANTS**

CONSULTANT shall provide to SANITATION DISTRICT, prior to execution of this Agreement, the names and full description of all Subconsultants and CONSULTANT's project team members anticipated to be used on this project by CONSULTANT. CONSULTANT shall include a description of the scope of work to be done by each Subconsultant and each CONSULTANT's project team member. CONSULTANT shall include the respective compensation amounts for CONSULTANT and each Subconsultant on a per-project-element basis, broken down as indicated in Section 2-COMPENSATION.

There shall be no substitution of the listed Subconsultants and CONSULTANT's project team members without prior written approval by the SANITATION DISTRICT.

## **10. ENGINEERING REGISTRATION**

The CONSULTANT's personnel are comprised of registered engineers and a staff of specialists and draftsmen in each department. The firm itself is not a registered engineer but represents and agrees that wherever in the performance of this Agreement requires the services of a registered engineer, such services hereunder will be performed under the direct supervision of registered engineers.

## **11. AUDIT PROVISIONS**

- A. SANITATION DISTRICT retains the reasonable right to access, review, examine, and audit, any and all books, records, documents and any other evidence of procedures and practices that the SANITATION DISTRICT determines are necessary to discover and verify that the CONSULTANT is in compliance with all requirements under this Agreement. The CONSULTANT shall include the SANITATION DISTRICT's right as described above, in any and all of their subcontracts, and shall ensure that these rights are binding upon all Subconsultants.
- B. SANITATION DISTRICT retains the right to examine CONSULTANT's books, records, documents and any other evidence of procedures and practices that the SANITATION DISTRICT determines are necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred or to ensure CONSULTANT's compliance with all requirements under this Agreement during the term of this Agreement and for a period of three (3) years after its termination.
- C. CONSULTANT shall maintain complete and accurate records in accordance with generally accepted industry standard practices and the SANITATION DISTRICT's policy. The CONSULTANT shall make available to the SANITATION DISTRICT for review and audit, all project related accounting records and documents, and any other financial data within fifteen (15) days after receipt of notice from the SANITATION DISTRICT. Upon SANITATION DISTRICT's request, the CONSULTANT shall submit exact duplicates of originals of all requested records to the SANITATION DISTRICT. If an audit is performed,

CONSULTANT shall ensure that a qualified employee of the CONSULTANT will be available to assist SANITATION DISTRICT's auditor in obtaining all project related accounting records and documents, and any other financial data.

## **12. LEGAL RELATIONSHIP BETWEEN PARTIES**

The legal relationship between the parties hereto is that of an independent contractor and nothing herein shall be deemed to make CONSULTANT an employee of the SANITATION DISTRICT.

## **13. NOTICES**

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, return receipt requested, postage prepaid.

Notices shall be mailed to the SANITATION DISTRICT at:

ORANGE COUNTY SANITATION DISTRICT  
10844 Ellis Avenue  
Fountain Valley, CA 92708-7018  
Attention: Larry Roberson, Senior Contracts Administrator  
Copy: Justin Fenton, Project Manager

Notices shall be mailed to CONSULTANT at:

STANTEC CONSULTING SERVICES, INC.  
38 Technology Drive  
Irvine, CA 92618-5312  
Attention: David S. Harrison, Vice President

All communication regarding the Scope of Work, will be addressed to the Project Manager. Direction from other SANITATION DISTRICT staff must be approved in writing by the SANITATION DISTRICT's Project Manager prior to action by the CONSULTANT.

## **14. TERMINATION**

The SANITATION DISTRICT may terminate this Agreement at any time, without cause, upon giving thirty (30) days written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be entitled to compensation for work performed on a prorated basis through and including the effective date of termination.

CONSULTANT shall be permitted to terminate this Agreement upon thirty (30) days written notice only if CONSULTANT is not compensated for billed amounts in accordance with the provisions of this Agreement, when the same are due.

Notice of termination shall be mailed to the SANITATION DISTRICT and/or CONSULTANT in accordance with Section 13 - NOTICES.



## **15. DOCUMENTS AND STUDY MATERIALS**

The documents and study materials for this project shall become the property of the SANITATION DISTRICT upon the termination or completion of the work. CONSULTANT agrees to furnish to the SANITATION DISTRICT copies of all memoranda, correspondence, computation and study materials in its files pertaining to the work described in this Agreement, which is requested in writing by the SANITATION DISTRICT.

## **16. COMPLIANCE**

### **A. Labor**

CONSULTANT certifies by the execution of this Agreement that it pays employees not less than the minimum wage as defined by law, and that it does not discriminate in its employment with regard to race, color, religion, sex or national origin; that it is in compliance with all Federal, State and local directives and executive orders regarding non-discrimination in employment; and that it agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

### **B. Air Pollution**

CONSULTANT and its Subconsultants and Subcontractors shall comply with all applicable Federal, State and local air pollution control laws and regulations.

## **17. AGREEMENT EXECUTION AUTHORIZATION**

Both the SANITATION DISTRICT and CONSULTANT do covenant that each individual executing this document by and on behalf of each party is a person duly authorized to execute agreements for that party.

## **18. DISPUTE RESOLUTION**

In the event of a dispute arising between the parties regarding performance or interpretation of this Agreement, the dispute shall be resolved by binding arbitration under the auspices of the Judicial Arbitration and Mediation Service ("JAMS"), or similar organization or entity conducting alternate dispute resolution services.

## **19. ATTORNEY'S FEES, COSTS AND NECESSARY DISBURSEMENTS**

If any action at law or in equity or if any proceeding in the form of an Alternative Dispute Resolution (ADR) is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which it may be entitled.

## **20. PROGRESS REPORTS**

Monthly progress reports shall be submitted for review by the tenth (10<sup>th</sup>) day of the following month and must include as a minimum: 1) current activities, 2) future activities, 3) potential items that are not included in the Scope of Work, 4) concerns and possible delays, 5) percentage of completion, and 6) budget status.

## **21. WARRANTY**

CONSULTANT shall perform its services in accordance with generally accepted industry and professional standards. If, within the 12-month period following completion of its services, the SANITATION DISTRICT informs CONSULTANT that any part of the services fails to meet those standards, CONSULTANT shall, within the time prescribed by the SANITATION DISTRICT, take all such actions as are necessary to correct or complete the noted deficiency(ies).

## **22. INDEMNIFICATION**

To the fullest extent permitted by law, CONSULTANT shall indemnify, defend (at CONSULTANT's sole cost and expense and with legal counsel approved by the SANITATION DISTRICT, which approval shall not be unreasonably withheld), protect and hold harmless the SANITATION DISTRICT and all of SANITATION DISTRICT's officers, directors, employees, consultants, and agents (collectively the "Indemnified Parties"), from and against any and all claims, damages, liabilities, causes of action, suits, arbitration awards, losses, judgments, fines, penalties, costs and expenses including without limitation, attorneys' fees, disbursements and court costs, and all other professional, expert or consultants fees and costs and the SANITATION DISTRICT's general and administrative expenses (individually, a "Claim", or collectively, "Claims") which may arise from or are in any manner related, directly or indirectly, to any work performed, or any operations, activities, or services provided by CONSULTANT in carrying out its obligations under this Agreement to the extent of the negligent, recklessness and/or willful misconduct of CONSULTANT, its principals, officers, agents, employees, CONSULTANT's suppliers, consultants, subconsultants, subcontractors, and/or anyone employed directly or indirectly by any of them, regardless of any contributing negligence or strict liability of an Indemnified Party. Notwithstanding the foregoing, nothing herein shall be construed to require CONSULTANT to indemnify the Indemnified Parties from any Claim arising from:

- (A) the sole or active negligence or willful misconduct of the Indemnified Parties; or
- (B) a natural disaster or other act of God, such as an earthquake; or
- (C) the independent action of a third party who is neither one of the Indemnified Parties nor the CONSULTANT, nor its principal, officer, agent, employee, nor CONSULTANT's supplier, consultant, subconsultant, subcontractor, nor anyone employed directly or indirectly by any of them.

Exceptions (A) through (B) above shall not apply, and CONSULTANT shall, to the fullest extent permitted by law, indemnify the Indemnified Parties, from Claims arising from more than one cause if any such cause taken alone would otherwise result in the obligation to indemnify hereunder.

CONSULTANT's liability for indemnification hereunder is in addition to any liability CONSULTANT may have to the SANITATION DISTRICT for a breach by CONSULTANT of any of the provisions of this Agreement. Under no circumstances shall the insurance requirements and limits set forth in this Agreement be construed to limit CONSULTANT's indemnification obligation or other liability hereunder.

The terms of this Agreement are contractual and the result of negotiation between the parties hereto. Accordingly, any rule of construction of contracts (including, without limitation, California Civil Code Section 1654) that ambiguities are to be construed against the drafting party, shall not be employed in the interpretation of this Agreement.

## **23. DUTY TO DEFEND**

The duty to defend hereunder is wholly independent of and separate from the duty to indemnify and such duty to defend shall exist regardless of any ultimate liability of CONSULTANT and shall be consistent with Civil Code Section 2782.8. Such defense obligation shall arise immediately upon presentation of a Claim by any person if, without regard to the merit of the Claim, such Claim could potentially result in an obligation to indemnify one or more Indemnified Parties, and upon written notice of such Claim being provided to CONSULTANT. Payment to CONSULTANT by any Indemnified Party or the payment or advance of defense costs by any Indemnified Party shall not be a condition precedent to enforcing such Indemnified Party's rights to indemnification hereunder. In the event a final judgment, arbitration, award, order, settlement, or other final resolution expressly determines that the Claim did not arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONSULTANT, to any extent, then the SANITATION DISTRICT will reimburse CONSULTANT for the reasonable costs of defending the Indemnified Parties against such claims.

CONSULTANT's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until such time as action against the Indemnified Parties for such matter indemnified hereunder is fully and finally barred by the applicable statute of limitations.

## **24. CONSULTANT PERFORMANCE**

The CONSULTANT's performance shall be evaluated by the SANITATION DISTRICT. A copy of the evaluation shall be sent to the CONSULTANT for comment. The evaluation, together with the comments, shall be retained by the SANITATION DISTRICT and may be considered in future CONSULTANT selection processes.

## **25. COMPLIANCE WITH SANITATION DISTRICT POLICIES AND PROCEDURES**

CONSULTANT shall comply with all SANITATION DISTRICT policies and procedures including the OCSD Safety Standards, as applicable, all of which may be amended from time to time.

## **26. CLOSEOUT**

When the SANITATION DISTRICT determines that all Work authorized under the Agreement is fully complete and that the SANITATION DISTRICT requires no further work from CONSULTANT, or the Agreement is otherwise terminated or expires in accordance with the terms of the Agreement, the SANITATION DISTRICT shall give the Consultant written notice that the Agreement will be closed out. CONSULTANT shall

submit all outstanding billings, work submittals, deliverables, reports or similarly related documents as required under the Agreement within thirty (30) days of receipt of notice of Agreement closeout.

Upon receipt of CONSULTANT's submittals, the SANITATION DISTRICT shall commence a closeout audit of the Agreement and will either:

- i. Give the CONSULTANT a final Agreement Acceptance: or
- ii. Advise the CONSULTANT in writing of any outstanding item or items which must be furnished, completed, or corrected at the CONSULTANT's cost.

CONSULTANT shall be required to provide adequate resources to fully support any administrative closeout efforts identified in this Agreement. Such support must be provided within the timeframe requested by the SANITATION DISTRICT.

Notwithstanding the final Agreement Acceptance the CONSULTANT will not be relieved of its obligations hereunder, nor will the CONSULTANT be relieved of its obligations to complete any portions of the work, the non-completion of which were not disclosed to the SANITATION DISTRICT (regardless of whether such nondisclosures were fraudulent, negligent, or otherwise); and the CONSULTANT shall remain obligated under all those provisions of the Agreement which expressly or by their nature extend beyond and survive final Agreement Acceptance.

Any failure by the SANITATION DISTRICT to reject the work or to reject the CONSULTANT's request for final Agreement Acceptance as set forth above shall not be deemed to be acceptance of the work by the SANITATION DISTRICT for any purpose nor imply acceptance of, or agreement with, the CONSULTANT's request for final Agreement Acceptance.

## **27. ENTIRE AGREEMENT**

This Agreement constitutes the entire understanding and agreement between the parties and supersedes all previous negotiations between them pertaining to the subject matter thereof.

IN WITNESS WHEREOF, this Agreement has been executed in the name of the SANITATION DISTRICT, by its officers thereunto duly authorized, and CONSULTANT as of the day and year first above written.

**STANTEC CONSULTING SERVICES, INC.**

By \_\_\_\_\_  
Date \_\_\_\_\_  
\_\_\_\_\_  
Printed Name & Title

**ORANGE COUNTY SANITATION DISTRICT**

By \_\_\_\_\_  
David John Shawver  
Board Chairman  
Date \_\_\_\_\_

By \_\_\_\_\_  
Kelly A. Lore  
Clerk of the Board  
Date \_\_\_\_\_

By \_\_\_\_\_  
Ruth Zintzun  
Purchasing & Contracts Manager  
Date \_\_\_\_\_

Attachments: Attachment "A" – Scope of Work  
Attachment "D" – Allowable Direct Costs  
Attachment "E" – Fee Proposal  
Attachment "G" – Not Attached  
Attachment "H" – Not Used  
Attachment "I" – Cost Matrix and Summary  
Attachment "K" – Minor Subconsultant Hourly Rate Schedule  
Attachment "L" – OCSD Safety Standards

LDR:ms



OPERATIONS COMMITTEE

Agenda Report

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**File #:** 2019-625

**Agenda Date:** 12/4/2019

**Agenda Item No:** 11.

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**FROM:** James D. Herberg, General Manager  
Originator: Kathy Millea, Director of Engineering

**SUBJECT:**

**WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT, PROJECT NO. 3-62**

**GENERAL MANAGER'S RECOMMENDATION**

**RECOMMENDATION:** Recommend to the Board of Directors to:

- A. Receive and file Bid Tabulation and Recommendation for Westminster Boulevard Force Main Replacement, Project No. 3-62;
- B. Award a Construction Contract to Teichert Energy & Utilities Group, Inc. for Westminster Boulevard Force Main Replacement, Project No. 3-62, for a total amount not to exceed \$27,743,000; and
- C. Approve a contingency of \$2,774,300.

**BACKGROUND**

The Seal Beach Pump Station currently discharges all flow through a single 42-inch diameter ductile iron force main that is approaching the end of its useful life. A second 30-inch force main exists. This second pipe is made of a material known to fail catastrophically. It was removed from service approximately four years ago. The Orange County Sanitation District (Sanitation District) was compensated for this faulty pipe material by the original manufacturer many years ago.

This project will replace the two force mains with two parallel 36-inch high-density polyethylene pipes. These force mains run from the Seal Beach Pump Station at the intersection of Seal Beach Boulevard and Westminster Boulevard in the City of Seal Beach, to the intersection of Westminster Boulevard and Rancho Road in the City of Westminster, a distance of approximately 14,000 feet.

**RELEVANT STANDARDS**

- Achieve less than 2.1 sewer spills per 100 miles
- Comply with California Public Contract Code Section 20103.8, award construction contract to lowest responsive bidder



The bids were evaluated in accordance with the Sanitation District's policies and procedures. A notice was sent to all bidders on November 30, 2019 informing them of the intent of the Sanitation District staff to recommend award of the Construction Contract to Teichert Energy & Utilities Group, Inc.

Staff recommends awarding a Construction Contract to the lowest responsive bidder. Teichert Energy & Utilities Group, Inc., for a total amount not to exceed \$27,743,000.

## **CEQA**

The project is exempt from CEQA under the Class 1, 2, 3, and 4 categorical exemptions set forth in California Code of Regulations sections 15301, 15302, 15303, and 15304 because the project involves repairs, replacement, limited construction of new facilities, and minor alteration of existing facilities involving no expansion of use or capacity. A Notice of Exemption will be filed with the OC Clerk-Recorder after the Sanitation District's Board of Directors approval of the construction contract.

## **FINANCIAL CONSIDERATIONS**

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This item has been budgeted. (FY 2019-20 Budget Update, Appendix A, Page A-7) and the budget is sufficient for this action.

## **ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Construction Contract

JF:dm



**PART A**  
**CONTRACT AGREEMENT**

# **TABLE OF CONTENTS**

## **CONTRACT AGREEMENT**

SECTION – 1	GENERAL CONDITIONS .....	1
SECTION – 2	MATERIALS AND LABOR.....	4
SECTION – 3	PROJECT .....	4
SECTION – 4	PLANS AND SPECIFICATONS .....	5
SECTION – 5	TIME OF COMMENCEMENT AND COMPLETION .....	5
SECTION – 6	TIME IS OF THE ESSENCE .....	5
SECTION – 7	EXCUSABLE DELAYS .....	6
SECTION – 8	EXTRA WORK.....	6
SECTION – 9	CHANGES IN PROJECT.....	7
SECTION – 10	LIQUIDATED DAMAGES FOR DELAY .....	7
SECTION – 11	CONTRACT PRICE AND METHOD OF PAYMENT .....	7
SECTION – 12	SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS .....	9
SECTION – 13	COMPLETION .....	10
SECTION – 14	CONTRACTOR'S EMPLOYEES COMPENSATION.....	10
SECTION – 15	SURETY BONDS .....	12
SECTION – 16	INSURANCE.....	13
SECTION – 17	RISK AND INDEMNIFICATION.....	22
SECTION – 18	TERMINATION .....	22
SECTION – 19	WARRANTY .....	23
SECTION – 20	ASSIGNMENT .....	24
SECTION – 21	RESOLUTION OF DISPUTES .....	24
SECTION – 22	SAFETY & HEALTH .....	24
SECTION – 23	NOTICES.....	25

CONTRACT AGREEMENT  
ORANGE COUNTY SANITATION DISTRICT

**PROJECT NO. 3-62**  
**WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT**

THIS AGREEMENT is made and entered into, to be effective, this December 18, 2019, by and between Teichert Energy & Utilities Group, Inc., hereinafter referred to as "CONTRACTOR" and the Orange County Sanitation District, hereinafter referred to as "OCSD".

WITNESSETH

That for and in consideration of the promises and agreements hereinafter made and exchanged, OCSD and CONTRACTOR agree as follows:

**SECTION – 1      GENERAL CONDITIONS**

CONTRACTOR certifies and agrees that all the terms, conditions and obligations of the Contract Documents as hereinafter defined, the location of the job site, and the conditions under which the Work is to be performed have been thoroughly reviewed, and enters into this Contract based upon CONTRACTOR's investigation of all such matters and is in no way relying upon any opinions or representations of OCSD. It is agreed that this Contract represents the entire agreement. It is further agreed that the Contract Documents are each incorporated into this Contract by reference, with the same force and effect as if the same were set forth at length herein, and that CONTRACTOR and its Subcontractors, if any, will be and are bound by any and all of said Contract Documents insofar as they relate in any part or in any way, directly or indirectly, to the Work covered by this Contract.

A. Contract Documents Order of Precedence

"Contract Documents" refers to those documents identified in the definition of "Contract Documents" in the General Conditions – Definitions.

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C-CA-072619  
PROJECT NO. 3-62  
WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT

1. In the event of a conflict between one Contract Document and any of the other Contract Documents, the provisions in the document highest in precedence shall be controlling. The order of precedence of the Contract Documents is as follows:
  - a. Supplemental Agreements – the last in time being the first in precedence
  - b. Addenda issued prior to opening of Bids – the last in time being the first in precedence
  - c. Contract Agreement
  - d. Permits and other regulatory requirements
  - e. Special Provisions
  - f. General Conditions (GC)
  - g. Notice Inviting Bids and Instruction to Bidders
  - h. Geotechnical Baseline Report (GBR), if attached as a Contract Document
  - i. Plans and Specifications – in these documents the order of precedence shall be:
    - i. Specifications (Divisions 01-17)
    - ii. Plans
    - iii. General Requirements (GR)
    - iv. Standard Drawings and Typical Details
  - j. CONTRACTOR's Bid
2. In the event of a conflict between terms within an individual Contract Document, the conflict shall be resolved by applying the following principles as appears applicable:
  - a. Figured dimensions on the Contract Documents shall govern. Dimensions not specified shall be as directed by the ENGINEER. Details not shown or specified shall be the same as similar parts that are shown or specified, or as directed. Full-size details shall take precedence over scale Drawings as to

shape and details of construction. Specifications shall govern as to material and workmanship.

- b. The Contract Documents calling for the higher quality material or workmanship shall prevail. Materials or Work described in words, which so applied, have a well known technical or trade meaning shall be deemed to refer to such recognized standards. In the event of any discrepancy between any Drawings and the figures thereon, the figures shall be taken as correct.
- c. Scale Drawings, full-size details, and Specifications are intended to be fully complementary and to agree. Should any discrepancy between Contract Documents come to the CONTRACTOR's attention, or should an error occur in the efforts of others, which affect the Work, the CONTRACTOR shall notify the ENGINEER, in writing, at once. In the event any doubts or questions arise with respect to the true meaning of the Contract Documents, reference shall be made to the ENGINEER whose written decision shall be final. If the CONTRACTOR proceeds with the Work affected without written instructions from the ENGINEER, the CONTRACTOR shall be fully responsible for any resultant damage or defect.
- d. Anything mentioned in the Specifications and not indicated in the Plans, or indicated in the Plans and not mentioned in the Specifications, shall be of like effect as if indicated and mentioned in both. In case of discrepancy in the Plans or Specifications, the matter shall be immediately submitted to OCSD's ENGINEER, without whose decision CONTRACTOR shall not adjust said discrepancy save only at CONTRACTOR's own risk and expense. The decision of the ENGINEER shall be final.

In all matters relating to the acceptability of material, machinery or plant equipment; classifications of material or Work; the proper execution, progress or sequence of the Work; and quantities interpretation of the Contract Documents, the decision of the ENGINEER shall be final and binding, and shall be a condition precedent to any payment under the Contract, unless otherwise ordered by the Board of Directors.

**B. Definitions**

Capitalized terms used in this Contract are defined in the General Conditions, Definitions. Additional terms may be defined in the Special Provisions.

**SECTION – 2 MATERIALS AND LABOR**

CONTRACTOR shall furnish, under the conditions expressed in the Plans and Specifications, at CONTRACTOR'S own expense, all labor and materials necessary, except such as are mentioned in the Specifications to be furnished by OCSD, to construct and complete the Project, in good workmanlike and substantial order. If CONTRACTOR fails to pay for labor or materials when due, OCSD may settle such claims by making demand upon the Surety to this Contract. In the event of the failure or refusal of the Surety to satisfy said claims, OCSD may settle them directly and deduct the amount of payments from the Contract Price and any amounts due to CONTRACTOR. In the event OCSD receives a stop payment notice from any laborer or material supplier alleging non-payment by CONTRACTOR, OCSD shall be entitled to deduct all of its costs and expenses incurred relating thereto, including but not limited to administrative and legal fees.

**SECTION – 3 PROJECT**

The Project is described as:

**PROJECT NO. 3-62**

**WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT**

#### **SECTION – 4 PLANS AND SPECIFICATONS**

The Work to be done is shown in a set of Plans and Specifications entitled:

##### **PROJECT NO. 3-62**

##### **WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT**

Said Plans and Specifications and any revision, amendments and addenda thereto are attached hereto and incorporated herein as part of this Contract and referred to by reference.

#### **SECTION – 5 TIME OF COMMENCEMENT AND COMPLETION**

CONTRACTOR agrees to commence the Project within 15 calendar days from the date set forth in the "Notice to Proceed" sent by OCSD, unless otherwise specified therein and shall diligently prosecute the Work to completion within nine hundred seventy-eight (978) calendar days from the date of the "Notice to Proceed" issued by OCSD, excluding delays caused or authorized by OCSD as set forth in Sections 7, 8, and 9 hereof, and applicable provisions in the General Conditions. The time for completion includes fourteen (14) calendar days determined by OCSD likely to be inclement weather when CONTRACTOR will be unable to work.

In addition, CONTRACTOR shall accomplish such milestones within the periods of performance set forth in Appendix A of the Special Provisions entitled "Work Completion Schedule."

#### **SECTION – 6 TIME IS OF THE ESSENCE**

Time is of the essence of this Contract. As required by the Contract Documents, CONTRACTOR shall prepare and obtain approval of all shop drawings, details and samples, and do all other things necessary and incidental to the prosecution of CONTRACTOR's Work in conformance with an approved construction progress schedule. CONTRACTOR shall coordinate the Work covered by this Contract with that of all other contractors, subcontractors and of OCSD, in a manner that will facilitate the efficient completion of the entire Work and accomplish the required milestone(s), if any, by the applicable deadline(s) in accordance with Section 5 herein. OCSD shall have the right to assert complete control of the premises on

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C-CA-072619  
PROJECT NO. 3-62  
WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT

which the Work is to be performed and shall have the right to decide the time or order in which the various portions of the Work shall be installed or the priority of the work of subcontractors, and, in general, all matters representing the timely and orderly conduct of the Work of CONTRACTOR on the premises.

## **SECTION – 7      EXCUSABLE DELAYS**

CONTRACTOR shall only be excused for any delay in the prosecution or completion of the Project as specifically provided in General Conditions, “Extensions for Delay”, and the General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”.

Extensions of time and extra compensation arising from such excusable delays will be determined in accordance with the General Conditions, “Extension of Time for Delay” and “Contract Price Adjustments and Payments”, and extensions of time and extra compensation as a result of incurring undisclosed utilities will be determined in accordance with General Requirements, “By CONTRACTOR or Others – Unknown Utilities during Contract Work”.

OCSD’s decision will be conclusive on all parties to this Contract.

## **SECTION – 8      EXTRA WORK**

The Contract Price as set forth in Section 11, includes compensation for all Work performed by CONTRACTOR, unless CONTRACTOR obtains a Change Order signed by a designated representative of OCSD specifying the exact nature of the Extra Work and the amount of extra compensation to be paid all as more particularly set forth in Section 9 hereof and the General Conditions, “Request for Change (Changes at CONTRACTOR’s Request)”, “OWNER Initiated Changes”, and “Contract Price Adjustments and Payments”.

In the event a Change Order is issued by OCSD pursuant to the Contract Documents, OCSD shall extend the time fixed in Section 5 for completion of the Project by the number of days, if



any, reasonably required for CONTRACTOR to perform the Extra Work, as determined by OCSD's ENGINEER. The decision of the ENGINEER shall be final.

## **SECTION – 9 CHANGES IN PROJECT**

OCSD may at any time, without notice to any Surety, by Change Order, make any changes in the Work within the general scope of the Contract Document, including but not limited to changes:

1. In the Specifications (including Drawings and designs);
2. In the time, method or manner of performance of the Work;
3. In OCSD-furnished facilities, equipment, materials, services or site; or
4. Directing acceleration in the performance of the Work.

No change of period of performance or Contract Price, or any other change in the Contract Documents, shall be binding until the Contract is modified by a fully executed Change Order.

All Change Orders shall be issued in accordance with the requirements set forth in the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and "OWNER Initiated Changes".

## **SECTION – 10 LIQUIDATED DAMAGES FOR DELAY**

Liquidated Damages shall be payable in the amounts and upon the occurrence of such events or failure to meet such requirements or deadlines as provided in the Special Provisions, "Liquidated Damages and Incentives."

## **SECTION – 11 CONTRACT PRICE AND METHOD OF PAYMENT**

- A. OCSD agrees to pay and the CONTRACTOR agrees to accept as full consideration for the faithful performance of this Contract, subject to any additions or deductions as provided in approved Change Orders, the sum of Twenty-Seven Million Seven Hundred Forty-Three Thousand Dollars (\$27,743,000) as itemized on the Attached Exhibit "A".

Upon satisfaction of the conditions precedent to payment set forth in the General Requirements, Additional General Requirements and General Conditions (including but not limited to Sections entitled "Mobilization Payment Requirements" and "Payment Itemized Breakdown of Contract Lump Sum Prices"), there shall be paid to the CONTRACTOR an initial Net Progress Payment for mobilization. OCSD shall issue at the commencement of the job a schedule which shows:

1. A minimum of one payment to be made to the CONTRACTOR for each successive four (4) week period as the Work progresses, and
2. The due dates for the CONTRACTOR to submit requests for payment to meet the payment schedule.

After the initial Net Progress Payment, and provided the CONTRACTOR submits the request for payment prior to the end of the day required to meet the payment schedule, the CONTRACTOR shall be paid a Net Progress Payment on the corresponding monthly payment date set forth in the schedule.

Payments shall be made on demands drawn in the manner required by law, accompanied by a certificate signed by the ENGINEER, stating that the Work for which payment is demanded has been performed in accordance with the terms of the Contract Documents, and that the amount stated in the certificate is due under the terms of the Contract.

Payment applications shall also be accompanied with all documentation, records, and releases as required by the Contract, Exhibit A, Schedule of Prices, and General Conditions, "Payment for Work – General". The Total amount of Progress Payments shall not exceed the actual value of the Work completed as certified by OCSD's ENGINEER.

The processing of payments shall not be considered as an acceptance of any part of the Work.

- B. As used in this Section, the following defined terms shall have the following meanings:
1. **“Net Progress Payment”** means a sum equal to the Progress Payment less the Retention Amount and other qualified deductions (Liquidated Damages, stop payment notices, etc.).
  2. **“Progress Payment”** means a sum equal to:
    - a. the value of the actual Work completed since the commencement of the Work as determined by OCSD;
    - b. plus the value of material suitably stored at the worksite, treatment plant or approved storage yards subject to or under the control of OCSD since the commencement of the Work as determined by OCSD;
    - c. less all previous Net Progress Payments;
    - d. less all amounts of previously qualified deductions;
    - e. less all amounts previously retained as Retention Amounts.
  3. **“Retention Amount”** for each Progress Payment means the percentage of each Progress Payment to be retained by OCSD to assure satisfactory completion of the Contract. The amount to be retained from each Progress Payment shall be determined as provided in the General Conditions –“Retained Funds; Substitution of Securities.”

## **SECTION – 12 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION OF FUNDS**

Pursuant to Public Contract Code Section 22300 et seq., the CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.”

## **SECTION – 13    COMPLETION**

Final Completion and Final Acceptance shall occur at the time and in the manner specified in the General Conditions, "Final Acceptance and Final Completion", "Final Payment" and Exhibit A - Schedule of Prices.

Upon receipt of all documentation, records, and releases as required by the Contract from the CONTRACTOR, OCSD shall proceed with the Final Acceptance as specified in General Conditions.

## **SECTION – 14    CONTRACTOR'S EMPLOYEES COMPENSATION**

### **A.    Davis-Bacon Act:**

CONTRACTOR will pay and will require all Subcontractors to pay all employees on said Project a salary or wage at least equal to the prevailing rate of per diem wages as determined by the Secretary of Labor in accordance with the Davis-Bacon Act for each craft or type of worker needed to perform the Contract. The provisions of the Davis-Bacon Act shall apply only if the Contract is in excess of Two Thousand Dollars (\$2,000.00) and when twenty-five percent (25%) or more of the Contract is funded by federal assistance. If the aforesaid conditions are met, a copy of the provisions of the Davis-Bacon Act to be complied with are incorporated herein as a part of this Contract and referred to by reference.

### **B.    General Prevailing Rate:**

OCSD has been advised by the State of California Director of Industrial Relations of its determination of the general prevailing rate of per diem wages and the general prevailing rate for legal holiday and overtime Work in the locality in which the Work is to be performed for each craft or type of Work needed to execute this Contract, and copies of the same are on file in the Office of the ENGINEER of OCSD. The CONTRACTOR

agrees that not less than said prevailing rates shall be paid to workers employed on this public works Contract as required by Labor Code Section 1774 of the State of California. Per California Labor Code 1773.2, OCSD will have on file copies of the prevailing rate of per diem wages at its principal office and at each job site, which shall be made available to any interested party upon request.

C. Forfeiture for Violation:

CONTRACTOR shall, as a penalty to OCSD, forfeit Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid (either by the CONTRACTOR or any Subcontractor under it) less than the prevailing rate of per diem wages as set by the Director of Industrial Relations, in accordance with Sections 1770-1780 of the California Labor Code for the Work provided for in this Contract, all in accordance with Section 1775 of the Labor Code of the State of California.

D. Apprentices:

Sections 1777.5, 1777.6, 1777.7 of the Labor Code of the State of California, regarding the employment of apprentices are applicable to this Contract and the CONTRACTOR shall comply therewith if the prime contract involves Thirty Thousand Dollars (\$30,000.00) or more.

E. Workday:

In the performance of this Contract, not more than eight (8) hours shall constitute a day's work, and the CONTRACTOR shall not require more than eight (8) hours of labor in a day from any person employed by him hereunder except as provided in paragraph (B) above. CONTRACTOR shall conform to Article 3, Chapter 1, Part 7 (Section 1810 et seq.) of the Labor Code of the State of California and shall forfeit to OCSD as a penalty, the sum of Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by CONTRACTOR or any Subcontractor for each calendar day during which any worker is

required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one week in violation of said Article. CONTRACTOR shall keep an accurate record showing the name and actual hours worked each calendar day and each calendar week by each worker employed by CONTRACTOR in connection with the Project.

F. Registration; Record of Wages; Inspection:

CONTRACTOR shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the Work is subject to compliance monitoring by the California Department of Industrial Relations. CONTRACTOR shall maintain accurate payroll records and shall submit payroll records to the Labor Commissioner pursuant to Labor Code Section 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.

CONTRACTOR shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulations Section 16461(e).

**SECTION – 15 SURETY BONDS**

CONTRACTOR shall, before entering upon the performance of this Contract, furnish Bonds approved by OCSD's General Counsel – one in the amount of one hundred percent (100%) of the Contract amount, to guarantee the faithful performance of the Work, and the other in the amount of one hundred percent (100%) of the Contract amount to guarantee payment of all claims for labor and materials furnished. As changes to the Contract occur via approved Change Orders, the CONTRACTOR shall assure that the amounts of the Bonds are adjusted to maintain one hundred percent (100%) of the Contract Price. This Contract shall not become effective until such Bonds are supplied to and approved by OCSD. Bonds must be issued by a Surety authorized by the State Insurance Commissioner to do business in California. The Performance Bond shall remain in full force and effect through the warranty period, as specified

in Section 19 below. All Bonds required to be submitted relating to this Contract must comply with California Code of Civil Procedure Section 995.630. Each Bond shall be executed in the name of the Surety insurer under penalty of perjury, or the fact of execution of each Bond shall be duly acknowledged before an officer authorized to take and certify acknowledgments, and either one of the following conditions shall be satisfied:

- A. A copy of the transcript or record of the unrevoked appointment, power of attorney, by-laws, or other instrument, duly certified by the proper authority and attested by the seal of the insurer entitling or authorizing the person who executed the Bond to do so for and on behalf of the insurer, is on file in the Office of the County Clerk of the County of Orange; or
- B. A copy of a valid power of attorney is attached to the Bond.

#### **SECTION – 16 INSURANCE**

CONTRACTOR shall purchase and maintain, for the duration of the Contract, 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, and the results of that Work by CONTRACTOR, its agents, representatives, employees, or Subcontractors, in amounts equal to the requirements set forth below. CONTRACTOR shall not commence Work under this Contract until all insurance required under this Section is obtained in a form acceptable to OCSD, nor shall CONTRACTOR allow any Subcontractor to commence Work on a subcontract until all insurance required of the Subcontractor has been obtained. CONTRACTOR shall maintain all of the foregoing insurance coverages in force through the point at which the Work under this Contract is fully completed and accepted by OCSD pursuant to the provisions of the General Conditions, "Final Acceptance and Final Completion". Furthermore, CONTRACTOR shall maintain all of the foregoing insurance coverages in full force and effect throughout the warranty period, commencing on the date of Final Acceptance. The requirement for carrying the foregoing insurance shall not derogate from the provisions for indemnification of OCSD by

CONTRACTOR under Section 17 of this Contract. Notwithstanding nor diminishing the obligations of CONTRACTOR with respect to the foregoing, CONTRACTOR shall subscribe for and maintain in full force and effect during the life of this Contract, inclusive of all changes to the Contract Documents made in accordance with the provisions of the General Conditions, "Request for Change (Changes at CONTRACTOR's Request)" and/or "OWNER Initiated Changes", the following insurance in amounts not less than the amounts specified. OCSD reserves the right to amend the required limits of insurance commensurate with the CONTRACTOR's risk at any time during the course of the Project. No vehicles may enter OCSD premises/worksite without possessing the required insurance coverage.

CONTRACTOR's insurance shall also comply with all insurance requirements prescribed by agencies from whom permits shall be obtained for the Work and any other third parties from whom third party agreements are necessary to perform the Work (collectively, the "Third Parties"), The Special Provisions may list such requirements and sample forms and requirements from such Third Parties may be included in an attachment to the General Requirements. CONTRACTOR bears the responsibility to discover and comply with all requirements of Third Parties, including meeting specific insurance requirements, that are necessary for the complete performance of the Work. To the extent there is a conflict between the Third Parties' insurance requirements and those set forth by OCSD herein, the requirement(s) providing the more protective coverage for both OCSD and the Third Parties shall control and be purchased and maintained by CONTRACTOR.

A. Limits of Insurance

1. General Liability: Ten Million Dollars (\$10,000,000) per occurrence and a general aggregate limit of Twenty Million Dollars (\$20,000,000) for bodily injury, personal injury and property damage. Coverage shall include each of the following:
  - a. Premises-Operations.



- b. Products and Completed Operations, with limits of at least Ten Million Dollars (\$10,000,000) per occurrence and a general aggregate limit of Twenty Million Dollars (\$20,000,000) which shall be in effect at all times during the warranty period set forth in the Warranty section herein, and as set forth in the General Conditions, "Warranty (CONTRACTOR's Guarantee)", plus any additional extension or continuation of time to said warranty period that may be required or authorized by said provisions.
- c. Broad Form Property Damage, expressly including damage arising out of explosion, collapse, or underground damage.
- d. Contractual Liability, expressly including the indemnity provisions assumed under this Contract.
- e. Separation of Insured Clause, providing that coverage applies separately to each insured, except with respect to the limits of liability.
- f. Independent CONTRACTOR's Liability.

To the extent first dollar coverage, including defense of any claim, is not available to OCSD or any other additional insured because of any SIR, deductible, or any other form of self insurance, CONTRACTOR is obligated to assume responsibility of insurer until the deductible, SIR or other condition of insurer assuming its defense and/or indemnity has been satisfied.

CONTRACTOR shall be responsible to pay any deductible or SIR.

- g. If a crane will be used, the General Liability insurance will be endorsed to add Riggers Liability coverage or its equivalent to cover the usage of the crane and exposures with regard to the crane operators, riggers and others involved in using the crane.

- h. If divers will be used, the General Liability insurance will be endorsed to cover marine liability or its equivalent to cover the usage of divers.
2. Automobile Liability: The CONTRACTOR shall maintain a policy of Automobile Liability Insurance on a comprehensive form covering all owned, non-owned, and hired automobiles, trucks, and other vehicles providing the following minimum limits of liability coverage:
- Either (1) a combined single limit of Five Million Dollars (\$5,000,000) and a general aggregate limit of Five Million Dollars (\$5,000,000) for bodily injury, personal injury and property damage;
- Or alternatively, (2) Five Million Dollars (\$5,000,000) per person for bodily injury and Five Million Dollars (\$5,000,000) per accident for property damage.
3. Umbrella Excess Liability: The minimum limits of general liability and automobile liability insurance required, as set forth above, shall be provided for either in a single policy of primary insurance or a combination of policies of primary and umbrella excess coverage. Excess liability coverage shall be issued with limits of liability which, when combined with the primary insurance, will equal the minimum limits for general liability and automobile liability.
4. Drone Liability Insurance: If a drone will be used, drone liability insurance must be maintained by CONTRACTOR in the amount of One Million Dollars (\$1,000,000) in a form acceptable by OCSD.
5. Worker's Compensation/Employer's Liability: CONTRACTOR shall provide such Worker's Compensation Insurance as required by the Labor Code of the State of California, including employer's liability with a minimum limit of One Million Dollars (\$1,000,000) per accident for bodily injury or disease. If an exposure to Jones Act

liability may exist, the insurance required herein shall include coverage with regard to Jones Act claims.

Where permitted by law, CONTRACTOR hereby waives all rights of recovery by subrogation because of deductible clauses, inadequacy of limits of any insurance policy, limitations or exclusions of coverage, or any other reason against OCSD, its or their officers, agents, or employees, and any other contractor or subcontractor performing Work or rendering services on behalf of OCSD in connection with the planning, development and construction of the Project. In all its insurance coverages related to the Work, CONTRACTOR shall include clauses providing that each insurer shall waive all of its rights of recovery by subrogation against OCSD, its or their officers, agents, or employees, or any other contractor or subcontractor performing Work or rendering services at the Project. Where permitted by law, CONTRACTOR shall require similar written express waivers and insurance clauses from each of its Subcontractors of every tier. A waiver of subrogation shall be effective as to any individual or entity, even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium, directly or indirectly, and (c) whether or not such individual or entity has an insurable interest in the property damaged.

6. Pollution Liability Insurance: CONTRACTOR shall purchase and maintain insurance for pollution liability covering bodily injury, property damage (including loss of use of damaged property or property that has not been physically injured or destroyed), cleanup costs, and defense costs (including costs and expenses for investigation, defense, or settlement of claims). Coverage shall carry limits of at least Two Million Dollars (\$2,000,000) and shall apply to sudden and non-sudden pollution conditions

(including sewage spills), both at the site or needed due to migration of pollutants from the site, resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials, or other irritants, contaminants or pollutants.

If CONTRACTOR provides coverage written on a claims-made basis, OCSD has the right to approve or reject such coverage in its own discretion. If written on a claims-made basis, the CONTRACTOR warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this Contract, and that continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of two years beginning from the time that the Project under this Contract is completed.

7. Limits are Minimums: If CONTRACTOR maintains higher limits than the minimums shown in this Section, OCSD requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR.

B. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by OCSD. At the option of OCSD, either: the Insurer shall reduce or eliminate such deductibles or self-insured retentions as respects OCSD, its Directors, officers, agents, CONSULTANTS, and employees; or CONTRACTOR shall provide a financial guarantee satisfactory to OCSD guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

C. Other Insurance Provisions

1. Each such policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to contain, the following provisions:

- a. OCSD, its Directors, officers, agents, CONSULTANTS, and employees, and all public agencies from whom permits will be obtained, and their Directors, officers, agents, and employees are hereby declared to be additional insureds under the terms of this policy, but only with respect to the operations of CONTRACTOR at or from any of the sites of OCSD in connection with this Contract, or acts and omissions of the additional insured in connection with its general supervision or inspection of said operations related to this Contract.
  - b. Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by OCSD shall be excess only and not contributing with insurance provided under this policy.
2. Each insurance policy required herein shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, and that coverage shall not be cancelled for non-payment of premium except after ten (10) days prior written notice by certified mail, return receipt requested. Should there be changes in coverage or an increase in deductible or SIR amounts, CONTRACTOR undertakes to procure a manuscript endorsement from its insurer giving 30 days prior notice of such an event to OCSD, or to have its insurance broker/agent send to OCSD a certified letter describing the changes in coverage and any increase in deductible or SIR amounts. The certified letter must be sent Attention: Risk Management and shall be received not less than twenty (20) days prior to the effective date of the change(s). The letter must be signed by a Director or Officer of the broker/agent and must be on company letterhead, and may be sent via e-mail in pdf format.

3. Coverage shall not extend to any indemnity coverage for the active negligence of any additional insured in any case where an agreement to indemnify the additional insured would be invalid under California Civil Code Section 2782(b).
4. If required by a public agency from whom permit(s) will be obtained, each policy of General Liability Insurance and Automobile Liability Insurance shall be endorsed to specify by name the public agency and its legislative members, officers, agents, CONSULTANTS, and employees, to be additional insureds.

D. Acceptability of Insurers

Insurers must have an "A-", or better, Policyholder's Rating, and a Financial Rating of at least Class VIII, or better, in accordance with the most current A.M. Best Rating Guide. OCSD recognizes that State Compensation Insurance Fund has withdrawn from participation in the A.M. Best Rating Guide process. Nevertheless, OCSD will accept State Compensation Insurance Fund for the required policy of worker's compensation insurance, subject to OCSD's option, at any time during the term of this Contract, to require a change in insurer upon twenty (20) days written notice. Further, OCSD will require CONTRACTOR to substitute any insurer whose rating drops below the levels herein specified. Said substitution shall occur within twenty (20) days of written notice to CONTRACTOR by OCSD or its agent.

E. Verification of Coverage

CONTRACTOR shall furnish OCSD with original certificates and mandatory endorsements affecting coverage. Said policies and endorsements shall conform to the requirements herein stated. All certificates and endorsements are to be received and approved by OCSD before Work commences. OCSD reserves the right to require complete, certified copies of all required insurance policies, including endorsements, affecting the coverage required by these Specifications at any time.

#### F. Subcontractors

CONTRACTOR shall be responsible to establish insurance requirements for any Subcontractors hired by CONTRACTOR. The insurance shall be in amounts and types reasonably sufficient to deal with the risk of loss involving the Subcontractor's operations and work. OCSD and any public agency issuing permits for the Project must be named as "Additional Insured" on any General Liability or Automobile Liability policy obtained by a Subcontractor. The CONTRACTOR must obtain copies and maintain current versions of all Subcontractors' policies, Certificate of Liability and mandatory endorsements effecting coverage. Upon request, CONTRACTOR must furnish OCSD with the above referenced required documents.

## G. Required Forms and Endorsements

## 1. Required ACORD Form

- a. Certificate of Liability Form 25

2. Required Insurance Services Office, Inc. Endorsements (when alternative forms are shown, they are listed in order of preference)

In the event any of the following forms are cancelled by Insurance Services Office, Inc. (ISO), or are updated, the ISO replacement form or equivalent must be supplied.

- |    |  |   |
|----|--|---|
| a. | Commercial General Liability   | Form CG-0001 10 01                                  |
| b. | Additional Insured Including<br>Products-Completed Operations                              | Form CG-2010 10 01 <b>and</b><br>Form CG-2037 10 01 |
| c. | Waiver of Transfer of Rights of<br>Recovery Against Others to Us/<br>Waiver of Subrogation | Form CG-2404 11 85; <b>or</b><br>Form CG-2404 10 93 |

### 3. Required State Compensation Insurance Fund Endorsements

- |    |                       |                      |
|----|-----------------------|----------------------|
| a. | Waiver of Subrogation | Endorsement No. 2570 |
| b. | Cancellation Notice   | Endorsement No. 2065 |

4. Additional Required Endorsements

- a. Notice of Policy Termination Manuscript Endorsement

5. Pollution Liability Endorsements

There shall be a Separation of Insured Clause or endorsement, providing that coverage applies separately to each insured, except with respect to the limits of liability. There shall also be an endorsement or policy language containing a waiver of subrogation rights on the part of the insurer.

OCSD, its directors, officers, agents, CONSULTANTS and employees and all public agencies from whom permits will be obtained as well as their directors, officers, agents, and employees shall be included as insureds under the policy. Any additional insured endorsement shall contain language at least as broad as the coverage language contained in ISO form CG 20 10 11 85 or alternatively in both CG 20 10 10 01 and CG 20 37 10 01 together.

**SECTION – 17 RISK AND INDEMNIFICATION**

All Work covered by this Contract done at the site of construction or in preparing or delivering materials to the site shall be at the risk of CONTRACTOR alone. CONTRACTOR shall save, indemnify, defend, and keep OCSD and others harmless as more specifically set forth in General Conditions, "General Indemnification".

**SECTION – 18 TERMINATION**

This Contract may be terminated in whole or in part in writing by OCSD in the event of substantial failure by the CONTRACTOR to fulfill its obligations under this Agreement, or it may be terminated by OCSD for its convenience provided that such termination is effectuated in a manner and upon such conditions set forth more particularly in General Conditions, "Termination for Default" and/or "Termination for Convenience", provided that no termination may be effected unless proper notice is provided to CONTRACTOR at the time and in the



manner provided in said General Conditions. If termination for default or convenience is effected by OCSD, an equitable adjustment in the price provided for in this Contract shall be made at the time and in the manner provided in the General Conditions, "Termination for Default" and "Termination for Convenience".

## **SECTION – 19    WARRANTY**

The CONTRACTOR agrees to perform all Work under this Contract in accordance with the Contract Documents, including OCSD's designs, Drawings and Specifications.

The CONTRACTOR guarantees for a period of at least one (1) year from the date of Final Acceptance of the Work, pursuant to the General Conditions, "Final Acceptance and Final Completion" that the completed Work is free from all defects due to faulty materials, equipment or workmanship and that it shall promptly make whatever adjustments or corrections which may be necessary to cure any defects, including repairs of any damage to other parts of the system resulting from such defects. OCSD shall promptly give notice to the CONTRACTOR of observed defects. In the event that the CONTRACTOR fails to make adjustments, repairs, corrections or other work made necessary by such defects, OCSD may do so and charge the CONTRACTOR the cost incurred. The CONTRACTOR's warranty shall continue as to any corrected deficiency until the later of (1) the remainder of the original one-year warranty period; or (2) one year after acceptance by OCSD of the corrected Work. The Performance Bond and the Payment Bond shall remain in full force and effect through the guarantee period.

The CONTRACTOR's obligations under this clause are in addition to the CONTRACTOR's other express or implied assurances under this Contract, including but not limited to specific manufacturer or other extended warranties specified in the Plans and Specifications, or state law and in no way diminish any other rights that OCSD may have against the CONTRACTOR for faulty materials, equipment or Work.

## **SECTION – 20    ASSIGNMENT**

No assignment by the CONTRACTOR of this Contract or any part hereof, or of funds to be received hereunder, will be recognized by OCSD unless such assignment has had prior written approval and consent of OCSD and the Surety.

## **SECTION – 21    RESOLUTION OF DISPUTES**

OCSD and the CONTRACTOR shall comply with the provisions of California Public Contract Code Section 20104 et. seq., regarding resolution of construction claims for any Claims which arise between the CONTRACTOR and OCSD, as well as all applicable dispute and Claims provisions as set forth in the General Conditions and as otherwise required by law.

## **SECTION – 22    SAFETY & HEALTH**

CONTRACTOR shall comply with all applicable safety and health requirements mandated by federal, state, city and/or public agency codes, permits, ordinances, regulations, and laws, as well as these Contract Documents, including but not limited to the General Requirements, Section entitled “Safety” and Exhibit B OCSD Safety Standards.

## **SECTION – 23    NOTICES**

Any notice required or permitted under this Contract shall be sent by certified mail, return receipt requested, at the address set forth below. Any party whose address changes shall notify the other party in writing.

TO OCSD:                      Orange County Sanitation District  
                                     10844 Ellis Avenue  
                                     Fountain Valley, California 92708-7018  
                                     Attn: Clerk of the Board

Copy to:                      Orange County Sanitation District  
                                     10844 Ellis Avenue  
                                     Fountain Valley, California 92708-7018  
                                     Attn: Construction Manager  
  
                                     Bradley R. Hogin, Esquire  
                                     Woodruff, Spradlin & Smart  
                                     555 Anton Boulevard  
                                     Suite 1200  
                                     Costa Mesa, California 92626

TO CONTRACTOR:        Teichert Energy & Utilities Group, Inc.  
                                     3500 American River Drive  
                                     Sacramento, CA 95864

Copy to:                      John Solis, Regional Manager, Southern California  
                                     Teichert Energy & Utilities Group, Inc.  
                                     3500 American River Drive  
                                     Sacramento, CA 95864

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CONFORMED

C-CA-072619  
PROJECT NO. 3-62  
WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT

IN WITNESS WHEREOF, the parties hereto have executed this Contract Agreement as the date first hereinabove written.

CONTRACTOR: Teichert Energy & Utilities Group, Inc.  
3500 American River Drive  
Sacramento, CA 95864

By \_\_\_\_\_

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

Its \_\_\_\_\_

CONTRACTOR's State License No. 1051426 (Expiration Date – 3/31/2021)

OCSD: Orange County Sanitation District

By \_\_\_\_\_

David John Shawver  
Board Chairman

By \_\_\_\_\_

Kelly A. Lore  
Clerk of the Board

By \_\_\_\_\_

Ruth Zintzun  
Purchasing and Contracts Manager

**EXHIBIT A**  
**SCHEDULE OF PRICES**

**TABLE OF CONTENTS**  
**EXHIBIT A**  
**SCHEDULE OF PRICES**

EXA-1 BASIS OF COMPENSATION..... 1

EXA-2 PROGRESS PAYMENTS ..... 1

EXA-3 RETENTION AND ESCROW ACCOUNTS..... 1

EXA-4 STOP PAYMENT NOTICE..... 3

EXA-5 PAYMENT TO SUBCONTRACTORS ..... 3

EXA-6 PAYMENT OF TAXES ..... 3

EXA-7 FINAL PAYMENT ..... 4

EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT ... 5

ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT ..... 7

ATTACHMENT 2 – SCHEDULE OF PRICES..... 8

# **EXHIBIT A**

## **SCHEDULE OF PRICES**

### **EXA-1 BASIS OF COMPENSATION**

CONTRACTOR will be paid the Contract Price according to the Schedule of Prices, and all other applicable terms and conditions of the Contract Documents.

### **EXA-2 PROGRESS PAYMENTS**

Progress payments will be made in accordance with all applicable terms and conditions of the Contract Documents, including, but not limited to:

1. Contract Agreement – Section 11 – “Contract Price and Method of Payment;”
2. General Conditions – “Payment – General”;
3. General Conditions – “Payment – Applications for Payment”;
4. General Conditions – “Payment – Mobilization Payment Requirements;”
5. General Conditions – “Payment – Itemized Breakdown of Contract Lump Sum Prices”;
6. General Conditions – “Contract Price Adjustments and Payments”;
7. General Conditions – “Suspension of Payments”;
8. General Conditions – “OCSD’s Right to Withhold Certain Amounts and Make Application Thereof”; and
9. General Conditions – “Final Payment.”

### **EXA-3 RETENTION AND ESCROW ACCOUNTS**

#### **A. Retention:**

OCSD shall retain a percentage of each progress payment to assure satisfactory completion of the Work. The amount to be retained from each progress payment shall be determined as provided in General Conditions – “Retained Funds; Substitution of Securities”. In all contracts between CONTRACTOR and its Subcontractors and/or Suppliers, the retention may not exceed the percentage specified in the Contract Documents.

B. Substitution of Securities:

CONTRACTOR may, at its sole expense, substitute securities as provided in General Conditions – “Retained Funds; Substitution of Securities.” Payment of Escrow Agent:

In lieu of substitution of securities as provided above, the CONTRACTOR may request and OCSD shall make payment of retention earned directly to the escrow agent at the expense of the CONTRACTOR. At the expense of the CONTRACTOR, the CONTRACTOR may direct the investment of the payments into securities consistent with Government Code §16430 and the CONTRACTOR shall receive the interest earned on the investments upon the same terms provided for in this article for securities deposited by the CONTRACTOR. Upon satisfactory completion of the Contract, the CONTRACTOR shall receive from the escrow agent all securities, interest and payments received by the escrow agent from OCSD, pursuant to the terms of this article. The CONTRACTOR shall pay to each Subcontractor, not later than twenty (20) calendar days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to ensure the performance of the Subcontractor. The escrow agreement used by the escrow agent pursuant to this article shall be substantially similar to the form set forth in §22300 of the California Public Contract Code.

C. Release of Retention:

Upon Final Acceptance of the Work, the CONTRACTOR shall submit an invoice for release of retention in accordance with the terms of the Contract.

D. Additional Deductibles:

In addition to the retentions described above, OCSD may deduct from each progress payment any or all of the following:

1. Liquidated Damages that have occurred as of the date of the application for progress payment;
2. Deductions from previous progress payments already paid, due to OCSD's discovery of deficiencies in the Work or non-compliance with the Specifications or any other requirement of the Contract;
3. Sums expended by OCSD in performing any of the CONTRACTOR's obligations under the Contract that the CONTRACTOR has failed to perform, and;
4. Other sums that OCSD is entitled to recover from the CONTRACTOR under the terms of the Contract, including without limitation insurance deductibles and assessments.



The failure of OCSD to deduct any of the above-identified sums from a progress payment shall not constitute a waiver of OCSD's right to such sums or to deduct them from a later progress payment.

#### **EXA-4 STOP PAYMENT NOTICE**

In addition to other amounts properly withheld under this article or under other provisions of the Contract, OCSD shall retain from progress payments otherwise due the CONTRACTOR an amount equal to one hundred twenty-five percent (125%) of the amount claimed under any stop payment notice under Civil Code §9350 et. seq. or other lien filed against the CONTRACTOR for labor, materials, supplies, equipment, and any other thing of value claimed to have been furnished to and/or incorporated into the Work; or for any other alleged contribution thereto. In addition to the foregoing and in accordance with Civil Code §9358 OCSD may also satisfy its duty to withhold funds for stop payment notices by refusing to release funds held in escrow pursuant to public receipt of a release of stop payment notice executed by a stop payment notice claimant, a stop payment notice release bond, an order of a court of competent jurisdiction, or other evidence satisfactory to OCSD that the CONTRACTOR has resolved such claim by settlement.

#### **EXA-5 PAYMENT TO SUBCONTRACTORS**

##### **Requirements**

1. The CONTRACTOR shall pay all Subcontractors for and on account of Work performed by such Subcontractors, not later than seven (7) days after receipt of each progress payment as required by the California Business and Professions Code §7108.5. Such payments to Subcontractors shall be based on the measurements and estimates made pursuant to article progress payments provided herein.
2. Except as specifically provided by law, the CONTRACTOR shall pay all Subcontractors any and all retention due and owing for and on account of Work performed by such Subcontractors not later than seven (7) days after CONTRACTOR's receipt of said retention proceeds from OCSD as required by the California Public Contract Code §7107.

#### **EXA-6 PAYMENT OF TAXES**

Unless otherwise specifically provided in this Contract, the Contract Price includes full compensation to the CONTRACTOR for all taxes. The CONTRACTOR shall pay all federal, state, and local taxes, and duties applicable to and assessable against any Work, including but not limited to retail sales and use, transportation, export, import, business, and special taxes. The CONTRACTOR shall ascertain and pay the taxes when due. The CONTRACTOR will maintain auditable records, subject to OCSD reviews, confirming that tax payments are current at all times.

## **EXA-7 FINAL PAYMENT**

After Final Acceptance of the Work, as more particularly set forth in the General Conditions, "Final Acceptance and Final Completion", and after Resolution of the Board authorizing final payment and satisfaction of the requirements as more particularly set forth in General Conditions – "Final Payment", a final payment will be made as follows:

1. Prior to Final Acceptance, the CONTRACTOR shall prepare and submit an application for Final Payment to OCSD, including:
  - a. The proposed total amount due the CONTRACTOR, segregated by items on the payment schedule, amendments, Change Orders, and other bases for payment;
  - b. Deductions for prior progress payments;
  - c. Amounts retained;
  - d. A conditional waiver and release on final payment for each Subcontractor (per Civil Code Section 8136);
  - e. A conditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8136);
  - f. List of Claims the CONTRACTOR intends to file at that time or a statement that no Claims will be filed,
  - g. List of pending unsettled claims, stating claimed amounts, and copies of any and all complaints and/or demands for arbitration received by the CONTRACTOR; and
  - h. For each and every claim that resulted in litigation or arbitration which the CONTRACTOR has settled, a conformed copy of the Request for Dismissal with prejudice or other satisfactory evidence the arbitration is resolved.
2. The application for Final Payment shall include complete and legally effective releases or waivers of liens and stop payment notices satisfactory to OCSD, arising out of or filed in connection with the Work. Prior progress payments shall be subject to correction in OCSD's review of the application for Final Payment. Claims filed with the application for Final Payment must be otherwise timely under the Contract and applicable law.
3. Within a reasonable time, OCSD will review the CONTRACTOR's application for Final Payment. Any recommended changes or corrections will then be forwarded to the CONTRACTOR. Within ten (10) calendar days after receipt of recommended changes from OCSD, the CONTRACTOR will make the changes, or list Claims that will be filed as a result of the changes, and shall submit the revised application for Final Payment. Upon

acceptance by OCSD, the revised application for Final Payment will become the approved application for Final Payment.

4. If no Claims have been filed with the initial or any revised application for Final Payment, and no Claims remain unsettled within thirty-five (35) calendar days after Final Acceptance of the Work by OCSD, and agreements are reached on all issues regarding the application for Final Payment, OCSD, in exchange for an executed release, satisfactory in form and substance to OCSD, will pay the entire sum found due on the approved application for Final Payment, including the amount, if any, allowed on settled Claims.
5. The release from the CONTRACTOR shall be from any and all Claims arising under the Contract, except for Claims that with the concurrence of OCSD are specifically reserved, and shall release and waive all unreserved Claims against OCSD and its officers, directors, employees and authorized representatives. The release shall be accompanied by a certification by the CONTRACTOR that:
  - a. It has resolved all Subcontractors, Suppliers and other Claims that are related to the settled Claims included in the Final Payment;
  - b. It has no reason to believe that any party has a valid claim against the CONTRACTOR or OCSD which has not been communicated in writing by the CONTRACTOR to OCSD as of the date of the certificate;
  - c. All warranties are in full force and effect, and;
  - d. The releases and the warranties shall survive Final Payment.
6. If any claims remain open, OCSD may make Final Payment subject to resolution of those claims. OCSD may withhold from the Final Payment an amount not to exceed one hundred fifty percent (150%) of the sum of the amounts of the open claims, and one hundred twenty-five percent (125%) of the amounts of open stop payment notices referred to in article entitled stop payment notices herein.
7. The CONTRACTOR shall provide an unconditional waiver and release on final payment from each Subcontractor and Supplier providing Work under the Contract (per Civil Code Section 8138) and an unconditional waiver and release on final payment on behalf of the CONTRACTOR (per Civil Code Section 8138) within thirty (30) days of receipt of Final Payment.

#### **EXA-8 DISCOVERY OF DEFICIENCIES BEFORE AND AFTER FINAL PAYMENT**

Notwithstanding OCSD's acceptance of the application for Final Payment and irrespective of whether it is before or after Final Payment has been made, OCSD shall not be precluded from subsequently showing that:

1. The true and correct amount payable for the Work is different from that previously accepted;

2. The previously accepted Work did not in fact conform to the Contract requirements, or;
3. A previous payment or portion thereof for Work was improperly made.

OCSD also shall not be stopped from demanding and recovering damages from the CONTRACTOR, as appropriate, under any of the foregoing circumstances as permitted under the Contract or applicable law.

## ATTACHMENT 1 – CERTIFICATION FOR REQUEST FOR PAYMENT

I hereby certify under penalty of perjury as follows:

That the claim for payment is in all respects true, correct; that the services mentioned herein were actually rendered and/or supplies delivered to OCSD in accordance with the Contract.

I understand that it is a violation of both the federal and California False Claims Acts to knowingly present or cause to be presented to OCSD a false claim for payment or approval.

A claim includes a demand or request for money. It is also a violation of the False Claims Acts to knowingly make use of a false record or statement to get a false claim paid. The term "knowingly" includes either actual knowledge of the information, deliberate ignorance of the truth or falsity of the information, or reckless disregard for the truth or falsity of the information. Proof of specific intent to defraud is not necessary under the False Claims Acts. I understand that the penalties under the Federal False Claims Act and State of California False Claims Act are non-exclusive, and are in addition to any other remedies which OCSD may have either under contract or law.

I hereby further certify, to the best of my knowledge and belief, that:

1. The amounts requested are only for performance in accordance with the Specifications, terms, and conditions of the Contract;
2. Payments to Subcontractors and Suppliers have been made from previous payments received under the Contract, and timely payments will be made from the proceeds of the payment covered by this certification;
3. This request for progress payments does not include any amounts which the prime CONTRACTOR intends to withhold or retain from a Subcontractor or Supplier in accordance with the terms and conditions of the subcontract; and
4. This certification is not to be construed as Final Acceptance of a Subcontractor's performance.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

CONFORMED

C-EXA-080414  
PROJECT NO. 3-62  
WESTMINSTER BOULEVARD FORCE MAIN REPLACEMENT

## **ATTACHMENT 2 – SCHEDULE OF PRICES**

See next pages from the Bid Submittal Forms (Teichert Energy & Utilities Group, Inc.)

BF-14 Schedule of Prices, Pages 1-2

Bid Submitted By: Teichert Energy & Utilities Group, Inc.  
(Name of Firm)

**BF-14 SCHEDULE OF PRICES**

**INSTRUCTIONS**

**A. General**

For Unit Prices, it is understood that the following quantities are approximate only and are solely for the purpose of estimating the comparison of Bids, and that the actual value of Work will be computed based upon the actual quantities in the completed Work, whether they be more or less than those shown. CONTRACTOR's compensation for the Work under the Contract Documents will be computed based upon the lump sum amount of the Contract at time of award, plus any additional or deleted costs approved by OCSD via approved Change Orders, pursuant to the Contract Documents.

Bidder shall separately price and accurately reflect costs associated with each line item, leaving no blanks. Any and all modifications to the Bid must be initialed by an authorized representative of the Bidder in accordance with the Instructions to Bidders, Preparation of Bid.

Bidders are reminded of Instruction to Bidders, Discrepancy in Bid Items, which, in summary, provides that the total price for each item shall be based on the Unit Price listed for each item multiplied by the quantity; and the correct Total Price for each item shall be totaled to determine the Total Amount of Bid.

All applicable costs including overhead and profit shall be reflected in the respective unit costs and the TOTAL AMOUNT OF BID. The Bid price shall include all costs to complete the Work, including profit, overhead, etc., unless otherwise specified in the Contract Documents. All applicable sales taxes, state and/or federal, and any other special taxes, patent rights or royalties shall be included in the prices quoted in this Bid.

**B. Basis of Award**

AWARD OF THE CONTRACT WILL BE MADE ON THE BASIS OF THE LOWEST RESPONSIVE AND RESPONSIBLE BID.

**Note 1:** Base Bid. Includes all costs necessary to furnish all labor, materials, equipment and services for the construction of the Project per the Contract Documents.

Bid Submitted By: Teichert Energy & Utilities Group, Inc.

(Name of Firm)

**EXHIBIT A**  
**SCHEDULE OF PRICES**

BASE BID ITEMS (Refer to Note 1 in the Instructions):

Item No.	Description	Unit of Measurement	Approx Qty	Unit Price	Extended Price
1.	Mobilization as described in Specifications Section 01155 and in conformance with the Contract Documents for the lump sum price of...	Lump Sum			= \$1,300,000
2.	Sheeting, Shoring & Bracing as described in Specifications Section 01155 and in conformance with the Contract Documents for the lump sum price of...	Lump Sum			= \$1,500,000.00
3.	Removal of hazardous materials from demolition activities as described in Specifications Section 01155 and in conformance with the Contract Documents for the unit price and total price of...	Cubic Yards	1,100	X \$230.00	= \$253,000.00
4.	Fees for all permits as specified in Specifications Section 01155 and in conformance with the Contract Documents for an allowance of...	Allowance			= \$360,000
5.	All other portions of the Work, except the Work of Item Nos. 1 through 4 and 6, as described in Specifications Section 01155 and in conformance with the Contract Documents for the lump sum price of...	Lump Sum			= \$24,000,000.00 <del>\$24,205,000.00</del> NR
6.	Demobilization including final progress payment, clean-up and retention of the Project site as described in Specifications Section 01155 and in conformance with the Contract Documents for the lump sum price of...	Lump Sum			= \$330,000

**TOTAL AMOUNT OF BID (BASIS OF AWARD)**

27,743,000.00  
\$ 27,743,000.00





# Orange County Sanitation District

Administration Building  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
(714) 593-7433

## OPERATIONS COMMITTEE

### Agenda Report

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**File #:** 2019-647

**Agenda Date:** 12/4/2019

**Agenda Item No:** 12.

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**FROM:** James D. Herberg, General Manager  
Originator: Lorenzo Tyner, Assistant General Manager

**SUBJECT:**

**ORANGE COUNTY SANITATION DISTRICT'S PROCUREMENT PROCESS**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION:

Information Item.

**BACKGROUND**

Staff will provide an informational presentation on the Orange County Sanitation District's procurement process.

**RELEVANT STANDARDS**

- Ensure the public's money is wisely spent
- Participate in local, state, and national cooperative purchasing programs
- Comply with OCSD Policy - Purchasing Ordinance No. OCSD-52

**ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

N/A



## Orange County Sanitation District

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10844 Ellis Avenue  
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### OPERATIONS COMMITTEE

#### Agenda Report

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**File #:** 2019-646

**Agenda Date:** 12/4/2019

**Agenda Item No:** 13.

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**FROM:** James D. Herberg, General Manager  
Originator: Lan Wiborg, Director of Environmental Services

**SUBJECT:**

**ORANGE COUNTY SANITATION DISTRICT - ENVIRONMENTAL SERVICES**

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION:

Information Item.

**BACKGROUND**

Each month, staff provides an informational presentation on topics of interest to the Board of Directors. This month's topic: Orange County Sanitation District's Environmental Services Department - Regulatory Compliance Program.

**RELEVANT STANDARDS**

- Use all practical and effective means for resource recovery
- Comply with environmental permit requirements

**ATTACHMENT**

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

N/A