# **City of San Diego**

CONTRACTOR NAME: <u>Baker Electric, Inc.</u> ADDRESS: <u>1298 Pacific Oaks Pl., Escondido, CA 92029</u> TELEPHONE: <u>760-745-2001</u> FAX: <u>760-745-0321</u> CITY CONTACT: <u>Rosa Isela Riego, Contract Specialist, Email:</u> <u>RRiego@sandiego.gov</u> H. Isa / A. Rekani / LJI

# **PROPOSAL DOCUMENTS**





# FOR

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

RFP NO.:	K-17-1383-DB1-3-A
SAP NO. (WBS/IO/CC):	B-16132
CLIENT DEPARTMENT:	2012
COUNCIL DISTRICT:	8
PROJECT TYPE:	BO

ORIGINAL

#### THIS PROJECT IS SUBJECT TO THE FOLLOWING:

- > THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM.
- > BID DISCOUNT PROGRAM (The WHITEBOOK, SLBE-ELBE Program Requirements, Section IV(2))
- ▷ PREVAILING WAGE RATES: STATE ∑ FEDERAL
- > APPRENTICESHIP

#### **PROPOSALS DUE:**

# 12:00 NOON MARCH 22, 2017 CITY OF SAN DIEGO PUBLIC WORKS CONTRACTS 1010 SECOND AVENUE, 14<sup>th</sup> FLOOR, MS 614C SAN DIEGO, CA 92101 ATTN: CONTRACT SPECIALIST

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#### **REQUEST FOR PROPOSAL**

#### 1. INTRODUCTION AND PROJECT OVERVIEW

#### 1.1. SOLICITATION

- **1.1.1.** This is the City of San Diego's (City) solicitation process to acquire Design-Build services for the **South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements** Design-Build project.
- **1.1.2.** This RFP describes the Project, the required Scope of Work and Services, the Design-Builder selection process, the minimum information that shall be included in the Proposal for this Project and the terms and conditions governing the Work. Failure to submit all requested information in accordance with the requirements of this Request for Proposal (RFP) may be cause for disqualification.
- **1.1.3.** Each Proposal properly executed as required by this RFP shall constitute a firm offer, which may be accepted by the City within the time specified in the Proposal.
- **1.1.4.** This RFP will not commit the City to award a contract, to defray any costs incurred in the preparation of a Proposal pursuant to this RFP, or to procure or contract for the Work.
- **1.1.5.** Selection announcements, contract awards, and all data provided by the City shall be protected by the Design-Builder from public disclosure. The Design-Builders desiring to release information to the public, shall receive prior written approval from the City.
- **1.1.6.** The Design-Builder, by submitting a response to this RFP, agrees to provide the required services for the terms and conditions noted in this RFP and its exhibits if awarded by the City. The agreement and other terms and conditions are included in the Design-Build Contract and The GREENBOOK, The WHITEBOOK, and the Supplementary Special Provisions (SSP).
- **1.1.7.** Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting the RFPs or the Project's preliminary design may not be eligible to participate in the competition with any Design-Build Entity without the prior written consent of City.
- SUMMARY OF WORK: This is the City solicitation process to acquire Design-Build services for a Design-Build project to South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements. For additional information refer to Attachment A.

- **1.3. FULL AND OPEN COMPETITION:** This contract is open to full competition and may be bid on by Contractors who are on the City's current Prequalified Contractors' List. For information regarding the Contractors Prequalified list visit the City's web site: http://www.sandiego.gov.
- 1.4. PROPOSAL DUE DATE AND TIME ARE: March 22, 2017 at 12:00 P.M.
- **1.5. ESTIMATED PROJECT COST:** The City's estimated cost for this project is **\$897,000**.
- **1.6. LICENSE REQUIREMENT:** The City has determined that the following licensing classifications are required for this contract: **A or C-10.**
- **1.7. CONTRACT PERIOD:** The Project, including the Plant Establishment Period, shall be completed within **110** Working Days from the Notice to Proceed (NTP).
- **1.8. PREVAILING WAGE RATES APPLY TO THIS CONTRACT**: Refer to Attachment D.

#### **1.9. CONTRACTOR LICENSE AND PREQUALIFICATION STATUS:**

- **1.9.1.** The Design-Builder must possess a Class A or C-10 California State Contractor's license.
- **1.9.2.** The Design-Builder must, at the time of submission of the proposal, be prequalified at an amount equal to or greater than the total amount proposed, including any alternates or options.
- **1.9.3.** The Design-Builder's California State License and City of San Diego prequalification status as specified herein must be valid at time of submission.

#### 1.10. PRE-PROPOSAL MEETING AND SITE VISIT:

**1.10.1.** Those wishing to submit a Bid are **required** to attend the Pre-Proposal Meeting. The purpose of the meeting is to discuss the scope of the Project, submittal requirements, the pre-qualification process and any Equal Opportunity Contracting Program requirements and reporting procedures. To request a sign language or oral interpreter for this visit, call the Public Works Contracts Division at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. Failure to attend the Mandatory Pre- Proposal Meeting may result in the Design-Builder's Bid being deemed non-responsive. The Pre- Proposal meeting is scheduled as follows:

Date:February 22, 2017Time:10:00 A.M.Location:1010 Second Avenue, Suite 1400 (Large Conf. Rm.),<br/>San Diego, Ca 92101

**1.10.2.** Attendance at the Pre- Proposal Meeting will be evidenced by the Bidder's representative's signature on the attendance roster. It is the responsibility of the Bidder's representative to complete and sign the attendance roster.

Bidders may not be admitted after the specified start time of the mandatory Pre-Proposal Meeting.

1.10.3. PRE-PROPOSAL SITE VISIT: All those wishing to submit a bid MUST visit the Work Site with the Engineer. The purpose of the Site visit is to acquaint Bidders with the Site conditions. To request a sign language or oral interpreter for this visit, call the Public Works Contracts at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. The Pre- Proposal Site Visit is scheduled as follows:

Time:1:00 P.M.Date:February 22, 2017Location:2411 Dairy Mart Road, San Diego, Ca 92154

- **2. SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract.
  - **2.1.1.** City has incorporated mandatory SLBE-ELBE subcontractor participation percentages to enhance competition and maximize subcontracting opportunities. For the purpose of achieving the mandatory subcontractor participation percentages, a recommended breakdown of the SLBE and ELBE subcontractor participation percentages based upon certified SLBE and ELBE firms has also been provided to achieve the mandatory subcontractor participation percentages:

1.	SLBE	participation	1.0%
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- 2. ELBE participation
- 3. Total mandatory participation 7.7%
- **2.1.2.** The Bid may be declared non-responsive if the Bidder fails the meet the following requirements:
  - **2.1.2.1.** Attend the Pre- Proposal Meeting as described herein.
  - **2.1.2.2.** Include SLBE-ELBE certified subcontractors at the overall mandatory participation percentage identified in this document; **OR**

6.7%

2.1.2.3. Submit Good Faith Effort documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Bidder made a good faith effort to outreach to and include SLBE-ELBE Subcontractors required in this document within 3 Working Days of the Bid opening if the overall mandatory participation percentage is not met.

#### 3. SELECTION AND AWARD SCHEDULE:

**3.1.** The City anticipates that the process for selecting a Design-Builder and awarding the contract will be according to the following tentative schedule. Dates are subject to change:

3.2.	Pre-Proposal Meeting	February 22, 2017
3.3.	Proposal Due Date	March 22, 2017
3.4.	Presentations or Interviews	April 5, 2017
3.5.	Selection and Notification	April 27, 2017
3.6.	Limited Notice to Proceed	May 30, 2017

# INSTRUCTIONS TO PROPOSERS AND GENERAL CONDITIONS

#### 1. **PREQUALIFICATION OF CONTRACTORS:**

**1.1.** Contractors submitting proposals must be pre-qualified for the total amount proposed, inclusive of all alternate items or specified Task Order limits prior to the date of submittal. Proposals from contractors who have not been pre-qualified as applicable and Proposals that exceed the maximum dollar amount at which contractors are pre-qualified may be deemed **non-responsive** and ineligible for award. Complete information and links to the on-line prequalification application are available at:

#### http://www.sandiego.gov/cip/bidopps/prequalification.shtml

- **1.2.** The completed application must be submitted online no later than 2 weeks prior to the Proposal due date. For additional information or the answer to questions about the prequalification program, contact David Stucky at 619-533-3474 or <u>dstucky@sandiego.gov</u>.
- **1.3.** Due to the City's fiduciary requirement to safeguard vendor data, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on <u>PlanetBids</u><sup>™</sup>.
- 2. ELECTRONIC FORMAT RECEIPT AND OPENING OF PROPOSALS: Proposals will be received in <u>electronic format (eBids) EXCLUSIVELY</u> at the City of San Diego's electronic bidding (eBidding) site, at: <u>http://www.sandiego.gov/cip/bidopps/index.shtml</u> and are due by the date, and time shown on the cover of this solicitation.
  - **2.1. PROPOSERS MUST BE PRE-REGISTERED** with the City's bidding system and possess a system-assigned Digital ID in order to submit and electronic proposal.
  - 2.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.
  - **2.3.** Upon entry of their proposal, the system will ensure that all required fields are entered. **The system will not accept a proposal for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.

- 2.4. **PROPOSALS REMAIN SEALED UNTIL DUE DATE AND TIME**. eBids and eProposals are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256 bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Proposals submitted prior to the Due Date and Time are not available for review by anyone other than the submitter, who will have until the Due Date and Time to change, rescind or retrieve its proposal should they desire to do so.
- 2.5. PROPOSALS MUST BE SUBMITTED BY DUE DATE AND TIME. Once the deadline is reached, no further submissions are accepted into the system. Once the Due Date and Time has passed, bidders, proposers, the general public, and City staff are able to immediately see the results on line. City staff may then begin reviewing the submissions for responsiveness, Equal Opportunity Contracting Program (EOCP) compliance and other issues.
- **2.6. TECHNICAL PROPOSAL AND PRICE PROPOSAL ARE TO BE SEPARATE**. The proposer is to submit two separate proposal PDFs by the due date and time.
  - 1. The Technical proposal, which should contain the items detailed below and in Attachment G. There is to be **NO PRICING** information within this proposal. If a Technical proposal contains pricing information, the submission may be deemed non-responsive and ineligible for further consideration, and
  - **2**. The Price proposal, which should detail the cost structure and include any forms as required herein.
- **2.7. RECAPITULATION OF THE WORK.** Proposals shall not contain any recapitulation of the Work. Conditional proposals may be rejected as being **non-responsive**. Alternative proposals will not be considered unless called for.
- **2.8. PROPOSALS MAY BE WITHDRAWN** by the Proposer prior to, but not after, the time set as Due Date and Time.
  - **2.8.1.** Important Note: Submission of the electronic proposal into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the proposer's submission to upload and be received by the City's eBidding system. It is the proposer's sole responsibility to ensure their proposals are received on time by the City's eBidding system. The City of San Diego is not responsible for proposals that do not arrive by the required date and time.
- **2.9.** ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE. To request a copy of this solicitation in an alternative format, contact the Public Works Contract Specialist listed in the cover of this solicitation at least five (5) working days prior to the Proposal due date to ensure availability.

#### 3. ELECTRONIC SUBMISSIONS CARRY FULL FORCE AND EFFECT

- **3.1.** The proposer, by submitting its electronic proposal, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.
- **3.2.** By submitting an electronic proposal, the proposer certifies that the proposer has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its proposal, the proposer acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.
- **3.3.** The Proposer, by submitting their electronic proposal, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this proposal are true and correct.
- 4. **PROPOSALS ARE PUBLIC RECORDS:** Upon receipt by the City, proposals shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the proposal's General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.

## 5. CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:

**5.1. Prior** to the Award of the Contract or Task Order, you and your Subcontractors and Suppliers must register with the City's web-based vendor registration and bid management system. For additional information go to:

#### http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml.

- **5.2.** The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.
- **6. JOINT VENTURE CONTRACTORS:** Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 10 Working Days after receiving the Contract forms. See 7-6, "The Contractors Representative" in The GREENBOOK and 7-6.1 in The WHITEBOOK.

- **6.1** Each properly signed Proposal shall constitute a firm offer that may be accepted by the City within the time frame specified herein.
- **6.2** This RFP will not commit the City to award a contract, to defray any costs incurred in the preparation of a Proposal pursuant to this RFP, or to procure or contract for the Work.
- **6.3** Upon receipt by the City, Proposals shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the Proposal. General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.
- **6.4** Selection announcements, contract awards, and all data provided by the City shall be protected by the Design-Builder from public disclosure. The Design-Builders desiring to release information to the public shall receive prior written approval from the City.
- **6.5** Design-Builders who submit a response to this RFP agree to provide the required services in accordance with the terms and conditions noted in this RFP and its attachments upon award by the City. The agreement and other terms and conditions are included in the Design-Build Contract, The GREENBOOK, The WHITEBOOK, and the Supplementary Special Provisions (SSP).
- **6.6** Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting the RFPs or the Project's preliminary design may not be eligible to participate in the competition with any Design-Build Entity without the prior written consent of City. Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting any Reference Documents, such as the Water Department's Master Plan and any other document that was not prepared specifically for this contract, are considered to be eligible to participate.

#### 7. EQUAL OPPORTUNITY CONTRACTING

**7.1** As set forth in this RFP, the City is dedicated to the principles of equal opportunity in the workplace and in subcontracting. It is the City's expectation that firms doing business with the City have, and are able to demonstrate, the same level of commitment.

**7.2** The Design-Builders are encouraged to take positive steps to diversify and expand their subcontractor solicitation base and to offer contracting opportunities to all eligible certified Subcontractors in accordance with the City's EOCP requirements included in the Contract Documents.

#### 7.3 Design-Builder's Work Force

- **7.3.1** The Design-Builders shall submit with its Proposal a Work Force Report (EOC Form BB05) and prior to award of contract, the successful Design-Builder shall submit to the City's EOCP office an updated Work Force Report or an Equal Employment Opportunity (EEO) Plan.
- **7.3.2** If under representations are noted in the Work Force Report when compared to County Labor Force Availability data, the Design-Builder shall submit an Equal Opportunity Plan. Any Equal Employment Opportunity Plan submitted shall include the elements as outlined in the EOCP Requirements included in The WHITEBOOK.
- **7.3.3** The specified Equal Opportunity Contracting Program (EOCP) forms are available for download from the City's web site at:

http://www.sandiego.gov/eoc/forms/index.shtml

## 7.4 Nondiscrimination Ordinance (Municipal Code §§ 22.2701-22.2708)

- **7.4.1** The Design-Builder shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age or disability in the solicitation, selection, hiring or treatment of the Subcontractors and Suppliers. The Design-Builder shall provide equal opportunity for Subcontractors to participate in subcontracting opportunities. The Design-Builder understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment or other sanctions.
- **7.4.2** This language shall be in contracts between the Design-Builder and any Subcontractors and Suppliers.
- **7.4.3** As part of its Proposal, the Design-Builder shall provide to the City a list of all instances within the last 10 years where a complaint was filed or pending against Design-Builder in a legal or administrative proceeding alleging that Design-Builder discriminated against its employees, the Subcontractors, or Suppliers, and a description of the status or resolution of that complaint, including any remedial action taken. If there have not been any complaints filed or pending against Design-Builder to confirm shall be included in the Proposal.

#### 7.5 Contractor Registration and Electronic Reporting System

**7.5.1** Prior to the award of the Contract, the Design-Builder, Subcontractors, and Suppliers must register with the City's web-based vendor registration and bid management system, BidsOnlineTM hosted by PlanetBids System. For additional information go to:

http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml.

**7.5.2** Following the award of the Contract, the Design-Builder will be required to use the City's web-based contract compliance application for EOCP reporting purposes e.g., Weekly Certified Payroll, Monthly Employment Utilization, and Monthly Payments. Online tutorials are available at:

http://stage.prismcompliance.com/etc/vendortutorials.htm

- **7.5.3** The City may retain progress payments if:
  - **7.5.3.1** The non-registered Design-Builder, Subcontractors, or Suppliers fail to register,
  - **7.5.3.2** EOCP reporting is delinquent or inadequate, or

#### 8. CONTRACTOR'S LICENSE CLASSIFICATION AND PRE-QUALIFICATION STATUS

- **8.1.** The Design-Builder's California State License and City of San Diego prequalification status as specified herein must be valid at time of submission. Failure to comply with these requirements may result in the proposal being deemed non responsive and ineligible for further consideration.
- **8.2.** Design-Builders interested in submitting a proposal for this Project shall be prequalified through the City's Prequalification program:
  - **8.2.1.**The Design-Builders must submit a complete prequalification application online to the Public Works Contracts, Prequalification Program no later than 2 weeks prior to **the Proposal due date and time**. Complete information and links to the online prequalification application are available at:

http://www.sandiego.gov/cip/bidopps/prequalification.shtml

**8.2.2.**For additional information or the answer to questions about the prequalification program, contact David Stucky at 619-533-3474 or dstucky@sandiego.gov.

**8.2.3.**Due to the City's fiduciary requirement to safeguard vendor data, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on PlanetBids<sup>™</sup>.

#### 9. PRE-PROPOSAL ACTIVITIES

#### 9.1. Submission of Questions

**9.1.1.**The Director (or designee) of the Public Works Department is the officer responsible for opening, examining, and evaluating the competitive Proposals submitted to the City for the acquisition, construction, and completion of any public improvement except when otherwise set forth in these documents. All questions related to this solicitation shall be submitted to:

Public Works Contracts 1010 Second Avenue, 14<sup>th</sup> Floor San Diego, California, 92101 Attention: Contract Specialist listed on the front cover of this RFP.

OR:

To the Email address of the Contract Specialist listed on the front cover of this RFP.

- **9.1.2.**Questions received less than 14 Days prior to the Proposal due date may not be considered.
- **9.1.3.**Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.
- **9.1.4.**Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Design-Builder's responsibility to be informed of any Addenda that have been issued and to adjust its Proposal accordingly.

#### 9.2. Revisions to the RFP

The City, at its option, may respond to any or all questions submitted in writing via the City's eBidding web site in the form of an addendum. No other responses to questions, oral or written, shall be of any force or effect with respect to this solicitation.

Any changes to the Contract Documents through addendum are made effective as though originally issued with the Proposal. The Design-Builders shall acknowledge the receipt of Addenda at the time of Proposal submission.

#### 10. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK

- **10.1.** Contract Documents may be obtained by visiting the City's website: http://www.sandiego.gov/cip/ Plans and Specifications for this contract are also available for review in the office of Public Works Contracts.
- **10.2.** The Design-Builders shall carefully examine the Project Site, the Plans and Specifications, and other materials as described in or referenced by this RFP. The submission of a Proposal shall be conclusive evidence that the Design-Builder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work, the quantities of materials to be furnished, local conditions, and as to the requirements of the Contract Documents.
- **11. CHANGES TO THE SCOPE OF WORK:** Once a proposal has been accepted by the City and the award has been made, the Design-Builder shall immediately notify the City in writing of any proposed or anticipated change in the scope, contract amount, or contract time; and shall obtain the City's written consent to the change(s) prior to affecting them. In no event shall the City's consent be construed to relieve the Design-Builder from its duty to render all work and services in accordance with applicable laws and accepted industry standards
- 12. DESIGN SUBMITTALS: The City's review of the Design-Builder's Design Submittals shall not relieve the Design-Builder from its responsibilities under the Contract, or be deemed to be an acceptance or waiver by City of any deviation from, or of the Design-Builder's failure to comply with, any provision or requirement of the Contract Documents, unless such deviation or failure has been identified as such in writing in the document submitted for acceptance by the Design-Builder and accepted by City. Where approval or acceptance by City is required, it is understood to be general approval only, and does not relieve the Design-Builder of responsibility for complying with all applicable laws and good professional practices as the Design-Builder shall be the Engineer of Record.
- **13. BONDS AND INSURANCE:** Prior to the award of the Contract (or Task Order), the Design-Builders shall submit evidence of separate bonds and insurance as specified in Sections 2-4, "CONTRACT BONDS," 7-3, "LIABILITY INSURANCE," and 7-4, "WORKERS' COMPENSATION INSURANCE" of the City's standard specifications for public works constructions unless specified otherwise in the Contract Documents.
- 14. SUBMITTAL REQUIREMENTS: PROPOSALS MUST BE RECEIVED NO LATER THAN THE DUE DATE AND TIME. Proposals may be withdrawn by the Design-Builder only up to the proposal due date and time.

IMPORTANT NOTE: Submission of the electronic proposals into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's eBidding system. It is the bidder's sole responsibility to ensure that their bids are received on time by the City's eBidding system. The City of San Diego is not responsible for bids that do not arrive by the required date and time.

- **14.1. TECHNICAL PROPOSAL REQUIREMENTS:** Technical Proposals **s**ubmitted in response to this RFP shall be in the following order and shall include:
  - Legal name of company.
  - Legal form of entity (partnership, corporation, joint venture, or other). If joint venture, identify the members of the joint venture, and provide all information required under this section for each member.
  - Year of establishment of entity.
  - If company is subsidiary of a parent company, identify the parent company.
  - Address of main office.
  - Address of San Diego satellite office if applicable.
  - Contact information for firm, including name, title, email address and telephone number.
  - Number of employees in San Diego County.
  - Applicable License(s):
  - City of San Diego Business License Number, including expiration date.
  - State Contractor's License Number including expiration date, and all classifications. Professional Engineering/Architect License Number, including expiration date.
  - Failure to provide all required information may result in the Proposal being considered non-responsive and ineligible for further consideration.
  - **14.1.1.** The Technical Proposal shall be concise, well organized, and demonstrate the Design-Builder's qualifications and experience applicable to the Project. The Technical Proposal shall be limited to 50 one-sided pages (8<sup>1/2"</sup> x 11"), exclusive of resumes, graphics, forms, pictures, photographs, dividers, front and back cover, etc., that address the T<sup>echn</sup>ical Proposal contents; and of Equal Opportunity Contracting documentation. Font Type shall be Times New Roman in a minimum 12 Point font size, with a minimum 1" margin for text pages. A cover letter may be submitted but shall not contain any information that is a required element of the Technical Proposal. Any Technical Proposal that does not comply with these formatting standards may not be considered.

- **14.1.2.** The Technical Proposals submitted in response to this RFP shall be in accordance with the requirements listed in ATTACHMENT G. The contents of the Technical Proposal shall be organized consistent with the format in Attachment G.
- **14.1.3.** Design elements which deviate from the Scope of Work, City's design guidelines, or material substitutions which differ from the Approved Material List shall be highlighted in accordance with Attachment G.
- **14.1.4.** Failure to comply with this section may render the Design-Builder's submittal non-responsive and ineligible for further consideration.

#### 14.2. PRICE PROPOSAL REQUIREMENTS

- **14.2.1.** A clearly marked, signed PDF of the Price Proposal is to be submitted in a separate PDF. This **is not** to be included with the Technical proposal. Refer to Attachment H of this RFP for any Price Proposal forms required to be used.
- **14.2.2.** The Price Proposal shall be signed by an individual or individuals authorized to execute legal documents on behalf of the Design-Builder.
- **14.2.3.** The lowest proposed price is not the determining factor for award of this contract. See Attachment G for the criteria by which the proposals will be evaluated.
- **14.2.4.** In the event of any discrepancies, written numbers will govern over numerical. Also, the sum of all lump sum line items, unit price line items, allowance line items and any other priced items will govern over the "Total Design-Build Proposal" line item.
- **14.2.5.** The required EOCP information such as Subcontractor and Supplier listings shall be submitted as part of the Price Proposal.

#### 15. SELECTION CRITERIA AND SCORING

- **15.1.** An evaluation Panel comprised of representatives from the City will be established for this Project. The Panel may also include other interested parties such as additional participating agencies, representative from the community and other appropriate agencies such as the State Water Resource Control Board.
- **15.2.** Proposals will be ranked according to the selection criteria set forth in Attachment G.
- **15.3.** The Panel will review all proposals received. Interviews or presentations will be conducted as needed in accordance with Attachment G.

- **15.4.** Based upon this technical review, the Panel will rank the Design-Builders' proposals in accordance with the selection criteria set forth in Attachment G of this RFP.
- **15.5.** Once the Technical Proposals have been ranked by the Panel, the Design-Builders' price proposals will be made available to the panel and forwarded to EOCP for review and scoring of subcontractor participation. The EOCP score will then be added to the Design-Builders' cumulative scores.

#### 16. AWARD

- **16.1.** After the Technical Proposals have been evaluated, scored and ranked; the Price proposals will be factored in according to the criteria set forth in Attachment G. A Design-Builder selection will then be made.
- **16.2.** The City will announce in writing to all the RFP participants the selected Design-Builder. The announcement will show the results of the evaluation. This notification to the Design-Builders shall constitute the public announcement of the selected Design-Builder. In the event that the selected Design-Builder is subsequently deemed non-responsive or non-responsible, a new public announcement will be provided to all proposers with the name of the newly designated selected Design-Builder.
- **16.3.** To obtain the price Proposal results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the Proposal name and number. The Proposal tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

#### 17. ADDITIONAL POLICIES, PROCEDURES, TERMS AND CONDITIONS

- **17.1.** The Program's Selection Process is based on the policies, procedures and guidelines set forth in the City Municipal Code Chapter 2, Article 2, Division 33.
- **17.2. Protests.** A Design-Builder may protest the award of the Contract to another Design-Builder in accordance with San Diego Municipal Code.
- **17.3.** Changes to Key Personnel and Substitution of Subcontractors. The Design-Builder shall not change or substitute any individual that is identified in its proposal as "key personnel" without the written consent of the City. The Design-Builder shall not change or substitute any material, supplier, or subcontractor identified in its Proposal without written consent of the City. The City's consent will not be unreasonably withheld.

- **17.4. Project Team.** The Design-Builder shall maintain all representations, team members, and proposed tasks and work elements as valid, except for the schedule which may be adjusted as mutually agreed upon by the City and the Design-Builder.
- **17.5. Submittal of "Or Equal" Items.** See 4-1.6, "Trade Names or Equals" in the SSP and as modified by the Scope of Work ATTACHMENT A.
- **17.6. Subcontract Limitations.** The Design-Builder's attention is directed to Standard Specification for Public Works Construction, Section 2-3, "SUBCONTRACTS" which requires the Design-Builder to perform not less than the specified amount under this RFP. Failure to comply shall render the Proposal non-responsive.
- **17.7. San Diego Business Tax Certificate.** All Contractors, including Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, first floor, before the Contract can be executed.
- **17.8. City Standard Provisions.** The work resulting from this RFP is subject to the following standard provisions. See The WHITEBOOK for details.
  - **17.8.1.** The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.
  - **17.8.2.** The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.
  - **17.8.3.** The City of San Diego Municipal Code §22.3004 for Pledge of Compliance.
  - **17.8.4.** The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.
  - **17.8.5.** Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.
  - **17.8.6.** The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).
  - **17.8.7.** The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.
- **17.9. Prevailing Wage Rates Apply:** Refer to Attachment D.
- **17.10. Reference Standards:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK") <u>http://www.greenbookspecs.org/</u>	2015	PWPI070116-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* https://www.sandiego.gov/publicworks/edocref/greenbook	2015	PWPI070116-02
City of San Diego Standard Drawings* https://www.sandiego.gov/publicworks/edocref/standarddraw	2016	PWPI070116-03
Citywide Computer Aided Design and Drafting (CADD) Standards <u>https://www.sandiego.gov/publicworks/edocref/drawings</u>	2016	PWPI092816-04
California Department of Transportation (CALTRANS) Standard Specifications – http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-05
CALTRANS Standard Plans http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-06
California Manual on Uniform Traffic Control Devices Revision 1 (CA MUTCD Rev 1) - http://www.dot.ca.gov/trafficops/camutcd/	2014	PWPIO92816-07
NOTE: *Available online under Engineering Docur http://www.sandiego.gov/publicworks/edocref/i		

# ATTACHMENTS

## ATTACHMENT A

# PROJECT DESCRIPTION, SCOPE OF WORK, TECHNICAL SPECIFICATIONS, AND BRIDGING DOCUMENTS

# ATTACHMENT A

# PROJECT DESCRIPTION, SCOPE OF WORK, TECHNICAL SPECIFICATIONS, AND BRIDGING DOCUMENTS

#### 1. **PROJECT DESCRIPTION:**

**1.1.** This project is to split the Valve Master Station 01 VMS01 Loop into two (2) separate, stand alone loops, each one controlled by master station fitted with a run and hot standby unit located at city of San Diego's South Bay Water Reclamation Plant. The Contractor/Design Builder shall work with the plant personnel to determine how the VMS01 Loop is going to split. The new actuators and master stations shall be provided by the same Manufacturer to ensure compatibility of the overall system.

#### 2. <u>SCOPE OF WORK:</u>

2.1. This Scope of Work defines the extent of the Contractor/Design-Builder services required for the Work and Deliverables to split the City of San Diego's South Bay Water Reclamation Plant VMS01 Loop into two (2) separate, stand alone loops, (1A and 1B) each one controlled by a master station fitted with a run and hot standby unit. The Contractor/Design-Builder shall work with Plant personnel to determine how the VMS01 loop is split. The new actuators and master stations shall be provided by the same Manufacturer to ensure compatibility of the overall system. This Manufacturer shall also be responsible for the satisfactory operation of the two (2) new loops and their compatibility with the City's Emerson Ovation Distributed Control System (DCS).

The work consists of replacing approximately fifty-eight (58) existing EIM motor operators and three (3) associated 2- wire master stations and control system with suitably sized Rotork (or equal) motor operators, two (2) 2 --wire control master stations, (Rotork, or equal) and control system(s), (Rotork, or equal). The Contractor/Design-Builder shall be responsible for the correct sizing of all equipment and interface mounting hardware and any new conduit runs, de-wiring and/or re-wiring of power supply and control wiring to the actuators, to accommodate the siting of the new actuators onto the valves. Any new materials required, such as flexible conduit, wiring, connectors, etc., shall be provided by the Manufacturer/Vendor.

The work also consists of replacing the EIM Brand EQ Basin 1 & 2 Spray valves with sixteen (16) Rotork spray valves, or equal, on Loop 1B and replacing Primary Sludge Pump suction header valves with four (4) Rotork Brand suction header valves, or equal product, on Loop 1B.

This project includes relocating a maximum of ten (10) valve actuator controllers and appurtenant equipment for valve actuator controls that are currently located below, or above, grade that need to be raised above grade, or lowered to grade. The work to raise/lower the valve actuator controls include; fabricating and installing bracing and floor stands, modifications to the floor plates, installing new conduit runs, de -wiring and/or re-wiring of power supplies and providing control wiring to the actuators. Any new material required, such as flexible conduit, wiring, connectors, etc., shall be provided by the Manufacturer /Vendor.

Push Button Stations (PBS) are to be fitted at grade for the Operators use to ensure safe operation of actuators that are sited in inaccessible places. These PBS shall be described in Attachment A, Section 4 "Products", Subsection 4.2 "Motorized Operator", Item D "Controls", Paragraph 4.

The Contractor/Design-Builder shall provide the services of a Control Systems Specialist to work in close coordination with Plant personnel and the City's DCS Group prior to, and during the change-over of the new system to ensure the integration goes smoothly. The description of these services is provided in Attachment A, Section 5 "2-Wire Control System".

The City will provide the Contractor/Design-Builder with "As-Built" Loop Diagrams that show the existing conduit and wiring layout to assist with the design of the two (2) new Loops. It will be the responsibility of the Contractor/Design-Builder to verify the existing As-Built loop layout and show the City of San Diego Engineer how the new loop is to be provided, as a new twisted shielded pair will need to be installed to accommodate the new master station. The Contractor/Design-Builder will also be responsible for making any modifications to the existing loop and for installing any new conduit and wiring runs.

Upon completion of the successful installation of the two (2) new loops, the Contractor/Design-Builder shall provide documentation of the settings for each of the actuators using the City-Provided Tag number as a reference. This documentation shall be supplied to the City, on a CD, for future reference.

The Contractor/Design-Builder shall provide the City with "As-Built" Loop diagrams showing the MOV Tag numbers and their position on the loop for each of the two (2) loops installed.

Torque graphs for both the open and close directions of all the actuators installed shall be supplied to the City to verify that each actuator has been correctly sized. This shall be presented to the City in either paper or electronic format with the As-Built Loop Diagrams. **2.2.** KICK-OFF MEETING: Two months ahead of starting work, the Contractor/Design-Builder will meet with the City at the South Bay Water Reclamation Plant (SBWRP) to provide the City of San Diego with an overall Project Plan to show how they propose to carry out the above scope of work to ensure the minimum of interruptions to the South Bay Plant's normal operation. Additionally, an estimate of how long it will take to complete each individual loop and the installation services they will be sub-contracting from "other" sources to ensure they are available at the time of the retrofit. Additionally, the Contractor/Design-Builder will compile for each of the two (2) individual loops, a list of City-Provided Tag numbers, the new actuators model number and their associated torque rating and operating time, for approval by the City of San Diego, to ensure it is a satisfactory replacement.

The Contractor/Design-Builder will also provide the City with the list of personnel who will be involved with the work on site and their phone numbers. The phone numbers will be used for contact in case of an emergency only.

The time and date to start the work is to be mutually agreed upon by both parties.

Section 3.3 of Attachment A, "Submittals", lists the documentation required by the City of San Diego for the supplied equipment, for their records. This Documentation shall be for the "as -built" equipment and system.

**2.3.** SAFETY: Safety for the total operation is in the exclusive control of the Contractor/Design-Builder who will have total authority in preparing for and conducting the required work. The Contractor/Design-Builder shall provide a Job Safety Analysis (JSA) for review by the City.

The JSA shall outline the sequence of the work, equipment that will be used, identify hazards that may exist or may be created and what procedures and/or safety equipment will be used to eliminate or reduce these hazards. A job specific, Scope of Work, JSA, shall be prepared and submitted to the City two weeks in advance of the start of work. The name and qualifying documents of the "Competent Person" assigned to this project will be included in the JSA.

Any and all employees of the Contractor/Design-Builder or Sub-contractor(s) who will be working on site at the SBWRP shall attend a mandatory "Site Specific Safety Training Class" provided by the City. This one/half (1/2) hour (maximum) class will be held at the South Bay Water Reclamation Plant (SBWRP) Operations Building Conference Room, on a date and at a time convenient for both parties.

**2.4.** AFTER HOURS ACCESS TO JOB SITE: Before or after-hour access to the SBWRP is not available. Information for all Contractor/Design-Builder and Subcontractor personnel as well as vehicle information will be required two (2) weeks in advance of the start of work to allow for vehicle access passes to be prepared.

#### 3. <u>GENERAL</u>

#### 3.1. SUMMARY

**A.** Section Includes: Motorized valve operators, and the 2-Wire Control System requirements.

#### 3.2. **REFERENCES**

- **A.** American Water Works Association (AWWA).
- **B.** National Electrical Manufacturer's Association (NEMA).
- **C.** Project Scope Document.

#### 3.3. SUBMITTALS

- **A.** Manufacturer's product data including catalogue cuts: The Design-Builder shall submit all product's data.
- **B.** Manufacturer's installation instructions: The Design-Builder shall submit all installation instructions that come with the equipments from manufacturer.
- **C.** Shop drawings showing details and dimensions: The Design-Builder shall submit all required drawings.
- **D.** Manufacturer's certification: The Design-Builder shall submit all relevant certifications that products comply with the indicated requirements.
- **E.** Schedule of valves indicating valve identification and location.
- **F.** Manufacturer's certification that epoxy coatings have been factory tested and comply with the indicated requirements.
- **G.** Equipment specifications and data covering materials used, parts, devices, and other accessories forming part of the equipment.
- **H.** Complete assembly, layout, and installation drawings with clearly marked dimensions. This information shall be in sufficient detail to serve as a guide for assembly and disassembly and for ordering parts.
- I. Listing of all lubricants required for the equipment, if required.
- **J.** Safety Plan and Job Safety Analysis: The design-Builder should provide complete and detailed safety plan.
- **K.** Project Schedule and Work Plan : The Design-Builder identification of the key milestones from Notice to Proceed through Completion Date. The schedule shall identify major construction milestones, their duration and completion

dates based on Construction duration provided by the City considering allowances for City review periods during the design development documents, Construction documents and final plans and specifications. The schedule shall be in color and in 11"x 17" foldout format.

- **L.** As specified in this specification.
- **M.** Furnish motorized operators submittals.
- **N.** Motor and gear type and design information.
- **O.** Design Data:
  - **1.** Submit operating calculations for max break torques and minimum safety factor.
  - 2. Submit data and calculations to substantiate operating time.
  - **3.** Submit proposed operator configuration and dimensions for (each) actuator.
- **P.** Wiring schematics.
- **Q.** Operation and Maintenance Manuals.
- **R.** Warranty. Two (2) year, parts and service.
- **S.** Manufacturer qualifications.

#### 4. <u>PRODUCTS</u>

#### 4.1 MANUFACTURERS

- **A.** Manufacturers: One of the following, or equal prequalified by the Engineer for the City of San Diego:
  - **1.** Rotork Controls, Inc., IQ & IQT Series.

#### 4.2 MOTORIZED OPERATOR

- **A.** Design:
  - 1. Sized to move valves from full open to closed position at minimum 12 inches per minute, ±10 percent, under maximum load or as required by the existing system.
  - **2.** Meet applicable AWWA requirements.

- **3.** Actuator: Provide with built-in device to allow motor to reach full speed before engaging valve load in electrical operating mode, when motor is energized. For actuators in modulating service, provide direct drive of the center column when electrical motor is energized.
- 4. Hand wheels for Manual Operation: Metallic with arrows to indicate "open" rotation; incapable of rotation during motor operation; unaffected by fused motor, and being mechanically independent of the motor and its gearing; maximum 80 pound pull on rim for manual operation. When in the manual operating mode, actuator to remain in this mode until motor is energized, at which time the actuator shall automatically return to electric operation.
- **5.** Declutch Lever: Pad lockable in 2 positions, capable of mechanically disengaging motor and related gearing positively for manual operation.
- **6.** The complete motorized operator enclosure shall be:
  - **a.** NEMA 4X and NEMA 6 submersible to IP68 (23 feet for 72 hours).
  - **b.** Equipped with a separately sealed (double "O" ring) terminal area, such that with the terminal cover removed the actuator's internal components are protected from environmental moisture and dust during storage and "no-power" conditions, start-up and working life. Prior to commissioning the actuators they shall not require temporary power to be connected to them.
  - **c.** All external fasteners shall be stainless steel.
- **B.** Actuator Gearing:
  - **1.** Meet applicable AWWA requirements.
  - **2.** For multi-turn actuators, single reduction type with hardened alloy steel worm gear, and aluminum bronze worm gear set; self-locking to maintain gate position.
  - **3.** Power Gearing: Accurately cut to assure minimum backlash; anti-friction bearing with caged balls or rollers throughout.
  - **4.** Stem Nuts for multi-turn actuators: High tensile aluminum bronze; accurately machined and mounted in heavy ball or roller bearings.
  - 5. Actuator Gear Housing: Aluminum housing with a separate cast iron thrust base. For multi-turn actuator installations, the thrust base with stem nut to be a separate item so that it can be installed prior to mounting the actuator and can be left installed when the actuator is removed.

- **6.** Lubrication: Rotating power train components immersed in oil with provisions for inspection and re-lubrication without disassembly.
  - **a.** Lubricants: Suitable for ambient conditions of -20 degrees F to +150 degrees F.
  - **b.** Provide seals on shafting.
  - **c.** The actuators internals shall be sealed such that the actuator can be mounted in any position in the field with no leakage of oil, or void the warranty.
- 7. Where required, secondary gearboxes shall be externally attached to the actuator to accommodate variations in output speeds, torques or operating times and for use with quarter-turn valves. These multi-turn and quarter-turn gearboxes are to use accurately cut gears suitable for motor drive.
- **C.** Motors:
  - **1.** Specifically designed for valve and gate actuator service with high starting torque, low inertia, totally enclosed in a non-ventilated enclosure.
  - 2. Motor Insulation: NEMA Class F for 15 minute duty rating. Where the total cycle time (two complete strokes) is longer than 15 minutes then a NEMA Class H motor for 30 minute duty rating is to be used, with a maximum continuous temperature rating of 125 degrees C rise over ambient.
  - **3.** Motor Windings: Epoxy treated.
  - **4.** Size motor to provide the maximum torque required for valve opening/closing operation, with a safety factor of 1.5. Torque shall be based on the valve manufacture's calculated torque required for opening/closing at full differential and maximum valve dynamic torque.
  - 5. Voltage Tolerance: Capable of operating at within 10 percent of specified voltage.
  - 6. Motor Starters:
    - **a.** For Open-Close Service: Self-contained electromechanical reversing starter suitable for 60 starts/hr.
    - **b.** For Modulating Service: Self-contained solid-state reversing starter suitable for 1,200 starts per hour. The hammer action will be replaced by a direct drive.

- **7.** Accessories: Internal thermal contacts embedded in the motor windings for detecting motor overload and a ground lug.
- **8.** Power Supply: As scheduled or as indicated on the Drawings.
- **9.** Enclosures for Motors, Switches, and Other Electrical Compartments shall be:
  - **a.** In Class 1, Division 1, Groups C & D classified areas, and NEMA 6 & 7, and submersible to IP68, where required
  - **b.** In other locations: NEMA 4X and NEMA 6 submersible to IP68.
  - **c.** Terminal compartment shall have three threaded cable entries as a minimum. Provide additional threaded entries if required or indicated on the Drawings.
- **D.** Controls:
  - 1. Coordinate requirements with existing City of San Diego "as built" P&IDs, Electrical schematics, and Loop drawings. Process Control Strategy. Where indicated the actuator is to be fitted with a 2-wire communication card in order to be connected to the proposed new master station, as described in Section 5, "2-wire Control System" of this specification. This communication card is to be an integral part of the actuator's internal control system and not external to the actuator's housing.
  - 2. Voltage Transformer:
    - **a.** As required to step down power supply to control voltage.
    - **b.** Size voltage transformer to provide 24VDC (5 Watts power) or alternatively 120 VAC (15 VA power) control power, for customer signals, indication and interlock relays as needed.
  - **3.** Control Station:
    - **a.** Integral with operator. Enclosures shall be:
      - (1) In Class 1, Division 1, Groups C & D classified areas, NEMA 4X, 6 & 7, submersible to IP68.
      - (2) In other locations: NEMA 4X and NEMA 6 submersible to IP68.
    - **b.** Provided with Following Devices:
      - (1) HAND-STOP-AUTO selector switch, lockable in the STOP position.

- (2) OPEN and CLOSE selector, to provide "push to run" or "maintained" operation.
- (3) OPEN and CLOSE LED indicating lights, with redundancy.
- **4.** Where a Remote Hand Station (RHS) is required at grade, for safe operation of an inaccessible actuator, it shall include a Local/Off/Remote selector and Open and Close push buttons and indicating lights. The enclosure shall be NEMA 4X for non hazardous areas, in a 304SS hinged enclosure. For hazardous areas it shall be rated for NEMA 7, Class 1 Div 2 Groups C & D, unless otherwise indicated.
- **5.** Torque and Turns Limitations:
  - Position setting range: 2.5 to 8,000 turns, with resolution to 7.5 degrees of actuator output. For direct drive modulating duty, resolution shall be 0.1 degree of actuator output. Position shall be sensed by an Absolute Encoder shall be a simple design with only 5 moving parts and capable of reliably sensing position even in the case of a single fault. Technologies utilizing potentiometers or LED's shall not be acceptable
  - **b.** Torque setting: 40 percent to 100 percent rated torque, adjustable in 1% increments.
  - **c.** Torque sensing shall be affected purely electrically or electronically. Extrapolating torque from mechanically measured motor speed, current, flux is not acceptable due to response time.
  - **d.** Actuator control shall provide the option of bypassing the torque switch setting when motor first engages load in order to inhibit torque off during gate breakaway or during starting in mid travel against high inertia loads.
- **6.** Electric Circuit Diagrams:
  - **a.** Identical diagrams regardless of whether valves and gates are to open or close on torque or position limit.
- **7.** Valve Position/Actuator Status Indication:
  - **a.** The actuator shall provide a local display of the position of the valve, even when the power supply is not present.
  - **b.** In the event of a mains power supply loss or failure, the position contacts shall continue to be operable in order to provide remote position feedback and maintain interlock capabilities.
  - **c.** The position of the actuator and valve shall be updated contemporaneously, even when the power supply is not present.

- **d.** Contacts shall be provided which can be selected to indicate any position of the valve or gate, with each contact selectable as normally open or normally closed. The contacts shall be rated at 5 A, 250 VAC, 30 VDC. A minimum of four (4) contacts are to be included, with the provision for an additional 4.
- **e.** As an alternative to providing valve position, any of the above contacts shall be selectable to signal one of the following, but not limited to:
  - (1) Valve Opening or Closing.
  - (2) Motor Tripped on Torque in Mid Travel.
  - (3) Motor Stalled.
  - (4) Actuator Being Operated by Hand wheel.
  - (5) Actuator in Remote.
- **f.** For actuators in modulating service, that are not part of the 2-wire control system, shall provide a controller that will accept a 4-20 mA analog signal. Additionally, a 4-20 mA position transmitter shall be included to provide a valve position feedback. The controller shall compare the input signal with the feedback signal to produce an error signal. The controller shall cause the motor to move the valve or gate in a direction so as to reduce the magnitude of the error signal. The controller positioning accuracy shall be plus or minus 1.0 percent of travel or better. It shall be possible to adjust Dead Band (0 to 9.9 percent of travel) and a Motion Inhibit Timer (2 to 99 seconds), and select action upon loss of signal, open/close/stay put.
- **8.** Local Position Indication LCD:
  - **a.** Alpha-numeric LCD display: Display from fully open to fully closed positions in 0.1 percent increments; display current actuator status; and guide operators through set-up and adjustments.

Non-intrusive calibration-adjustment and interrogation of the actuator shall be accomplished without the removal of any of the actuator's covers. Non-intrusive calibration, adjustment and interrogation will be by means of a setting tool to provide speedy interrogation capabilities as well as security. The setting tool shall have an intrinsically safe watertight casing. In addition it shall be possible to use a PDA or laptop for actuator set-up and interrogation. Each actuator shall include a Data Logger to provide diagnostic information for maintenance and preventative maintenance purposes, including, but not limited to: torque curves

for both open and close strokes (both last and average and maximum torque vs. position) and motor starts for both open and close strokes vs. position, plus event recorder logging that is date stamped. This information is to be accessed by means of: a) A setting tool, that utilizes either IrDA and/or Bluetooth programming; b) PDA or; c) laptop, and in a format that can be saved electronically or on paper and then viewed at a later date. The software to achieve this and any updates to the software are to be supplied at no extra cost to the end user.

- **b.** Green, red, and yellow LED lights indicating Open, Closed, and Intermediate gate positions included on the actuator's interface screen:
  - (1) Position indication to be maintained even when the power to the actuator is isolated.
  - (2) Local Display: Large enough to be readable from a distance of six feet when the actuator is powered up. It shall be possible to rotate the display in 90 degree increments to compensate for the actuators installed position.
- **9.** Automatic phase correction circuitry to ensure correct rotation of electric motor.
- **10.** Single phasing protection to prevent burn out of the motor.
- **11.** Torque switch hammer protection.
- **12.** Jammed valve protection.
- **13.** Instantaneous reversal protection of the motor such that direction can be changed without utilizing a "stop" function.
- **14.** Opto-isolation of input signals.

Each actuator shall be supplied with a start-up kit, comprised of: installation instructions; electrical wiring diagram; and sufficient spare terminal screws and cover seals to make good any site losses during the commissioning period.

Each actuator shall be performance tested and individual test certificates supplied free of charge. The test equipment shall simulate a typical valve/gate load and the following parameters recorded:

- (a) Current at maximum torque setting
- (b) Torque at max torque setting
- (c) Flash test voltage

- (d) Actuator output speed or operating time
- **15.** Operation:
  - (a) Operation: As required by the City of San Diego.

#### 5. <u>2-WIRE CONTROL SYSTEM</u>

#### 5.1 NETWORK COMMUNICATION

- **A.** Provide the Field Control Unit (FCU) communication card in the actuator in order to operate it over a twisted shielded pair of wires, from the master station. Where manually operated valves are fitted with limit switches and require to be fed onto the 2-wire loop, the signals shall be fed via a General Purpose Field Unit (GPFCU), either in its own general purpose enclosure mounted adjacent to the valve or mounted in a rack housed in a suitable enclosure.
- Β. Provide the required Master Station with a Hot Standby that can provide a seamless change over in the event of a fault on the primary unit. The 2-wire loop shall be connected at both ends to the master station, capable of being up to 4000 feet (at 9600 baud) long and capable of handling up to 240 nodes. The systems loop shall not require Repeaters, or Amplifiers, to function correctly. The loop shall be on RS-485 standard, or equal, that is "noise" immune and shall be single fault tolerant that allows the master station to operate in a loop back mode when a fault occurs due to open or short circuit or ground fault. The master station shall continuously poll the loop when not issuing commands. The master station shall be pre-configured for its monitoring and control functions and shall have a built-in HMI with LCD and keypad to allow for set up and interrogation of the 2-wire system, independent of the connected PLC/DCS. The master station shall be easy to configure via its own built in web pages viewed on a laptop, such that Tag numbers can be entered prior to installation and to interrogate and control the system without the need of a host DCS or PLC. The master station shall be capable of being connected to the DCS/PLC via serial links of RS232 or RS485, with additional connectors for Ethernet (Modbus TCP for data exchange and TCP/IP for the web server). The master station shall have the capacity to handle the number of known Tag numbers plus 25% spare capacity for future expansion. The master station shall have a built in power supply for 120 VAC for the "run" unit and a separate 120 VAC supply for the "hot standby" unit.
- **C.** The field control units (FCU) shall provide to the master station, as a minimum the following : 1) <u>Control Outputs</u>, Open/Stop/Close/ESD, set position 0-100% analog control 2) <u>Position and Torque</u> Feedback, actuators current torque value and valve position analog status (0 to 100%) 3) <u>Actuator Status Feedback</u>, Valve position, actuator alarm status, remote control availability, valve opening and closing digital status, actuator torque tripped mid stroke and end of stroke, motor thermostat status, valve manual movement, contactor failure to

energize, excessive travel time, motor still energized at end of travel, communication failure, field control unit (FCU) failure 4) <u>Valve Signature Data</u>, torque profiling in open and close direction.

- **1.** It shall be possible to add new nodes to an existing loop, up to the capacity of the master station, by simply opening the loop and adding extra FCU's.
- 2. It shall be possible to mount the new master station in the enclosure the existing master station is currently housed.

#### 6. SYSTEMS INTEGRATION CONTROL

- **6.2.** The manufacturer/supplier shall provide the services of a control systems specialist to work in concert with the City's DCS group to identify and detail all programming parameters or impact to DCS program.
- **6.3.** Provide Modbus memory map of all MOV and Master Station I/O points (must include the items in the list below at minimum).

Discrete Inputs	Discrete Outputs	Analog Inputs	Analog Outputs
Valve Opened	Valve Open Command	Valve Position	Valve Demand /Set point
Valve Closed	Valve Close Command	Actuator Torque	
Actuator in Remote			
Actuator Comm. Fail			
General Failure Alarm			

#### **MOV I/O Points for DCS**

#### Hot Stand-by Master Station I/O Points for DCS

Discrete Inputs	Discrete Outputs
Master Station A OK	Change Master to Stand-by or main
Master Station B OK	Alarm Acknowledge

#### 7. EXECUTION & SOURCE QUALITY CONTROL

- **7.1.** Factory test each motorized operator assembly in accordance with AWWA C540, except as modified herein.
- **7.2.** Demonstrate that the stroke time is within the specified range.
- **7.3.** Verify limit switch and torque switch functions in both directions.
- **7.4.** Provide individual factory test certificates for each motorized actuator at no additional cost. Record the following parameters as a minimum.
  - A. No load current.

- **B.** Current at maximum torque setting.
- **C.** Stall current.
- **D.** Torque at maximum torque setting.
- **E.** Stall torque.
- **F.** Test voltage and frequency.
- **G.** Flash test voltage.
- **H.** Actuator output speed.
- **7.5.** Record details of specification, such as gear ratios for both manual and automatic drive, closing direction, wiring diagram, and serial number on the test certificates.
- **7.6.** Require the motorized actuator manufacturer to submit certified statements that proof-of-design tests were carried out per the "Valve Actuator" section of AWWA C540 and that all requirements were successfully met.

#### 8. INSTALLATION

**8.1.** Install operators in accordance with manufacturer's instructions.

#### 9. MANUFACTURER'S FIELD SERVICES

- **9.1.** Coordinate field service work with the City of San Diego Project Manager prior to initiating such work.
- **9.2.** Manufacturer's representative to perform Installation, Testing and Facility Start-up, and training.
- **9.3.** Check and verify that installation of the motorized operators is in accordance with the drawings and manufacturer's installation instructions.

#### South Bay VMS01 Network 1A Loop Map

Position	Tag No.	Notes
	New Cable Run F	rom Masterstation1A Port A (Out) To 16JBC100A
		Run From Conduit (16/322) To 16JBC100A
1	60MV302	
2	60MV301	
3	60MV1021	
4	60MV1011	
5	60MV2011	
6	60MV2021	
7	02MV101	Aver insulta from 02 UV(102 (Ones & Olege Status)
8	02MV103	Aux inputs from 02-HV102 (Open & Close Status)
	05VLJB01 (TB1)	Valve Junction Box (TB1- 1pos, 2neg ,3shld) ble Run From 05VLJB01 to 60JBC100A
tive rout		through conduit (60/329).
		minate in 60JBC100A
9 9	10FCV0800	Connection from 60JBC100A
<u>ə</u>	10VLJB02 (TB1)	Valve Junction Box (TB1- 1pos, 2neg ,3shld)
10	15FCV0310	waive edited on box (1 b1- 1005, zneg ,35mu)
10	15FCV0320	
12	15FCV0330	
13	15FCV0340	••••••••••••••••••••••••••••••••••••••
10	FU#8	GPFCU (15HV-0610, 15HV-0620)
15	FU#8A	GPFCU (15HV-0630, 15HV-0640)
16	15G701	
17	FU#9	GPFCU (15HV-0650, 15HV-0660)
18	FU#9A	GPFCU (15HV-0670, 15HV-0680)
19	15FCV0380	
20	15FCV0370	
21	15FCV0360	
22	15FCV0350	
	15VLJB02 (TB1)	Valve Junction Box (TB1- 1pos, 2neg ,3shid)
	FU#8	GPFCU (1pos, 2neg ,3shld) Note: Junction
23	FU#29	GPFCU (15HV-0703, 15HV-0704)
24	16MOV2011	
25	16MOV2013	
26	16MOV2021	
27	16MOV2023	
		le Run From 16MOV2023 To 16JBC100A
	New Cable Run	From 16JBC100A To Masterstation 1A Port B(In)

#### South Bay VMS01 Network 1B Loop Map

	op 1B	
oop Position	Tag No.	Notes
	10JB101S (TB1)	Junction Box (TB1- 77pos,78neg,79shid) From Masterstation Port A (out)
1	10G123	
2	10G120	
3	10G100	
4	10G110	Aux inputs from 10-HV 0211 (Open & Close Status)
5	10G113	Aux inputs from 10-HV 0212 (Open & Close Status)
	10JB101S (TB1)	Junction Box (TB1- 81+,82-,83shid)
6	FU#28	GPFCU (SV-0322, SV-1227)
7	10MOV1222	
8	10MOV1221	
9	10MOV1223	
10	10MOV1211	
	10MOV1212	
12	10MOV1213	
13	FU#27	GPFCU (SV-0321, SV-1217)
14	FU#26	GPFCU (SV-1127, SV-0312, SV-1117, SV-0311)
4 m	10VLJB01 (TB1)	Valve Junction Box (TB1- 5H, 6N Sv-1117)( 4N, 3H SV-0311)
15	10MOV1122	
16	10MOV1123	
17	10MOV1121	
18	10MOV1112	
19	10MOV1113	
20	10MOV1111	Value Inesting Day (TDA Asso Days Askid)
	10VLJB01 (TB2)	Valve Junction Box (TB2- 1pos, 2neg ,3shid)
	FU#25 (TB1)	GPFCU (1pos, 2neg ,3shld) Note: Verify
21	10MOV7031	
22	10MOV7071	
23	10MOV7063	Added to Scope and Drawing
24	10MOV7061	
25	10MOV7053	Added to Scope and Drawing
26	10MOV7052	Replace 10MOV7032 In Original Scope and add to Drawing
27	10MOV7051	
28	10MOV7043	Added to Scope and Drawing
29	10MOV7042	
30	10MOV7041	
31 31 32	10MOV7033 FU#25	Added to Scope and Drawing GPFCU (10 HV-9021,9011,9013)
32	FU#5 (TB1)	GPFCU (10 HV-3021,3011,5013) GPFCU (1pos, 2neg ,3shld) Note: Verify
		GFFC0 (Tpos, zileg, 3smd) Note: Verily
33	10MOV6061	
34	10MOV6062	CDECU ( 10 HV 0001 0022)
34 35	10MOV6062 FU#5A	GPFCU ( 10 HV-0901,9023) GPFCU ( 10 HV-0902, 0002)
34 35 36	10MOV6062 FU#5A FU#5	GPFCU ( 10 HV-0902, 0903)
34 35 36 37	10MOV6062 FU#5A FU#5 FU#30	GPFCU ( 10 HV-0902, 0903) GPFCU (SV-0550, SV-0502, SV-0501)
34 35 36 37 38	10MOV6062 FU#5A FU#5 FU#30 FU#4	GPFCU ( 10 HV-0902, 0903) GPFCU (SV-0550, SV-0502, SV-0501) GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )
34 35 36 37	10MOV6062 FU#5A FU#5 FU#30	GPFCU ( 10 HV-0902, 0903) GPFCU (SV-0550, SV-0502, SV-0501) GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 ) GPFCU (SV-0801, SV-0802, SV-0803)
34 35 36 37 38	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6	GPFCU ( 10 HV-0902, 0903) GPFCU (SV-0550, SV-0502, SV-0501) GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 ) GPFCU (SV-0801, SV-0802, SV-0803) New Cable Run From FU#6 to 05VLJB01
34 35 36 37 38	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1)	GPFCU ( 10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)
34 35 36 37 38 39	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS)	GPFCU ( 10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TBS- 1pos, 2neg ,3shld)
34 35 36 37 38 39 40	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224	GPFCU ( 10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TBS- 1pos, 2neg ,3shld)         Added to Scope and Drawing
34 35 36 37 38 39 40 41	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV222	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TBS- 1pos, 2neg ,3shld)         Added to Scope and Drawing         Added to Scope and Drawing
34 35 36 37 38 39 40 41 42	10MOV6062 FU#5A FU#5 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV222 12MOV228	GPFCU ( 10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TBS- 1pos, 2neg ,3shld)         Added to Scope and Drawing         Added to Scope and Drawing         Added to Scope and Drawing
34 35 36 37 38 39 40 41 42 43	10MOV6062 FU#5A FU#5 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV222 12MOV228 12MOV226	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing
34 35 36 37 38 39 40 41 42 43 44	10MOV6062 FU#5A FU#5 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV228 12MOV228 12MOV226 12MOV227	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing
34         35         36         37         38         39         40         41         42         43         44         45	10MOV6062 FU#5A FU#5 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV228 12MOV228 12MOV226 12MOV227 12MOV225	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing
34 35 36 37 38 39 40 41 42 43 44 45 46	10MOV6062 FU#5A FU#5 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV228 12MOV226 12MOV226 12MOV225 12MOV223	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing
34       35       36       37       38       39       40       41       42       43       44       45       46       47	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV228 12MOV226 12MOV226 12MOV225 12MOV225 12MOV223 12MOV221	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing
34         35         36         37         38         39         40         41         42         43         44         45         46         47         48	10MOV6062 FU#5A FU#5 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV228 12MOV226 12MOV226 12MOV225 12MOV225 12MOV223 12MOV221 FU#7	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530)         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing         Added to Scope and Drawing <t< td=""></t<>
34         35         36         37         38         39         40         41         42         43         44         45         46         47         48         49	10MOV6062 FU#5A FU#5 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV228 12MOV226 12MOV226 12MOV225 12MOV225 12MOV223 12MOV221 FU#7 FU#7A	GPFCU (10 HV-0902, 0903)GPFCU (SV-0550, SV-0502, SV-0501)GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )GPFCU (SV-0801, SV-0802, SV-0803)New Cable Run From FU#6 to 05VLJB01Valve Junction Box (TB1- 1pos, 2neg ,3shld)Junction Box (TB5- 1pos, 2neg ,3shld)Added to Scope and DrawingAdded to Scope and DrawingGPFCU (12HV-3021, 12HV-3022, 12HV-3023)GPFCU (12HV-3011, 12HV-3012, 12HV-3013)
34         35         36         37         38         39         40         41         42         43         44         45         46         47         48         49         50	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV224 12MOV225 12MOV225 12MOV225 12MOV223 12MOV221 FU#7 FU#7A 12MOV211	GPFCU (10 HV-0902, 0903)GPFCU (SV-0550, SV-0502, SV-0501)GPFCU (SV-0540, SV-0520, SV-0510, SV-0530 )GPFCU (SV-0801, SV-0802, SV-0803)New Cable Run From FU#6 to 05VLJB01Valve Junction Box (TB1- 1pos, 2neg ,3shld)Junction Box (TB5- 1pos, 2neg ,3shld)Added to Scope and DrawingAdded to Scope and DrawingGPFCU (12HV-3021, 12HV-3022, 12HV-3023)GPFCU (12HV-3011, 12HV-3012, 12HV-3013)Added to Scope and Drawing
34         35         36         37         38         39         40         41         42         43         44         45         46         47         48         49         50         51	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV224 12MOV225 12MOV225 12MOV225 12MOV223 12MOV221 FU#7 FU#7A 12MOV211 12MOV213	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530)         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing         GPFCU (12HV-3021, 12HV-3022, 12HV-3023)         GPFCU (12HV-3011, 12HV-3012, 12HV-3013)         Added to Scope and Drawing
34         35         36         37         38         39         40         41         42         43         44         45         46         47         48         49         50         51         52	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV224 12MOV225 12MOV225 12MOV225 12MOV223 12MOV221 FU#7 FU#7A 12MOV211 12MOV213 12MOV215	GPFCU (10 HV-0902, 0903)GPFCU (\$V-0550, \$V-0502, \$V-0501)GPFCU (\$V-0540, \$V-0520, \$V-0510, \$V-0530 )GPFCU (\$V-0801, \$V-0802, \$V-0803)New Cable Run From FU#6 to 05VLJB01Valve Junction Box (TB1- 1pos, 2neg ,3shld)Junction Box (TB5- 1pos, 2neg ,3shld)Added to Scope and DrawingAdded to Scope and Drawing </td
34         35         36         37         38         39         40         41         42         43         44         45         46         47         48         49         50         51	10MOV6062 FU#5A FU#5 FU#30 FU#4 FU#6 05VLJB01 (TB1) 12JB100C (TBS) 12MOV224 12MOV224 12MOV225 12MOV225 12MOV225 12MOV223 12MOV221 FU#7 FU#7A 12MOV211 12MOV213	GPFCU (10 HV-0902, 0903)         GPFCU (SV-0550, SV-0502, SV-0501)         GPFCU (SV-0540, SV-0520, SV-0510, SV-0530)         GPFCU (SV-0801, SV-0802, SV-0803)         New Cable Run From FU#6 to 05VLJB01         Valve Junction Box (TB1- 1pos, 2neg ,3shld)         Junction Box (TB5- 1pos, 2neg ,3shld)         Added to Scope and Drawing         GPFCU (12HV-3021, 12HV-3022, 12HV-3023)         GPFCU (12HV-3011, 12HV-3012, 12HV-3013)         Added to Scope and Drawing

#### South Bay VMS01 Network 1B Loop Map

Loop Position	Tag No.	Notes
56	12MOV212	Added to Scope and Drawing
57	12MOV214	Added to Scope and Drawing
	12JB100C	Junction Box (4pos, 5neg ,ôshld)
58	12MOV112	
59	12MOV111	
60	12MOV121	
61	12MOV122	
	12JB100C (TBS)	Junction Box (TBS- 7pos, 8neg ,9shld)
	05VLJB01 (TB1)	Valve Junction Box (TB1- 5pos, 6neg ,7shld)
62	05G122	
63	05G121	
64	05G111	
65	05G112	
66	05MOV508	
67	05MOV509	
68	FU#2	GPFCU (05HV-0500, 05HV-0511, 05HV-0512)
69	FU#2A	GPFCU (05HV-0521, 05HV-0522) To Masterstation 1B Port B(in)

# **ATTACHMENT B**

# **INTENTIONALLY LEFT BLANK**

Attachment B – Intentionally Left Blank South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

# ATTACHMENT C

# INTENTIONALLY LEFT BLANK

Attachment C – Intentionally Left Blank South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

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# ATTACHMENT D

# **PREVAILING WAGES**

## **PREVAILING WAGES**

- 1. **PREVAILING WAGE RATES:** Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.
  - **1.1. Compliance with Prevailing Wage Requirements.** Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.
    - **1.1.1.** Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <a href="http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm">http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm</a>. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.
    - **1.1.2.** The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.
  - **1.2. Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed.

- **1.3. Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.
  - **1.3.1.** For contracts entered into on or after April 1, 2015, Contractor and their subcontractors shall furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.
- **1.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.
- **1.5.** Working Hours. Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections1810 through 1815.
- **1.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.
- **1.7.** Labor Code Section 1861 Certification. Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract."
- **1.8.** Labor Compliance Program. The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.

- **1.9. Contractor and Subcontractor Registration Requirements.** This project is subject to compliance monitoring and enforcement by the DIR. As of March 1, 2015, no contractor or subcontractor may be listed on a bid or proposal for a public works project unless registered with the DIR pursuant to Labor Code section 1725.5. As of April 1, 2015, a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, or enter into any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5 By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration to the City upon request.
  - **1.9.1.** A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.

# ATTACHMENT E

# SUPPLEMENTARY SPECIAL PROVISIONS

# SUPPLEMENTARY SPECIAL PROVISIONS

The following Supplementary Special Provisions (SSP) modifies the following documents:

- 1. The **2015 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK") currently in effect.
- 2. The **2015 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK") including the following:
  - a. General Provisions (A) for all Contracts.
  - b. General Provisions (C) for Design-Build Contracts.

#### SECTION 1 – TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

**1-2 TERMS AND DEFINITIONS.** To the "WHITEBOOK", item 54, "Normal Working Hours", ADD the following:

#### The Normal Working Hours are 7:00 AM to 3:30 PM.

#### SECTION 2 - SCOPE AND CONTROL OF WORK

- **2-3.2 Self Performance.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - **1.** You shall perform, with your own organization, Contract Work amounting to at least 30% of the base Bid.
- **2-16 CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM.** To the "WHITEBOOK", item 1, DELETE in its entirety.

#### SECTION 3 – CHANGES IN WORK

- **3-5.1 Claims.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
- ADD:

#### 3-5.1 Claims.

1. A Claim is a written demand by you that seeks an adjustment in the Contract Price, Contract Time, or other relief associated with a dispute arising under or relating to the Contract, including a breach of any provision thereof. A voucher, invoice, or other routine request for payment is not a Claim.

- 2. A Claim shall conform to these specifications and may be considered after the City has previously denied a request by you for a Change Order seeking the demanded relief.
- 3. You shall submit a Claim to the Engineer if a dispute occurs that arises from or relates to the Contract. The Claim shall seek all relief to which you assert you are entitled as a result of the event(s) giving rise to the dispute. Your failure to process a Claim in accordance with these specifications shall constitute a waiver of all relief associated with the dispute. Claims are subject to 6-11, "Right to Audit".
- 4. You shall continue to perform the Services and Work and shall maintain the Schedule during any dispute proceedings. The Engineer will continue to make payments for undisputed Services and Work.
- 5. The City's Claims process specified herein shall not relieve you of your statutory obligations to present claims prior to any action under the California Government Code.

## 3-5.1.1 Initiation of Claim.

- 1. You shall promptly, but no later than 30 Days after the event(s) giving rise to the Claim, deliver the Claim to the Engineer.
- 2. You shall not process a Claim unless the Engineer has previously denied a request by you for a Change Order that sought the relief to be pursued in the claim.

## 3-5.1.1.1 Claim Certification Submittal.

- 1. If your Claim seeks an increase in the Contract Price, the Contract Time, or both, submit with the Claim an affidavit certifying the following:
  - a) The Claim is made in good faith and covers all costs and delays to which you are entitled as a result of the event(s) giving rise to the Claim.
  - b) The amount claimed accurately reflects the adjustments in the Contract Price, the Contract Time, or both to which you believe you are entitled.
  - c) All supporting costs and pricing data are current, accurate, and complete to the best of your knowledge. The cost breakdown per item of Work shall be supplied.
  - d) You shall ensure that the affidavit is executed by an official who has the authority to legally bind you.

## 3-5.1.2 Initial Determination.

1. The Engineer will respond in writing to your Claim within 30 Days of receipt of the Claim.

## 3-5.1.3 Settlement Meeting.

 If you disagree with the Initial Determination, you shall request a Settlement Meeting within 30 Days. Upon receipt of this request, the Engineer will schedule the Settlement Meeting within 15 Working Days.

## 3-5.1.7 City's Final Determination.

- 1. If a settle agreement is not reached, the City shall make a written Final Determination within 10 Working Days after the Settlement Meeting.
- If you disagree with the City's Final Determination, notify the Engineer in writing of your objection within 15 Working Days after receipt of the written determination and file a "Request for Mediation" in accordance with 3-5.2, "Dispute Resolution Process".
- 3. Failure to give notice of objection within the 15 Working Days period shall waive your right to pursue the Claim.

## 3-5.1.8 Mandatory Assistance.

- 1. If a third party dispute, litigation, or both arises out of or relates in any way to the Services provided under the Contract, upon the City's request, you shall agree to assist in resolving the dispute or litigation. Your assistance includes, but is not limited to the following:
  - a) Providing professional consultations.
  - b) Attending mediations, arbitrations, depositions, trials, or any event related to the dispute resolution and litigation.

## **3-5.1.8.1 Compensation for Mandatory Assistance.**

- 1. The City will reimburse you for reasonable fees and expenses incurred by you for any required assistance rendered in accordance with 3-5.1.8, "Mandatory Assistance" as Extra Work.
- 2. The Engineer will determine whether these fees and expenses were necessary due to your conduct or failure to act.
- 3. If the Engineer determines that the basis of the dispute or litigation in which these fees and expenses were incurred were the result of your conduct or your failure to act in part or in whole, you shall reimburse the City for any payments made for these fees and expenses.
- 4. Reimbursement may be through any legal means necessary, including the City's withholding of your payment.

# **3-5.2.3 Selection of Mediator.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. A single mediator, knowledgeable in construction aspects and acceptable to both parties, shall be used to mediate the dispute.

- 2. To initiate mediation, the initiating party shall serve a Request for Mediation at the American Arbitration Association (AAA) on the opposing party.
- 3. If AAA is used, the initiating party shall concurrently file with AAA a "Request for Mediation" along with the appropriate fees, a copy of requested mediators marked in preference order, and a preference for available dates.
- 4. If AAA is selected to coordinate the mediation (Administrator), within 10 Working Days from the receipt of the initiating party's Request for Mediation, the opposing party shall file the following:
  - a) A copy of the list of the preferred mediators listed in preference order after striking any mediators to which they have any objection.
  - b) A preference for available dates.
  - c) Appropriate fees.
- 5. If the parties cannot agree on a mediator, then each party shall select a mediator and those mediators shall select the neutral third party to mediate the matter.
- **3-5.3 Forum of Litigation.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. It is the express intention that all legal actions and proceedings related to the Contract or Agreement with the City or to any rights or any relationship between the parties arising therefrom shall be solely and exclusively initiated and maintained in courts of the State of California for the County of San Diego.

## SECTION 4 - CONTROL OF MATERIALS

- **4-1.3.1 General.** To the "WHITEBOOK", ADD the following:
  - 1. Steel pipe in sizes larger than 18 inches shall require inspection at the source of production.
  - 2. City lab staff or a qualified inspection agency approved by the Engineer shall witness all welding, lining, coating, and testing. You shall incur additional inspection costs outlined in 4-1.3.3, "Inspection of Items Not Locally Produced".
  - 3. All parts of production (including but not limited to product fabrication, welding, testing, lining, and coating of straight pieces and specials) shall be performed or produced in the United States.
  - 4. Welding and all testing shall be performed by certified welders and testing staff with credentials traceable in the United States.

- **4-1.3.2 Inspection by the Agency.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. The City will provide inspection and testing laboratory services within the continental United States within a 200-mile radius of the geographical limits of the City.
- **4-1.3.3** Inspection of Items Not Locally Produced. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:
  - 1. When you intend to purchase materials, fabricated products, or equipment from sources located more than 200 miles (321.9 km) outside the geographical limits of the City, City Lab staff or a qualified inspection agency approved by the Engineer, shall be engaged at your expense to inspect the materials, equipment, or process.
  - 2. This approval shall be obtained before producing any material or equipment. City Lab staff or inspector shall evaluate the materials for conformance with the requirements of the Plans and Specifications. You shall forward reports required by the Engineer. No materials or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by City Lab staff or the approved agent. Approval by said agent shall not relieve you of responsibility for complying with the requirements of the Contract Documents.
  - 3. The Engineer may elect City Lab staff to perform inspection of an out-oftown manufacturer. You shall incur additional inspection costs of the Engineer including lodging, meals, and incidental expenses based on Federal Per Diem Rates, along with travel and car rental expenses. If the manufacturing plant operates a double shift, a double shift shall be figured in the inspection costs.
    - a) At the option of the Engineer, full time inspection shall continue for the length of the manufacturing period. If the manufacturing period will exceed 3 consecutive weeks, you shall incur additional inspection expenses of the Engineer's supervisor for a trip of 2 Days to the site per month.
    - b) When the Engineer elects City Lab staff to perform out-of-town inspections, the wages of staff employed by the City shall not be part of the additional inspection expenses paid by you.
    - c) Federal Per Diem Rates can be determined at the location below:

#### https://www.gsa.gov/portal/content/104877

#### **4-1.3.6 Preapproved Materials.** To the "WHITEBOOK", ADD the following:

3. You shall submit in writing a list of all products to be incorporated in the Work that are on the AML.

## **4-1.6** Trade Names or Equals. To the "WHITEBOOK", ADD the following:

12. You shall submit your list of proposed substitutions for an "equal" item **no less than 15 Working Days prior to the Proposal due date** and on the City's Product Submittal Form available at:

## http://www.sandiego.gov/publicworks/edocref/index.shtml

## **SECTION 5 – UTILITIES**

## **5-2 PROTECTION.** To the "WHITEBOOK", item 2, ADD the following:

g) Refer to Appendix "G" for more information on the protection of AMI devices.

## SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

## 6-3.2.1.1 Environmental Document.

1. The City of San Diego Planning Department has prepared a Notice of Exemption (NOE) for South Bay Water Reclamation Plant Loop Control and Valve Master Station Improvements, as referenced in the Contract Appendix. You shall comply with all requirements of the NOE as set forth in Appendix A.

## SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

**7-3 INSURANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

## 7-3 INSURANCE.

1. The insurance provisions herein shall not be construed to limit your indemnity obligations contained in the Contract.

## 7-3.1 Policies and Procedures.

- 1. You shall procure the insurance described below, at its sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
- 2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
- 3. You shall maintain this insurance for the duration of this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your liabilities under the Contract, e.g., your indemnity obligations, is not deemed limited to the insurance coverage required by this Contract.

- 4. The payment for insurance shall be included in the Contract Price as bid by you. Except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any Work under this Contract until you have provided and the City has approved all required insurance.
- 5. Policies of insurance shall provide that the City is entitled to 30 Days (10 Days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

## 7-3.2 Types of Insurance.

#### 7-3.2.1 Commercial General Liability Insurance.

- 1. Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.
- 2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).
- 3. There shall be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.
- 4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

General Annual Aggregate Limit	Limits of Liability

Other than Products/Completed Operations	\$2,000,000
Products/Completed Operations Aggregate Limit	\$2,000,000
Personal Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000

#### 7-3.2.2 Commercial Automobile Liability Insurance.

- 1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").
- 2. All costs of defense shall be outside the limits of the policy.

## 7-3.2.3 Contractors Pollution Liability Insurance.

- 1. You shall procure and maintain at your expense or require your Subcontractor, as described below, to procure and maintain the Contractors Pollution Liability Insurance including contractual liability coverage to cover liability arising out of cleanup, removal, storage, or handling of hazardous or toxic chemicals, materials, substances, or any other pollutants by you or any Subcontractor in an amount not less than \$2,000,000 limit for bodily injury and property damage.
- 2. All costs of defense shall be outside the limits of the policy. Any such insurance provided by your Subcontractor instead of you shall be approved separately in writing by the City.
- 3. For approval of a substitution of your Subcontractor's insurance, you shall certify that all activities for which the Contractors Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance. The deductible shall not exceed \$25,000 per claim.
- 4. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability.
- 5. Occurrence based policies shall be procured before the Work commences and shall be maintained for the Contract Time. Claims Made policies shall be procured before the Work commences, shall be maintained for the Contract Time, and shall include a 12 month extended Claims Discovery Period applicable to this contract or the existing policy or policies that shall continue to be maintained for 12 months after the completion of the Work without advancing the retroactive date.
- 6. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

## 7-3.2.5 Contractors Builders Risk Property Insurance.

- 1. You shall provide at your expense, and maintain until Final Acceptance of the Work, a Special Form Builders Risk Policy or Policies. This insurance shall be in an amount equal to the replacement cost of the completed Work (without deduction for depreciation) including the cost of excavations, grading, and filling. The policy or policies limits shall be 100% of this Contract value of the Work plus 15% to cover administrative costs, design costs, and the costs of inspections and construction management.
- 2. Insured property shall include material or portions of the Work located away from the Site but intended for use at the Site and shall cover material or portions of the Work in transit. The policy or policies shall include as insured property scaffolding, falsework, and temporary buildings located at the Site.

The policy or policies shall cover the cost of removing debris, including demolition.

- 3. The policy or policies shall provide that all proceeds thereunder shall be payable to the City as Trustee for the insured, and shall name the City, the Contractor, Subcontractors, and Suppliers of all tiers as named insured. The City, as Trustee, will collect, adjust, and receive all monies which may become due and payable under the policy or policies, may compromise any and all claims thereunder, and will apply the proceeds of such insurance to the repair, reconstruction, or replacement of the Work.
- 4. Any deductible applicable to the insurance shall be identified in the policy or policies documents and responsibility for paying the part of any loss not covered because of the application of such deductibles shall be apportioned among the parties except for the City as follows: if there is more than one claimant for a single occurrence, then each claimant shall pay a pro-rata share of the per occurrence deductible based upon the percentage of their paid claim to the total paid for insured. The City shall be entitled to 100% of its loss. You shall pay the City any portion of that loss not covered because of a deductible at the same time the proceeds of the insurance are paid to the City as trustee.
- 5. Any insured, other than the City, making claim to which a deductible applies shall be responsible for 100% of the loss not insured because of the deductible. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.
- **7-3.3 Rating Requirements.** Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State, and that have been approved by the City.
- **7-3.3.1 Non-Admitted Carriers.** The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

**7-3.4 Evidence of Insurance.** Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.

## 7-3.5 Policy Endorsements.

## 7-3.5.1 Commercial General Liability Insurance.

## 7-3.5.1.1 Additional Insured.

- 1. You shall provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.
- 2. To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured.
- 3. The additional insured coverage for projects for which the Engineer's Estimate is \$1,000,000 or more shall include liability arising out of:
  - a) Ongoing operations performed by you or on your behalf,
  - b) your products,
  - c) your Work, e.g., your completed operations performed by you or on your behalf, or
  - d) premises owned, leased, controlled, or used by you.
- 4. The additional insured coverage for projects for which the Engineer's Estimate is less than \$1,000,000 shall include liability arising out of:
  - a) Ongoing operations performed by you or on your behalf,
  - b) your products, or
  - c) premises owned, leased, controlled, or used by you.
- **7-3.5.1.2 Primary and Non-Contributory Coverage.** The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.
- **7-3.5.1.3 Project General Aggregate Limit.** The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit to the aggregate limit provided for the products-completed operations hazard.

## 7-3.5.2 Commercial Automobile Liability Insurance.

**7-3.5.2.1** Additional Insured. Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.

## 7-3.5.3 Contractors Pollution Liability Insurance Endorsements.

## 7-3.5.3.1 Additional Insured.

- 1. The policy or policies shall be endorsed to include as an Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:
  - a) Ongoing operations performed by you or on your behalf,
  - b) your products,
  - c) your work, e.g., your completed operations performed by you or on your behalf, or
  - d) premises owned, leased, controlled, or used by you.

Except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of § 2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

- 2. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that are not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code §11580.04.
- **7-3.5.3.2 Primary and Non-Contributory Coverage.** The policy or policies shall be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

**7-3.5.3.3 Severability of Interest.** For Contractors Pollution Liability Insurance, the policy or policies shall provide that your insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

## 7-3.5.5 Builders Risk Endorsements.

- **7-3.5.5.1 Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.
- **7-3.5.2 Builders Risk Partial Utilization.** If the City desires to occupy or use a portion or portions of the Work prior to Acceptance in accordance with this Contract, the City will notify you and you shall immediately notify your Builder's Risk insurer and obtain an endorsement that the policy or policies shall not be cancelled or lapse on account of any such partial use or occupancy. You shall obtain the endorsement prior to the City's occupation and use.
- **7-3.6 Deductibles and Self-Insured Retentions.** You shall pay for all deductibles and self-insured retentions. You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.
- **7-3.7 Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this Contract.
- **7-3.8** Notice of Changes to Insurance. You shall notify the City 30 Days prior to any material change to the policies of insurance provided under this Contract.
- **7-3.9 Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies e.g., all endorsements.
- 7-3.10 Architects and Engineers Professional Insurance (Errors and Omissions Insurance).
  - 1. For Contracts with required engineering services (e.g., <u>Design-Build</u>, preparation of engineered Traffic Control Plans (TCP), and etc) by you, you shall keep or require all of your employees or Subcontractors, who provide professional engineering services under this contract, Professional Liability coverage with a limit of \$1,000,000 per claim and \$2,000,000 annual aggregate in full force and effect.
  - 2. You shall ensure the following:
    - a) The policy retroactive date is on or before the date of commencement of the Project.
    - b) The policy will be maintained in force for a period of 3 years after completion of the Project or termination of this Contract, whichever occurs last. You agree that for the time period specified

above, there will be no changes or endorsements to the policy that affect the specified coverage.

- 3. If professional engineering services are to be provided solely by the Subcontractor, you shall:
  - a) Certify this to the City in writing and
  - b) Agree in writing to require the Subcontractor to procure Professional Liability coverage in accordance with the requirements set forth above.
- **7-4 NOT USED.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

## 7-4 WORKERS' COMPENSATION INSURANCE AND EMPLOYERS LIABILITY INSURANCE.

- 1. In accordance with the provisions of §3700 of the California Labor Code, you shall provide at your expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with the requirements of this section.
- 2. Limits for this insurance shall be not less than the following:

Workers' Compensation	Statutory Employers Liability
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit

- 3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you shall comply with such provisions before commencing the Work as required by §1861 of the California Labor Code.
- **7-4.1. Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.
- **7-8.6** Water Pollution Control. To the "GREENBOOK", ADD the following:
  - 1. Based on a preliminary assessment by the City, the Contract is subject to WPCP.

## **7-20 ELECTRONIC COMMUNICATION.** To the "WHITEBOOK", ADD the following:

- 2. Virtual Project Manager shall be used on this Contract.
- **7-21 GENERAL.** To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:
  - 3. During the construction phase of projects, the minimum waste management reduction goal is 90% of the inert material (a material not subject to decomposition such as concrete, asphalt, brick, rock, block, dirt, metal, glass, and etc.) and 65% of the remaining project waste. You shall provide appropriate documentation, including a Waste Management Form attached as an appendix, and evidence of recycling and reuse of materials to meet the waste reduction goals specified.

#### **SECTION 9 - MEASUREMENT AND PAYMENT**

#### ADD:

- **9-3.7 Compensation Adjustments for Price Index Fluctuations.** To the "WHITEBOOK", ADD the following:
  - 5. This Contract is not subject to the provisions of The "WHITEBOOK" for Compensation Adjustments for Price Index Fluctuations for paving asphalt.

#### SECTION 10 – GREEN BUILDINGS AND STORM WATER MANAGEMENT

ADD:

#### 10-3 STORM WATER MANAGEMENT DISCHARGE CONTROL.

1. You shall comply with Chapter 4, Article 3, Division 3 of the San Diego Municipal Code, Storm Water Management and Discharge Control, Municipal Storm Water Permit (MS4), California Regional Water Quality Control Board Order No. R9-2013-0001 (amended by R9-2015-0001 and R9-2015-0100), Storm Water Standards Manual, as amended from time to time, and any and all Best Management Practice (BMP) guidelines and pollution elimination requirements as may be established by the Enforcement Official. You warrant and certify that any and all Plans, reports, and specifications prepared for the City in accordance with this agreement shall meet all requirements of the San Diego Municipal Code and Storm Water Standards Manual. You understand that while the City will be reviewing your designs for storm water permit compliance prior to acceptance of Design-Builder's designs, you shall also understand and agree that the City's Storm Water review process and its acceptance of your designs in no way limits the your obligations under this agreement to prepare designs that comply with all requirements of the San Diego Municipal Code and MS4 Permit.

- 2. You shall complete and update the Storm Water Applicability Checklist (DS-560) to confirm the project's appropriate storm water requirements. For all applicable projects, and to the maximum extent practicable, you shall incorporate and include Source Control and Low Impact Development (LID) design features or Site Design BMPs on the construction plans. Additionally, for Priority Development projects, you shall prepare a Storm Water Quality Management Plan (SWQMP) in accordance with the requirements of the Storm Water Standards Manual. You shall prepare a SWQMP Drainage Management Area Map showing all LID site design, source control and treatment control BMPs, hydromodification management plan facilities, and tabulated calculations. Include sufficient details and cross sections for construction. The Drainage Management Area Map shall be included as part of the construction Plans in addition to the Storm Water Infrastructure cover sheet. A template of the Storm Water Infrastructure cover sheet will be provided by the City.
- 3. You shall attend the Pre-construction meeting. If applicable, you shall inspect and confirm that the permanent BMP was installed in accordance with the details on the Plans and that the permanent BMP functions meet the requirements of the MS4 Permit. Upon notification by the Engineer, the Design-Builder Engineer of Work shall sign and stamp the Permanent BMP Self Certification on the Plans or the Permanent BMP Self Certification Form (DS-563) prior to final acceptance by the City.
- 4. For projects requiring soil-disturbance Work such as geotechnical borings, street coring, and potholing as component of the design, you shall complete a Minor Water Pollution Control Plan (DS-570), if applicable.

#### SECTION 304 - METAL FABRICATION AND CONSTRUCTION

**304-5 PAYMENT.** To the "WHITEBOOK", REVISE section "**304-5**" to "**304-6**".

## EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP) SECTION A – GENERAL REQUIREMENTS

**4.1 Nondiscrimination in Contracting Ordinance.** To the City Supplement, subsection 4.1.1, paragraph (2), sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

You shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers.

#### END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

# TECHNICALS

#### SECTION 15100 - VALVES, GENERAL

#### City of San Diego, CWP Guidelines

#### PART 1 -- GENERAL

#### 1.1 WORK OF THIS SECTION

A. The WORK of this Section includes providing general requirements for valves including epoxy coating, installing, adjusting, and testing of valves and where buried valves are indicated, valve boxes to grade, with covers, stem extensions, and position indicators.

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NTS: The WORK of this Section applies to the WORK of the following Sections:

- 1. Section 15103 Globe Valves
- 2. Section 15104 Butterfly Valves
- 3. Section 15105 Check Valves
- 4. Section 15106 Ball Valves
- 5. Section 15107 Diaphragm Valves
- 6. Section 15109 Gate Valves
- 7. Section 15110 Plug Valves
- 8. Section 15111 Three-Way Plug Valves
- 9. Section 15112 Solenoid Valves
- 10. Section 15113 Air Release and Vacuum Valves
- 11. Section 15114 Pressure Regulating Valves
- 12. Section 15115 Miscellaneous Valves
- 13. Section 15116 Telescoping Valves

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#### 1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
  - 1. Section 11000 Equipment General Provisions
  - 2. Section 15000 Piping Components
  - 3. Section 15101 Valve Operators

#### 1.3 SPECIFICATIONS AND STANDARDS

- A. Except as otherwise indicated, the current editions of the following standards apply to the WORK of this Section:
  - 1. ANSI B16.1 Cast Iron Pipe Flanges and Flanged Fittings, Class 25, 125, 250, and 800
  - 2. ANSI B16.5 Pipe Flanges and Flanged Fittings, Steel Nickel Alloy and Other Special Alloys
  - 3. ANSI/ASME B1.20.1 General Purpose Pipe Threads (Inch)

4.	ANSI/ASME B31.1	Power Piping
5.	ASTM A 36	Specification for Structural Steel
6.	ASTM A 48	Specification for Gray Iron Castings
7.	ASTM A 126	Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings
8.	ASTM A 536	Specification for Ductile Iron Castings
9.	ASTM B 61	Specification for Steam or Valve Bronze Castings
10.	ASTM B 62	Specification for Composition Bronze or Ounce Metal Castings
11.	ASTM B 148	Specification for Aluminum-Bronze Castings
12.	ASTM B 584	Specification for Copper Alloy Sand Castings for General Applications
13.	ANSI/AWWA C500	Gate Valves for Water and Sewerage Systems
14.	ANSI/AWWA C502	Dry-Barrel Fire Hydrants
15.	ANSI/AWWA C503	Wet-Barrel Fire Hydrants
16.	ANSI/AWWA C504	Rubber-Seated Butterfly Valves
17.	ANSI/AWWA C506	Backflow Prevention Devices - Reduced Pressure Principle and Double Check Valve Types
18.	ANSI/AWWA C507	Ball Valves 6 Inches Through 48 Inches
19.	AWWA C508	Swing-Check Valves for Waterworks Service, 2 Inches Through 24 Inches NPS
20.	ANSI/AWWA C509	Resilient-Seated Gate Valves for Water and Sewage Systems
21.	AWWA C550	Protective Interior Coatings for Valves and Hydrants
22.	SSPC-SP-2	Hand Tool Cleaning
23.	SSPC-SP-5	White Metal Blast Cleaning

#### 1.4 SHOP DRAWINGS AND SAMPLES

A. The following shall be submitted in compliance with Section 01300:

- 1. Manufacturer's product data including catalogue cuts.
- 2. Manufacturer's installation instructions.
- 3. Shop drawings showing details and dimensions.
- 4. Manufacturer's certification that products comply with the indicated requirements.
- 5. Schedule of valves indicating valve identification and location.
- 6. Manufacturer's certification that epoxy coatings have been factory tested and comply with the indicated requirements.

[FEBRUARY 1992] [CONTRACT NO.]-[CONTRACT TITLE] Proposal Documents Attachment E – Technicais South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements VALVES, GENERAL 15100-2 63 | Page

#### 1.5 OWNER'S MANUAL

- A. The following shall be included in the OWNER'S MANUAL in compliance with Section 01300:
  - 1. Manufacturer's installation and operating instructions.
  - 2. Manufacturer's maintenance procedures.
  - 3. List of special tools.
  - 4. Schedule of valves indicating valve identification and location.

#### 1.6 FACTORY TESTING

- A. **General**: Valves shall be tested in compliance with the AWWA Standards as indicated. Except as otherwise indicated, each valve body shall be tested under a test pressure equal to twice its design water-working pressure.
- B. Proof-of-Design Tests: The CONTRACTOR shall furnish the CONSTRUCTION MANAGER three (3) certified copies of a report from an independent testing laboratory certifying successful completion of proof-of-design testing for all valves of sizes 10-inch and larger unless indicated otherwise in the specific valve Section. In lieu of testing the valves at an independent testing laboratory, proof-of-design testing may be performed at the valve manufacturer's laboratory, but must be witnessed by a representative of a qualified independent testing laboratory representative. Proof-of-design testing shall have been performed on not less than three valves, with all three units demonstrating full compliance with the test standards. Failure to satisfactorily complete the test shall be deemed sufficient evidence to reject all valves of the proposed make or manufacturer's model number.

#### 1.7 FIELD TESTING

A. Testing: Valves shall be field-tested for compliance with the indicated requirements.

#### PART 2 -- PRODUCTS

- 2.1 VALVES
  - A. **General:** Shut-off valves, 6-inch and larger, shall have operators with position indicators. Where buried, these valves shall be provided with valve boxes and covers containing position indicators, and valve extensions. Valves mounted higher than 7 feet above working level shall be provided with chain operators.
  - B. Valve Flanges: The flanges of valves shall comply with Section 15000.
  - C. **Gate Valve Stems:** Where dezincification is indicated, gate valve stems shall be fabricated with bronze conforming to ASTM B 62, containing not more than 5 percent of zinc nor more than 2 percent of aluminum. Gate valve stems shall be designed for minimum tensile strength of 60,000 psi, a minimum yield strength of 40,000 psi, and an elongation of at least 10 percent in 2 inches, as determined by a test coupon poured from the same ladle from which the valve stems are poured. Where dezincification is not indicated, bronze conforming to ASTM B 584 may be used.
  - D. **Protective Coating:** Except where otherwise indicated, ferrous surfaces, exclusive of stainless steel surfaces, in the water passages of all valves 4-inch and larger, and exterior surfaces of submerged valves, shall be epoxy coated conforming to Section 09800. Flange faces of valves shall not be epoxy coated.

- E. Valve Operators: Where indicated, valves shall include electric operators recommended by the manufacturer. Operators of the same type shall be furnished by the same manufacturer. Valve operators, regardless of type, shall be installed, adjusted, and tested by the valve manufacturer at the manufacturing plant. Except as otherwise indicated, electric, pneumatic, and hydraulic valve operators shall comply with Section 15101.
- F. **Nuts and Bolts:** Nuts and bolts on valve flanges, bodies and supports shall comply with Section 05500.
- 2.2 NAMEPLATES, TOOLS AND SPARE PARTS
  - A. **Nameplates**: Except as otherwise indicated, a label shall be provided on all valves exclusive of hose bibbs and chlorine cylinder valves. The label shall be 1/16-inch plastic or stainless steel, minimum 2 inches by 4 inches in size, and shall be permanently attached to the valve.
  - B. **Spare Parts:** Two sets of packings, O-rings, gaskets, discs, seats, and bushings shall be furnished with each valve, as applicable.

#### PART 3 -- EXECUTION

#### 3.1 VALVE INSTALLATION

- A. **General:** Valves, operating units, stem extensions, valve boxes, and accessories shall be installed in accordance with the manufacturer's installation instructions. Valves shall be independently supported to prevent stresses on the pipe.
- B. Access: Valves shall be installed to provide easy access for operation, removal, and maintenance and to prevent interferences between valve operators and structural members or handrails.
- C. Valve Accessories: Where combinations of valves, sensors, switches, and controls are indicated, the combinations shall be properly assembled and installed to ensure that systems are compatible and operating properly.

\*\* END OF SECTION \*\*

# SUPPLEMENTARY SPECIAL PROVISIONS

# APPENDICES

# **APPENDIX A**

# **NOTICE OF EXEMPTION**

,

#### NOTICE OF EXEMPTION

FROM:

CITY OF SAN DIEGO

PLANNING DEPARTMENT

SAN DIEGO, CA 92101

1222 FIRST AVENUE, MS 501

(Check one or both)

TO:

X RECORDER/COUNTY CLERK P.O.BOX 1750, MS A-33 1600 PACIFIC HWY, ROOM 260 SAN DIEGO, CA 92101-2422

OFFICE OF PLANNING AND RESEARCH 1400 tenth street, room 121 sacramento, ca 95814

#### PROJECT NO.: N/A PROJECT TITLE; SOUTH BAY WATER RECLAMATION PLANT LOOP CONTROL AND VALVE MASTER STATION IMPROVEMENTS

**PROJECT LOCATION-SPECIFIC:** The work will be located within the existing South Bay Water Reclamation Plant Facility at 2411 Dairy Mart Road located at the intersection of Dairy Mart and Monument Roads in the Tijuana River Valley. The plant is located within the Tijuana River Valley Community Planning Area in San Diego, California. All project activities are located outside the MHPA and inside the existing buildings.

PROJECT LOCATION-CITY/COUNTY: City of San Diego/San Diego

**DESCRIPTION OF NATURE AND PURPOSE OF THE PROJECT:** Separate SBWRP VMS01 Loop into 2 stand alone loops by replacing 55 existing EIM motor operators, 7 wire master stations and control systems, and relocating 10 valve actuator controllers and appurtenant equipment. All work will take place within the existing facility. No impacts to sensitive biological resources or archeological resources will result from this work located in a developed treatment facility.

NAME OF PUBLIC AGENCY APPROVING PROJECT: City of San Diego

#### NAME OF PERSON OR AGENCY CARRYING OUT PROJECT:

Public Utilities Department, Wastewater Branch, 9192 Topaz Way, San Diego, CA 92123, Keli Balo (858) 292-6423

#### EXEMPT STATUS: (CHECK ONE)

- () MINISTERIAL (SEC. 21080(b)(1); 15268);
- () DECLARED EMERGENCY (SEC. 21080(b)(3); 15269(a);
- () EMERGENCY PROJECT (SEC. 21080(B)(4)
- (X) CATEGORICAL EXEMPTION: SECTION 15301 (EXISTING FACILITIES)
- () STATUTORY EXEMPTIONS: SECTION 21080.21

**REASONS WHY PROJECT IS EXEMPT**: The City of San Diego conducted an environmental review and determined the project meets the categorical exemption criteria set forth in the CEQA State Guidelines Section 15301 (Existing Facilities) which allows for the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing facilities (public or private) involving negligible or no expansion of use beyond that existing at the time of the determination; specifically minor alteration of existing facilities involving negligible or no espansion of use. Additionally, none of the exceptions described in CEQA Guidelines Section 15300.2 apply.

#### LEAD AGENCY CONTACT PERSON:

Myra Herrmann, Senior Planner, Planning/Environmental Section,

Telephone: (619) 446-5372

#### IF FILED BY APPLICANT:

- 1. ATTACH CERTIFIED DOCUMENT OF EXEMPTION FINDING.
- 2. HAS A NOTICE OF EXEMPTION BEEN FILED BY THE PUBLIC AGENCY APPROVING THE PROJECT? ( ) YES ( ) NO

IT IS HEREBY CERTIFIED THAT THE CITY OF SAN DIEGO HAS DETERMINED THE ABOVE ACTIVITY TO BE EXEMPT FROM CEQA

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SIGNATURE/TITLE

SENIORPLANNER

July 22, 2015 DATE

CHECK ONE: (X) SIGNED BY LEAD AGENCY ( ) SIGNED BY APPLICANT

DATE RECEIVED FOR FILING WITH COUNTY CLERK OR OPR:

# **APPENDIX B**

# FIRE HYDRANT METER PROGRAM

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CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	<b>NUMBER</b> <b>DI</b> 55.27	<b>DEPARTMENT</b> Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	<b>PAGE</b> 1 <b>OF</b> 10	<b>EFFECTIVE DATE</b> October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

## 1. **PURPOSE**

1.1 To establish a Departmental policy and procedure for issuance, proper usage and charges for fire hydrant meters.

## 2. <u>AUTHORITY</u>

- 2.1 All authorities and references shall be current versions and revisions.
- 2.2 San Diego Municipal Code (NC) Chapter VI, Article 7, Sections 67.14 and 67.15
- 2.3 Code of Federal Regulations, Safe Drinking Water Act of 1986
- 2.4 California Code of Regulations, Titles 17 and 22
- 2.5 California State Penal Code, Section 498B.0
- 2.6 State of California Water Code, Section 110, 500-6, and 520-23
- 2.7 Water Department Director

## Reference

- 2.8 State of California Guidance Manual for Cross Connection Programs
- 2.9 American Water Works Association Manual M-14, Recommended Practice for Backflow Prevention
- 2.10 American Water Works Association Standards for Water Meters
- 2.11 U.S.C. Foundation for Cross Connection Control and Hydraulic Research Manual

## 3. **DEFINITIONS**

3.1 **Fire Hydrant Meter:** A portable water meter which is connected to a fire hydrant for the purpose of temporary use. (These meters are sometimes referred to as Construction Meters.)

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- 3.2 **Temporary Water Use:** Water provided to the customer for no longer than twelve (12) months.
- 3.3 **Backflow Preventor:** A Reduced Pressure Principal Assembly connected to the outlet side of a Fire Hydrant Meter.

## 4. **<u>POLICY</u>**

- 4.1 The Water Department shall collect a deposit from every customer requiring a fire hydrant meter and appurtenances prior to providing the meter and appurtenances (see Section 7.1 regarding the Fees and Deposit Schedule). The deposit is refundable upon the termination of use and return of equipment and appurtenances in good working condition.
- 4.2 Fire hydrant meters will have a 2 <sup>1</sup>/<sub>2</sub>" swivel connection between the meter and fire hydrant. The meter shall not be connected to the 4" port on the hydrant. All Fire Hydrant Meters issued shall have a Reduced Pressure Principle Assembly (RP) as part of the installation. Spanner wrenches are the only tool allowed to turn on water at the fire hydrant.
- 4.3 The use of private hydrant meters on City hydrants is prohibited, with exceptions as noted below. All private fire hydrant meters are to be phased out of the City of San Diego. All customers who wish to continue to use their own fire hydrant meters must adhere to the following conditions:
  - a. Meters shall meet all City specifications and American Water Works Association (AWWA) standards.
  - b. Customers currently using private fire hydrant meters in the City of San Diego water system will be allowed to continue using the meter under the following conditions:
    - 1. The customer must submit a current certificate of accuracy and calibration results for private meters and private backflows annually to the City of San Diego, Water Department, Meter Shop.

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- 2. The meter must be properly identifiable with a clearly labeled serial number on the body of the fire hydrant meter. The serial number shall be plainly stamped on the register lid and the main casing. Serial numbers shall be visible from the top of the meter casing and the numbers shall be stamped on the top of the inlet casing flange.
- 3. All meters shall be locked to the fire hydrant by the Water Department, Meter Section (see Section 4.7).
- 4. All meters shall be read by the Water Department, Meter Section (see Section 4.7).
- 5. All meters shall be relocated by the Water Department, Meter Section (see Section 4.7).
- 6. These meters shall be tested on the anniversary of the original test date and proof of testing will be submitted to the Water Department, Meter Shop, on a yearly basis. If not tested, the meter will not be allowed for use in the City of San Diego.
- 7. All private fire hydrant meters shall have backflow devices attached when installed.
- 8. The customer must maintain and repair their own private meters and private backflows.
- 9. The customer must provide current test and calibration results to the Water Department, Meter Shop after any repairs.
- 10. When private meters are damaged beyond repair, these private meters will be replaced by City owned fire hydrant meters.

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- 11. When a private meter malfunctions, the customer will be notified and the meter will be removed by the City and returned to the customer for repairs. Testing and calibration results shall be given to the City prior to any reinstallation.
- 12. The register shall be hermetically sealed straight reading and shall be readable from the inlet side. Registration shall be in hundred cubic feet.
- 13. The outlet shall have a 2 <sup>1</sup>/<sub>2</sub> "National Standards Tested (NST) fire hydrant male coupling.
- 14. Private fire hydrant meters shall not be transferable from one contracting company to another (i.e. if a company goes out of business or is bought out by another company).
- 4.4 All fire hydrant meters and appurtenances shall be installed, relocated and removed by the City of San Diego, Water Department. All City owned fire hydrant meters and appurtenances shall be maintained by the City of San Diego, Water Department, Meter Services.
- 4.5 If any fire hydrant meter is used in violation of this Department Instruction, the violation will be reported to the Code Compliance Section for investigation and appropriate action. Any customer using a fire hydrant meter in violation of the requirements set forth above is subject to fines or penalties pursuant to the Municipal Code, Section 67.15 and Section 67.37.

### 4.6 **Conditions and Processes for Issuance of a Fire Hydrant Meter**

### Process for Issuance

- a. Fire hydrant meters shall only be used for the following purposes:
  - 1. Temporary irrigation purposes not to exceed one year.

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- 2. Construction and maintenance related activities (see Tab 2).
- b. No customer inside or outside the boundaries of the City of San Diego Water Department shall resell any portion of the water delivered through a fire hydrant by the City of San Diego Water Department.
- c. The City of San Diego allows for the issuance of a temporary fire hydrant meter for a period not to exceed 12 months (365 days). An extension can only be granted in writing from the Water Department Director for up to 90 additional days. A written request for an extension by the consumer must be submitted at least 30 days prior to the 12 month period ending. No extension shall be granted to any customer with a delinquent account with the Water Department. No further extensions shall be granted.
- d. Any customer requesting the issuance of a fire hydrant meter shall file an application with the Meter Section. The customer must complete a "Fire Hydrant Meter Application" (Tab 1) which includes the name of the company, the party responsible for payment, Social Security number and/or California ID, requested location of the meter (a detailed map signifying an exact location), local contact person, local phone number, a contractor's license (or a business license), description of specific water use, duration of use at the site and full name and address of the person responsible for payment.
- e. At the time of the application the customer will pay their fees according to the schedule set forth in the Rate Book of Fees and Charges, located in the City Clerk's Office. All fees must be paid by check, money order or cashiers check, made payable to the City Treasurer. Cash will not be accepted.
- f. No fire hydrant meters shall be furnished or relocated for any customer with a delinquent account with the Water Department.
- g. After the fees have been paid and an account has been created, the

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meter shall be installed within 48 hours (by the second business day). For an additional fee, at overtime rates, meters can be installed within 24 hours (within one business day).

### 4.7 **Relocation of Existing Fire Hydrant Meters**

- a. The customer shall call the Fire Hydrant Meter Hotline (herein referred to as "Hotline"), a minimum of 24 hours in advance, to request the relocation of a meter. A fee will be charged to the existing account, which must be current before a work order is generated for the meter's relocation.
- b. The customer will supply in writing the address where the meter is to be relocated (map page, cross street, etc). The customer must update the original Fire Hydrant Meter Application with any changes as it applies to the new location.
- c. Fire hydrant meters shall be read on a monthly basis. While fire hydrant meters and backflow devices are in service, commodity, base fee and damage charges, if applicable, will be billed to the customer on a monthly basis. If the account becomes delinquent, the meter will be removed.

### 4.8 **Disconnection of Fire Hydrant Meter**

- a. After ten (10) months a "Notice of Discontinuation of Service" (Tab 3) will be issued to the site and the address of record to notify the customer of the date of discontinuance of service. An extension can only be granted in writing from the Water Department Director for up to 90 additional days (as stated in Section 4.6C) and a copy of the extension shall be forwarded to the Meter Shop Supervisor. If an extension has not been approved, the meter will be removed after twelve (12) months of use.
- b. Upon completion of the project the customer will notify the Meter Services office via the Hotline to request the removal of the fire hydrant meter and appurtenances. A work order will be generated

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for removal of the meter.

- c. Meter Section staff will remove the meter and backflow prevention assembly and return it to the Meter Shop. Once returned to the Meter Shop the meter and backflow will be tested for accuracy and functionality.
- d. Meter Section Staff will contact and notify Customer Services of the final read and any charges resulting from damages to the meter and backflow or its appurtenance. These charges will be added on the customer's final bill and will be sent to the address of record. Any customer who has an outstanding balance will not receive additional meters.
- e. Outstanding balances due may be deducted from deposits and any balances refunded to the customer. Any outstanding balances will be turned over to the City Treasurer for collection. Outstanding balances may also be transferred to any other existing accounts.

## 5. **EXCEPTIONS**

5.1 Any request for exceptions to this policy shall be presented, in writing, to the Customer Support Deputy Director, or his/her designee for consideration.

## 6. MOBILE METER

- 6.1 Mobile meters will be allowed on a case by case basis. All mobile meters will be protected by an approved backflow assembly and the minimum requirement will be a Reduced Pressure Principal Assembly. The two types of Mobile Meters are vehicle mounted and floating meters. Each style of meters has separate guidelines that shall be followed for the customer to retain service and are described below:
  - a) Vehicle Mounted Meters: Customer applies for and receives a City owned Fire Hydrant Meter from the Meter Shop. The customer mounts the meter on the vehicle and brings it to the Meter Shop for

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inspection. After installation is approved by the Meter Shop the vehicle and meter shall be brought to the Meter Shop on a monthly basis for meter reading and on a quarterly basis for testing of the backflow assembly. Meters mounted at the owner's expense shall have the one year contract expiration waived and shall have meter or backflow changed if either fails.

- b) Floating Meters: Floating Meters are meters that are not mounted to a vehicle. (Note: All floating meters shall have an approved backflow assembly attached.) The customer shall submit an application and a letter explaining the need for a floating meter to the Meter Shop. The Fire Hydrant Meter Administrator, after a thorough review of the needs of the customer, (i.e. number of jobsites per day, City contract work, lack of mounting area on work vehicle, etc.), may issue a floating meter. At the time of issue, it will be necessary for the customer to complete and sign the "Floating Fire Hydrant Meter Agreement" which states the following:
  - 1) The meter will be brought to the Meter Shop at 2797 Caminito Chollas, San Diego on the third week of each month for the monthly read by Meter Shop personnel.
  - 2) Every other month the meter will be read and the backflow will be tested. This date will be determined by the start date of the agreement.

If any of the conditions stated above are not met the Meter Shop has the right to cancel the contract for floating meter use and close the account associated with the meter. The Meter Shop will also exercise the right to refuse the issuance of another floating meter to the company in question.

Any Fire Hydrant Meter using reclaimed water shall not be allowed use again with any potable water supply. The customer shall incur the cost of replacing the meter and backflow device in this instance.

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## 7. <u>FEE AND DEPOSIT SCHEDULES</u>

7.1 **Fees and Deposit Schedules:** The fees and deposits, as listed in the Rate Book of Fees and Charges, on file with the Office of the City Clerk, are based on actual reimbursement of costs of services performed, equipment and materials. Theses deposits and fees will be amended, as needed, based on actual costs. Deposits, will be refunded at the end of the use of the fire hydrant meter, upon return of equipment in good working condition and all outstanding balances on account are paid. Deposits can also be used to cover outstanding balances.

All fees for equipment, installation, testing, relocation and other costs related to this program are subject to change without prior notification. The Mayor and Council will be notified of any future changes.

## 8. UNAUTHORIZED USE OF WATER FROM A HYDRANT

- 8.1 Use of water from any fire hydrant without a properly issued and installed fire hydrant meter is theft of City property. Customers who use water for unauthorized purposes or without a City of San Diego issued meter will be prosecuted.
- 8.2 If any unauthorized connection, disconnection or relocation of a fire hydrant meter, or other connection device is made by anyone other than authorized Water Department personnel, the person making the connection will be prosecuted for a violation of San Diego Municipal Code, Section 67.15. In the case of a second offense, the customer's fire hydrant meter shall be confiscated and/or the deposit will be forfeited.
- 8.3 Unauthorized water use shall be billed to the responsible party. Water use charges shall be based on meter readings, or estimates when meter readings are not available.
- 8.4 In case of unauthorized water use, the customer shall be billed for all applicable charges as if proper authorization for the water use had been obtained, including but not limited to bi-monthly service charges, installation charges and removal charges.

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8.5 If damage occurs to Water Department property (i.e. fire hydrant meter, backflow, various appurtenances), the cost of repairs or replacements will be charged to the customer of record (applicant).

Larry Gardner Water Department Director

- Tabs:1.Fire Hydrant Meter Application
  - 2. Construction & Maintenance Related Activities With No Return To Sewer
  - 3. Notice of Discontinuation of Service

#### **APPENDIX**

Administering Division:	Customer Support Division					
Subject Index:	Construction Meters Fire Hydrant Fire Hydrant Meter Program Meters, Floating or Vehicle Mounted Mobile Meter Program, Fire Hydrant Meter					
Distribution:	DI Manual Holders					

Applicatio	n for Fire 👾					
City of San Diego	,	(HIBIT A)	(For Office Use Only)			
Water & Wastewater Hydrant M	leter	NS REQ	FAC	7		
		DATE	ВҮ			
METER SH	HOP (619) 527-7449	Application Date	Request	ted Install Date:		
Fire Hydrant Location: (Attach Detailed Map//Thomas B	Bros. Map Location of Cons	<u>Zip:</u>	<u>T.B.</u>	<u>G.B.</u> (CITY USE)		
Specific Use of Water:			,			
Any Return to Sewer or Storm Drain, If so , explain:		**************************************		· · · · · · · · · · · · · · · · · · ·		
Estimated Duration of Meter Use:			Check B	ox if Reclaimed Water		
Company Information						
Company Name:						
Mailing Address:		**************************************		· ·		
City: S	State:	Zip:	Phone: (	)		
*Business license#	*Con	tractor license#				
A Copy of the Contractor's license OR Busi	ness License is requ	ired at the time	of meter issuar	ice.		
Name and Title of Billing Agent: (PERSON IN ACCOUNTS PAYABLE)			Phone: <b>(</b>	)		
Site Contact Name and Title:		,	Phone: (	)		
Responsible Party Name:			Title:			
Cal ID#			Phone: (	. <b>)</b>		
Signature:	D	ate:				
Guarantees Payment of all Charges Resulting from the use of th	his Meter. <u>Insures that emplo</u>	vees of this Organization	understand the prope	r use of Fire Hydrant Meter		
	÷					
Fire Hydrant Meter Removal Re	equest	Requested R	emoval Date:			
Provide Current Meter Location if Different from Above:			tern sin s − 1000 i s			
Signature:		Title:		Date:		
Phone: ( )	Pager:	()		· · · · · · · · · · · · · · · · · · ·		
City Meter Private Meter						
Contract Acct #:	Deposit Amount	\$ 936.00	Fees Amount: 🗳	62.00		
Meter Serial #	Meter Size:	05	Meter Make and	Style: <b>6-7</b>		

		Backflow	
Backflow #	Backflow Size:	Make and Style:	
Name:	Signature:	Date	:
Proposal Documents Appendix B - Fire Hydrant Meter Pr			80   Page
South Bay Water Reclamation Plant Loop Control System	h & Valve Master Station Improveme	ints	

#### WATER USES WITHOUT ANTICIPATED CHARGES FOR RETURN TO SEWER

Auto Detailing Backfilling Combination Cleaners (Vactors) Compaction Concrete Cutters Construction Trailers **Cross Connection Testing** Dust Control **Flushing Water Mains** Hydro Blasting Hydro Seeing Irrigation (for establishing irrigation only; not continuing irrigation) Mixing Concrete Mobile Car Washing Special Events Street Sweeping Water Tanks Water Trucks Window Washing

Note:

1. If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charges.

Date

Name of Responsible Party Company Name and Address Account Number:\_\_\_\_\_\_

Subject: Discontinuation of Fire Hydrant Meter Service

Dear Water Department Customer:

The authorization for use of Fire Hydrant Meter #\_\_\_\_\_\_, located at *(Meter Location Address)* ends in 60 days and will be removed on or after *(Date Authorization Expires)*. Extension requests for an additional 90 days must be submitted in writing for consideration 30 days prior to the discontinuation date. If you require an extension, please contact the Water Department, or mail your request for an extension to:

City of San Diego Water Department Attention: Meter Services 2797 Caminito Chollas San Diego, CA 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant Hotline at (619)\_\_\_\_\_-

Sincerely,

Water Department

# **APPENDIX C**

# MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

# Materials Typically Accepted by Certificate of Compliance

- 1. Soil amendment
- 2. Fiber mulch
- 3. PVC or PE pipe up to 16 inch diameter
- 4. Stabilizing emulsion
- 5. Lime
- 6. Preformed elastomeric joint seal
- 7. Plain and fabric reinforced elastomeric bearing pads
- 8. Steel reinforced elastomeric bearing pads
- 9. Waterstops (Special Condition)
- 10. Epoxy coated bar reinforcement
- 11. Plain and reinforcing steel
- 12. Structural steel
- 13. Structural timber and lumber
- 14. Treated timber and lumber
- 15. Lumber and timber
- 16. Aluminum pipe and aluminum pipe arch
- 17. Corrugated steel pipe and corrugated steel pipe arch
- 18. Structural metal plate pipe arches and pipe arches
- 19. Perforated steel pipe
- 20. Aluminum underdrain pipe
- 21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
- 22. Metal target plates
- 23. Paint (traffic striping)
- 24. Conductors
- 25. Painting of electrical equipment
- 26. Electrical components
- 27. Engineering fabric
- 28. Portland Cement
- 29. PCC admixtures
- 30. Minor concrete, asphalt
- 31. Asphalt (oil)
- 32. Liquid asphalt emulsion
- 33. Ероху

## APPENDIX D

# SAMPLE CITY INVOICE

.

City of San Diego, Field Engineering Div., 9485 Aero Drive, SD CA 92123		Contractor's Name:				
Project Name:		Contractor's Address:	Contractor's Address:			
Work Order No or Job Order No.						
City Purchase Order No.		Contractor's Phone #:	Invoice No.			
Resident Engineer (RE):		Contractor's fax #:	Invoice Date:			
RE Phone#:	Fax#:	Contact Name:	Billing Period: ( to			

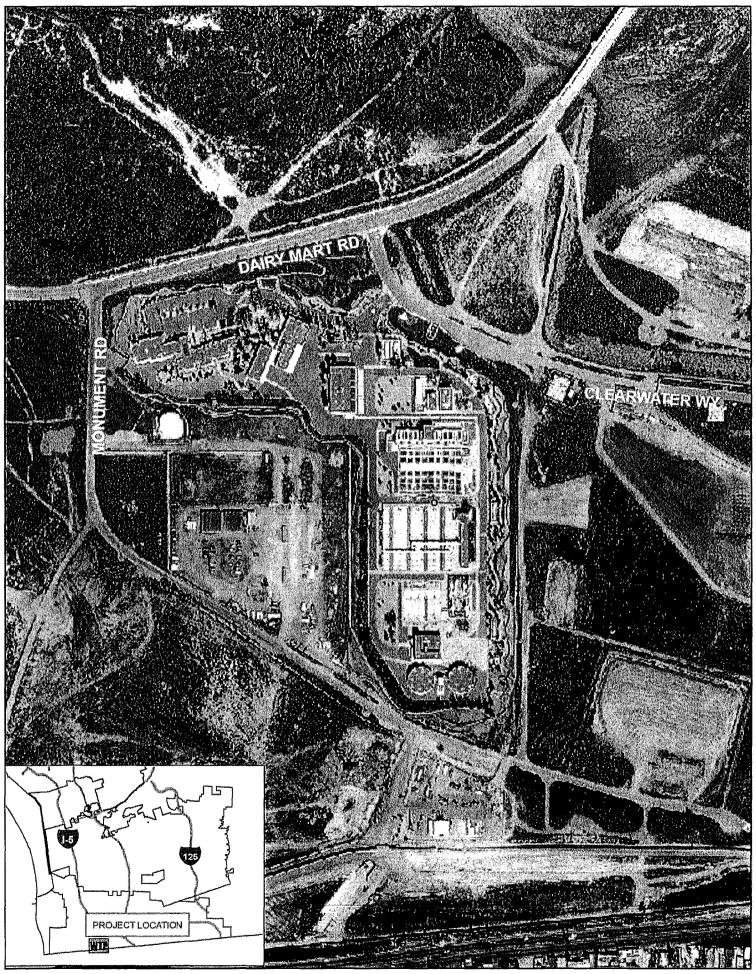
Item #	Item Description		Contract	Authorizati	ion		Previous	s Tot	als To Date	This	Estimate	Totals t	o Date
		Unit	Price	Qty		Extension	%/QTY		Amount	<u>%7QTY</u>	Amount	% / QTY	Amount
1					\$	-		\$	-		5 -	0.00% \$	-
2					\$	-		\$	-		5 -	0.00% \$	-
3					\$	-		\$	-		5 -	0.00% \$	-
4					\$	-		\$	-	1	-	0.00% \$	-
5					\$	-		\$	-	1	\$ -	0.00% \$	-
6					\$	-		\$	-		÷ -	0.00% \$	-
7					\$	-		\$	-		<b>5</b> -	0.00% \$	-
8					\$	-		\$	-		\$	0.00% \$	-
9					\$	-		\$	-	1	<b>5</b> –	0.00% \$	-
10					\$	-		\$			<b>-</b>	0.00% \$	-
11					\$	-		\$	-		-	0.00% \$	
12					\$	-		\$	-		<b>-</b>	0.00% \$	
13					\$	-		\$	-		<b>-</b>	0.00% \$	-
14					\$	-		\$	-	:	\$ -	0.00% \$	
15					\$	-		\$	-	:	-	0.00% \$	
16					\$	~		\$	-	1	-	0.00% \$	-
17	Field Orders				\$	-		\$	-		\$ -	0.00% \$	-
18					\$	-		\$	-		\$ -	0.00% \$	-
	CHANGE ORDER No.				\$	-		\$	-		<b>-</b>	0.00%  \$	-
					\$	-		\$	-		\$ -	0.00% \$	-
	Total Authorized Amount (in	cluding approv	ved Change Order)		\$	-		\$	-		\$ -	Total Billed \$	-

#### SUMMARY

A. Original Contract Amount	\$ - 1	I certify that the materials	Retention and/or Escrow Payment Schedule	
B. Approved Change Order #00 Thru #00	\$ -	have been received by me in	Total Retention Required as of this billing (Item E)	\$0.00
C. Total Authorized Amount (A+B)	\$ -	the quality and quantity specified	Previous Retention Withheld in PO or in Escrow	\$0.00
D. Total Billed to Date	\$ -	ll	Add'I Amt to Withhold in PO/Transfer in Escrow:	\$0.00
E. Less Total Retention (5% of D)	\$ -	Resident Engineer	Amt to Release to Contractor from PO/Escrow:	
F. Less Total Previous Payments	\$ 			
G. Payment Due Less Retention	\$0.00	Construction Engineer		
H. Remaining Authorized Amount	\$0.00		Contractor Signature and Date:	

## **APPENDIX E**

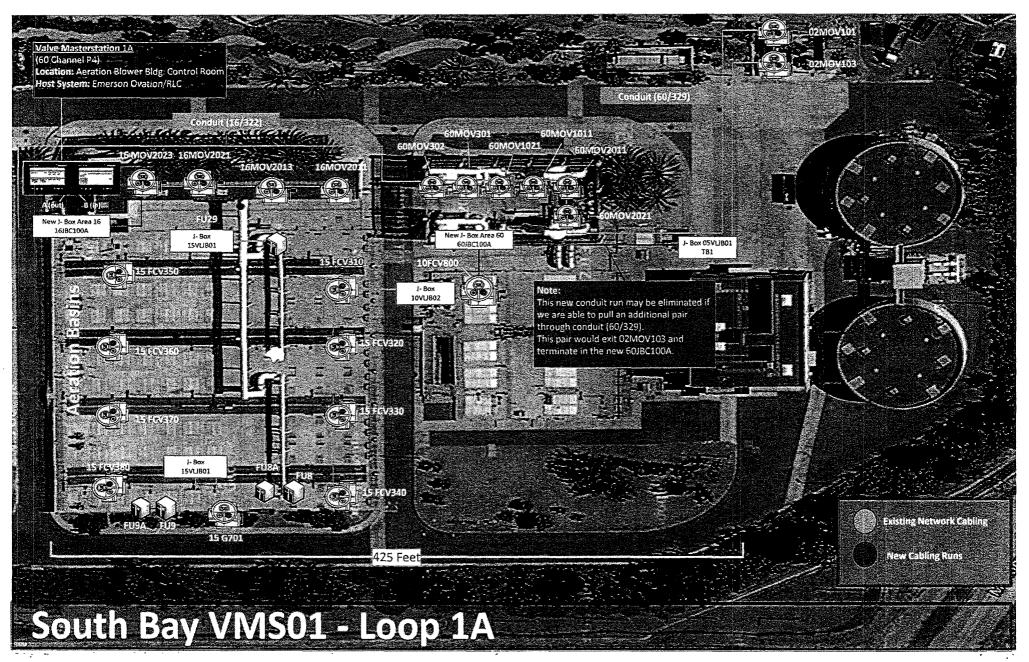
# LOCATION MAP

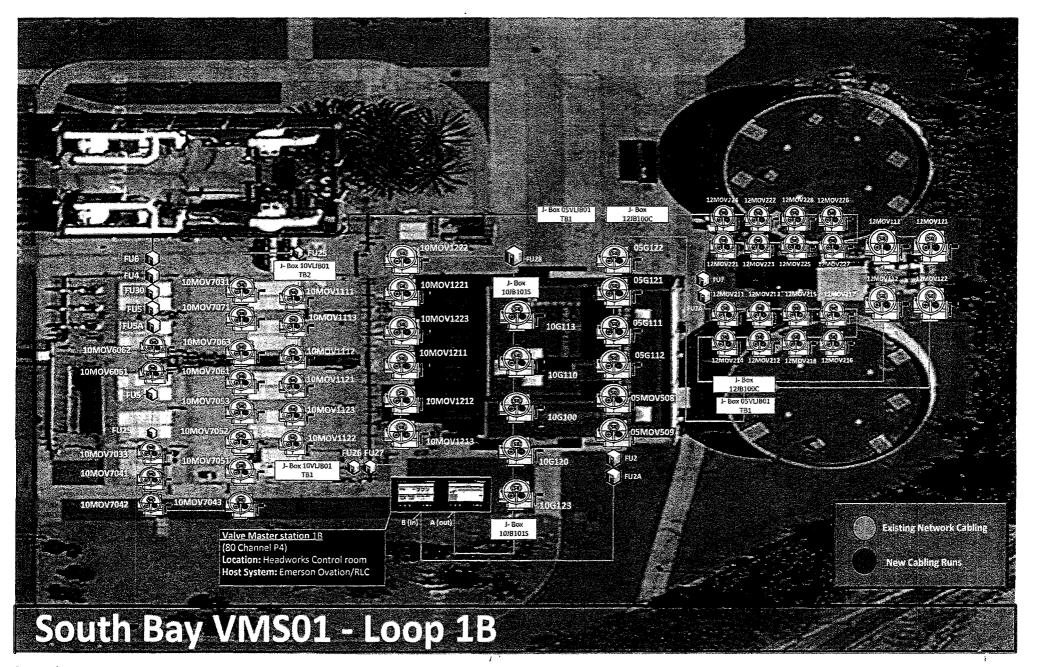


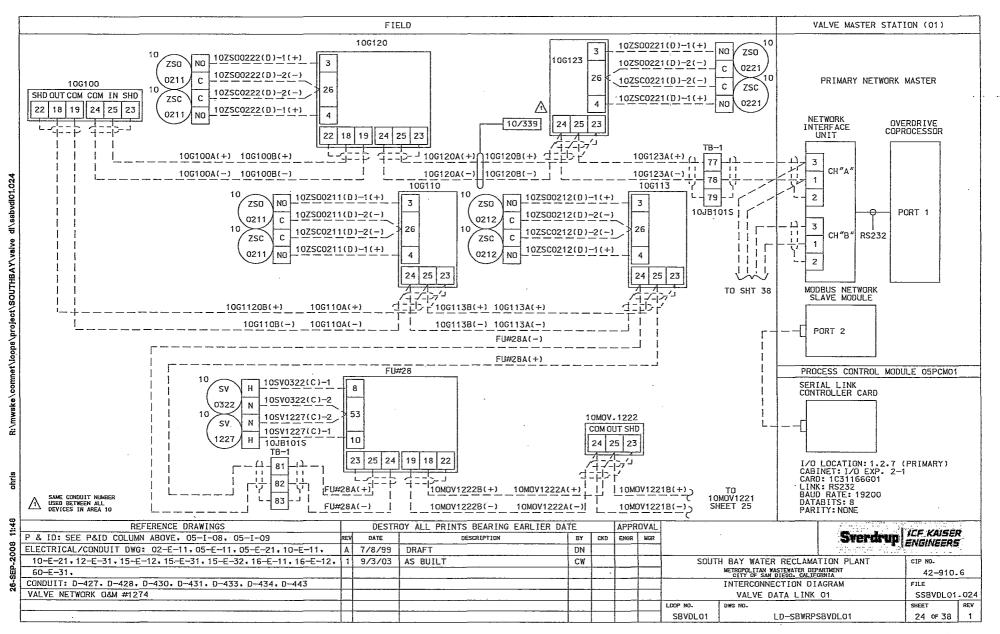
Proposal Documents SOUTH BAY WATER RECLAMATION PLANT Appendix E - Location Map South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

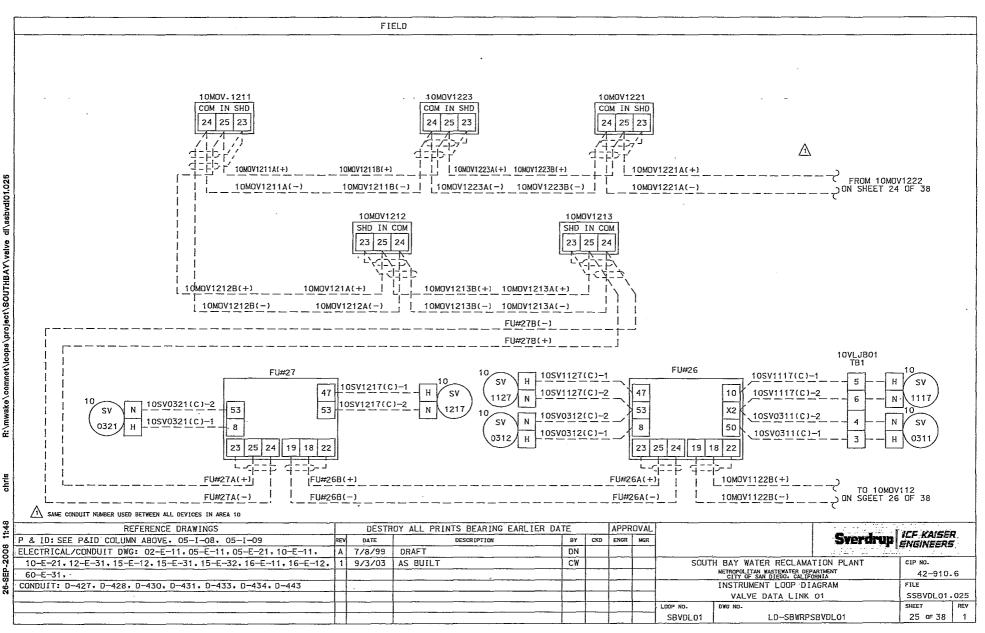
## **APPENDIX F**

# VMS LOOP AS-BUILTS AND SCHEMATICS DRAWINGS



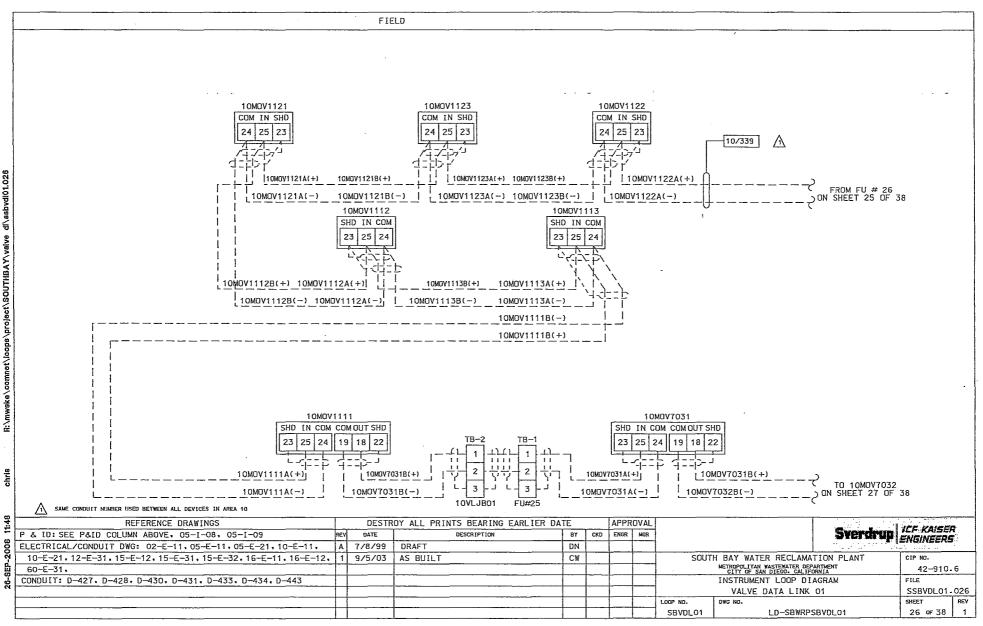






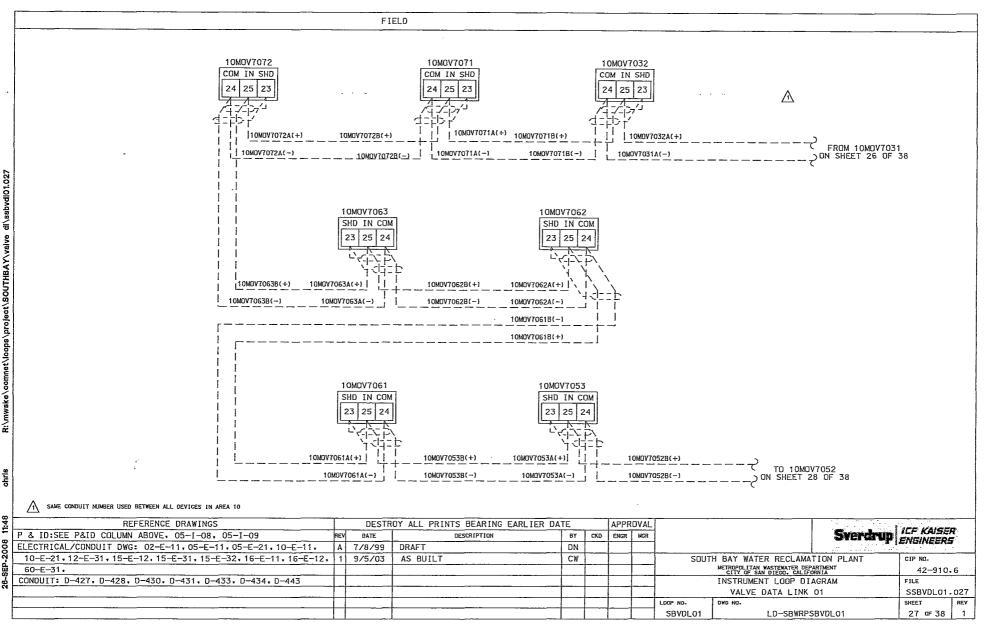
Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

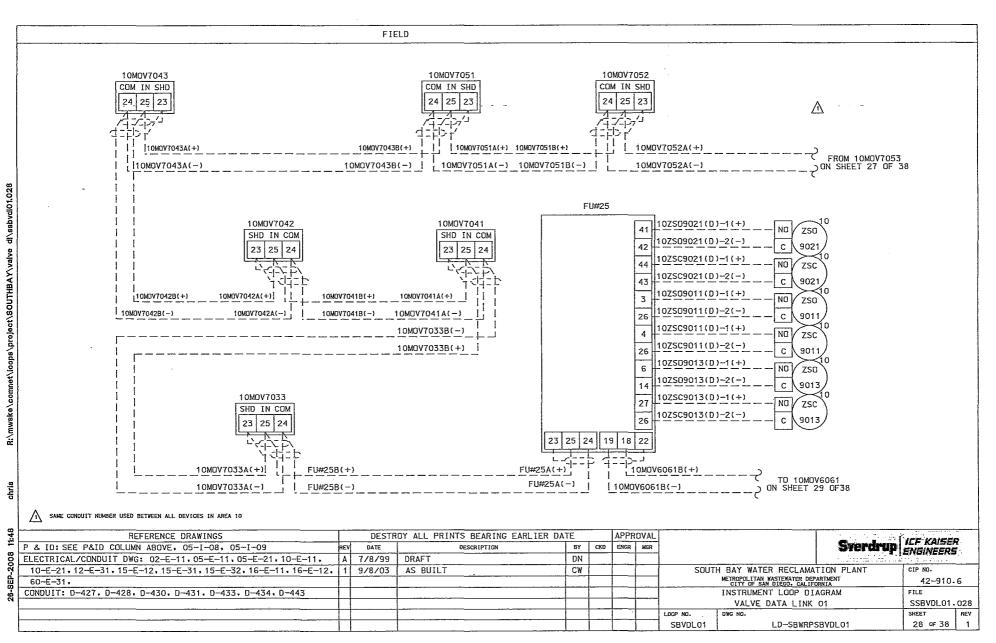


Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

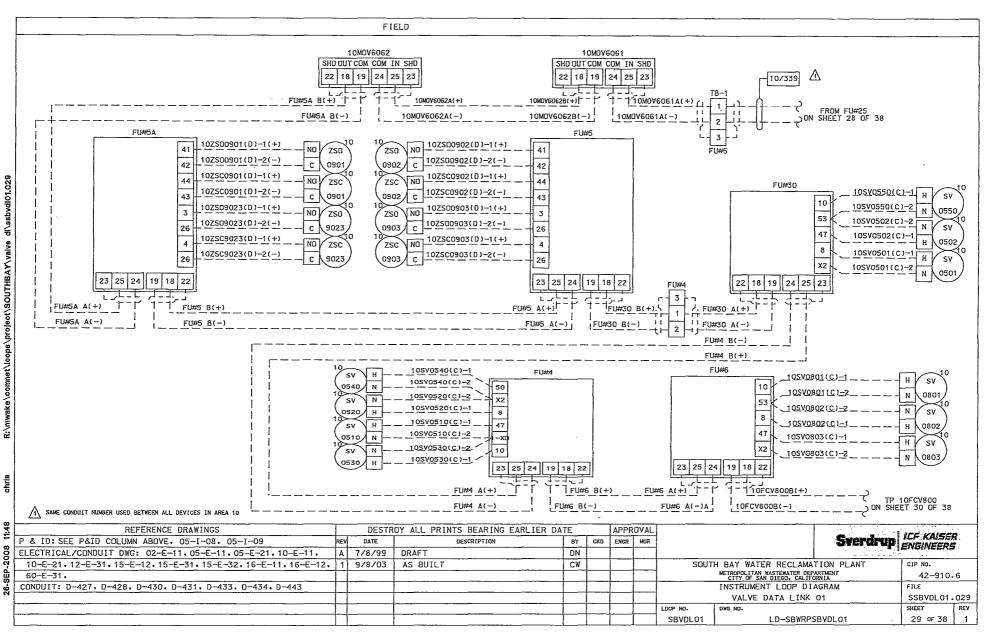


DR.SED



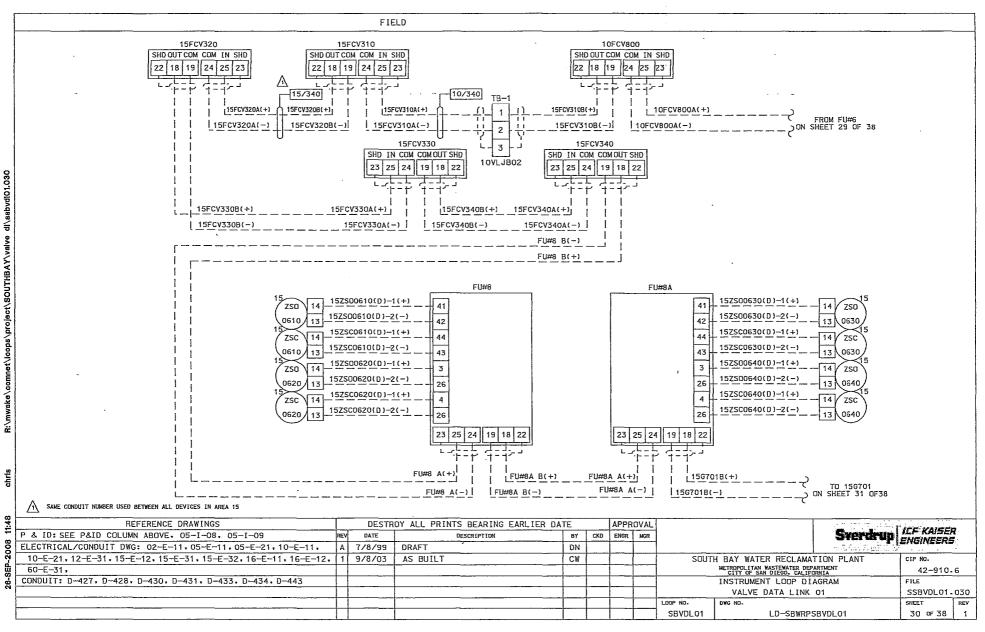
Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements



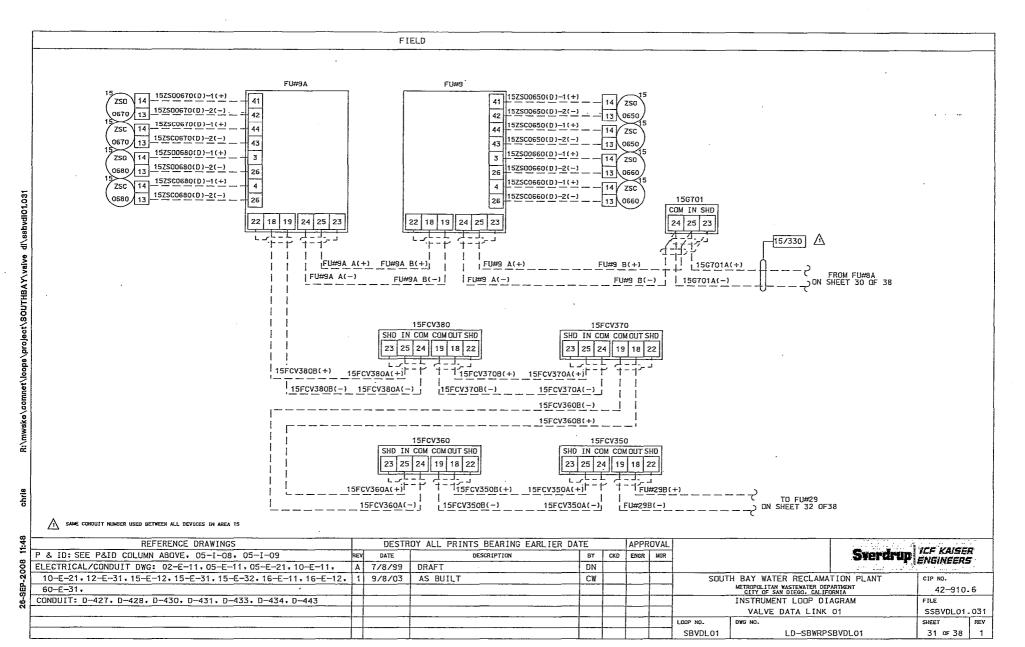
Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements



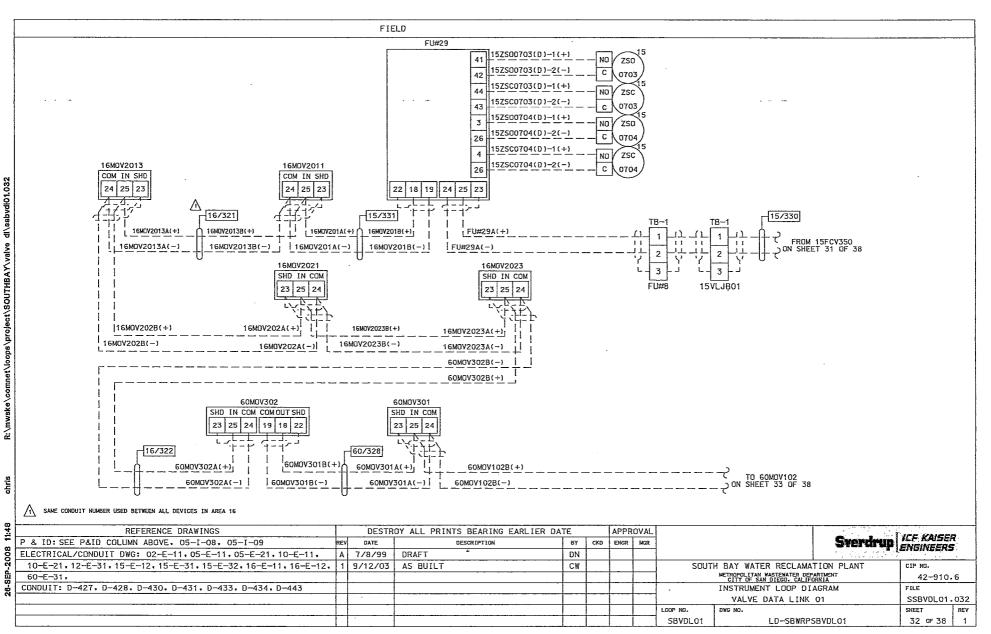
Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements



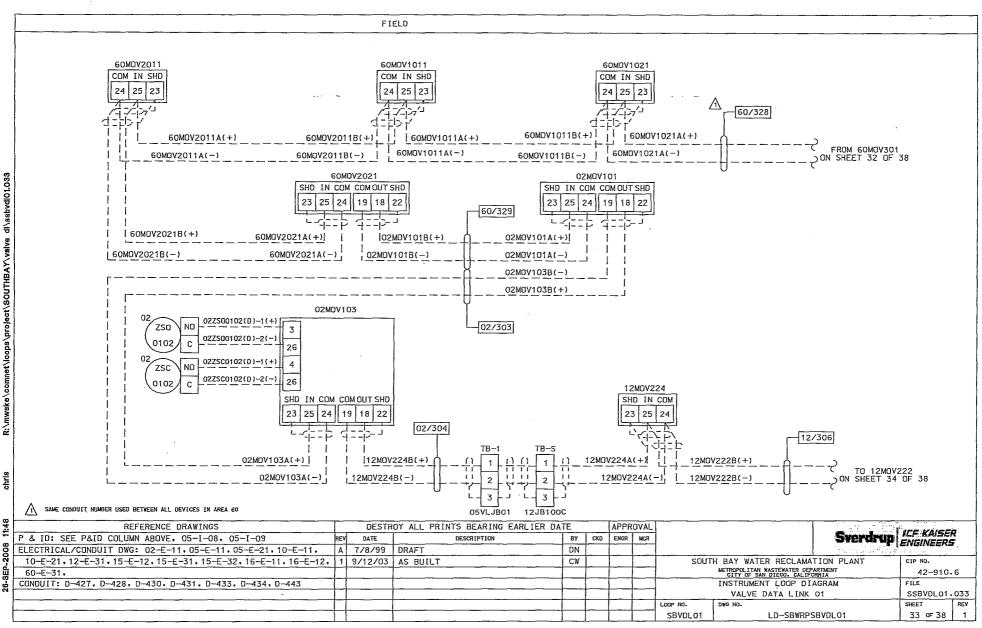
Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements



Appendix F – VMS Loop As-Builts and Schematics Drawings

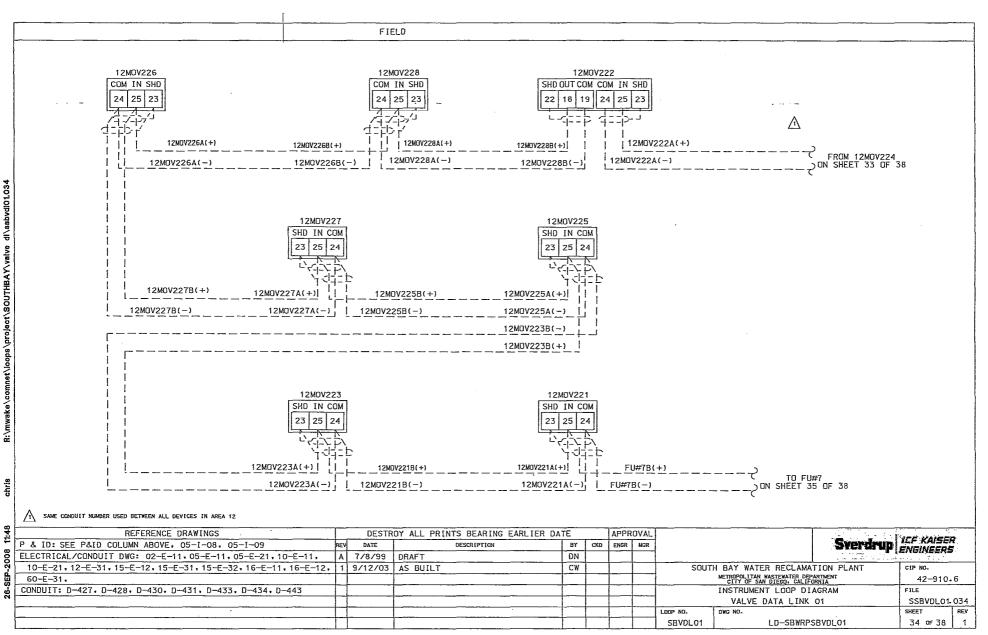
South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

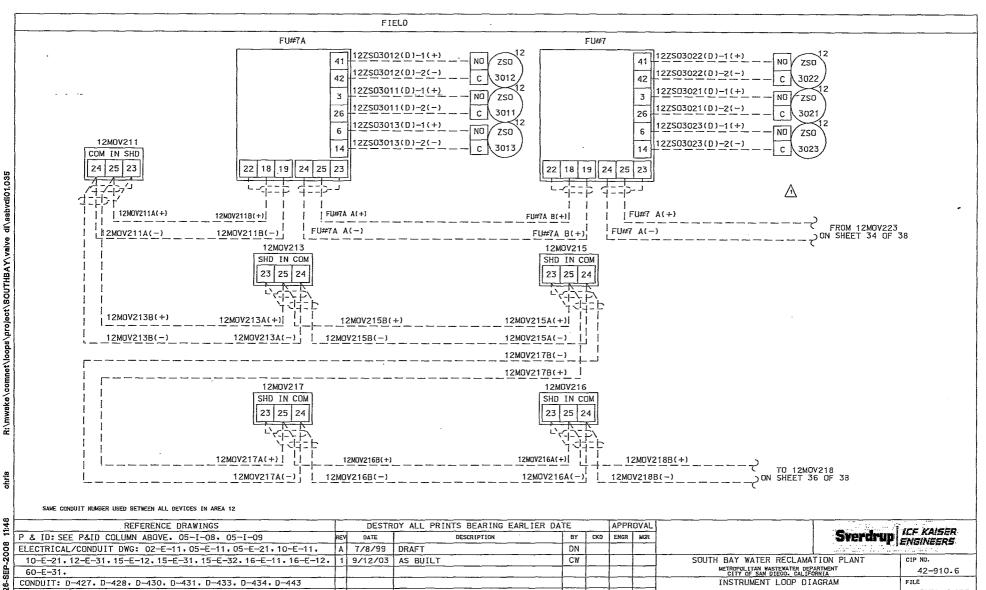


chris

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LOOP NO. DWG NO. SBVDL01

103 | Page

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1

SSBVDL01-035 SHEET

35 □F 38

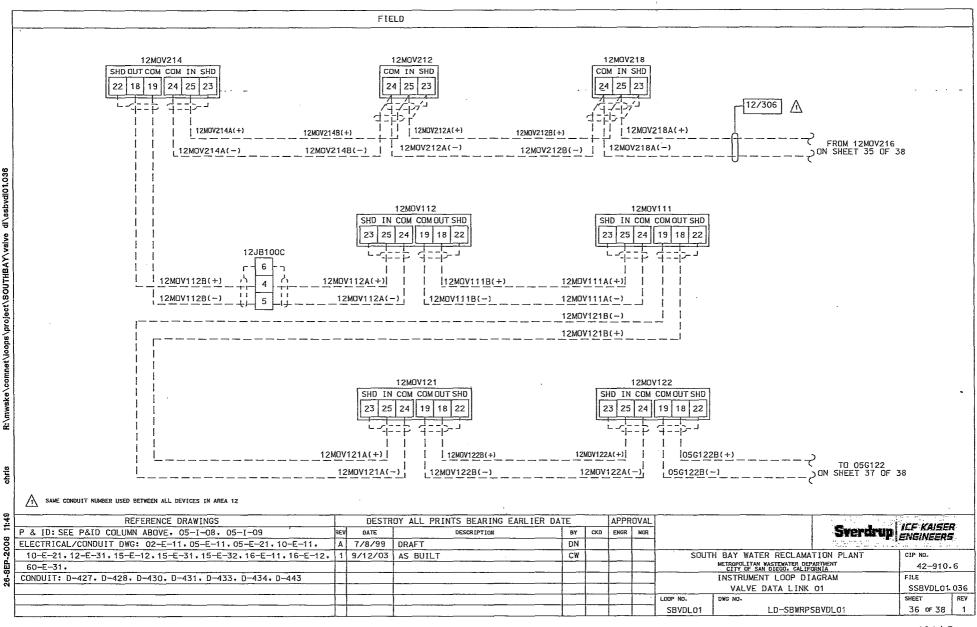
VALVE DATA LINK 01

LD-SBWRPSBVDL01

Proposal Documents

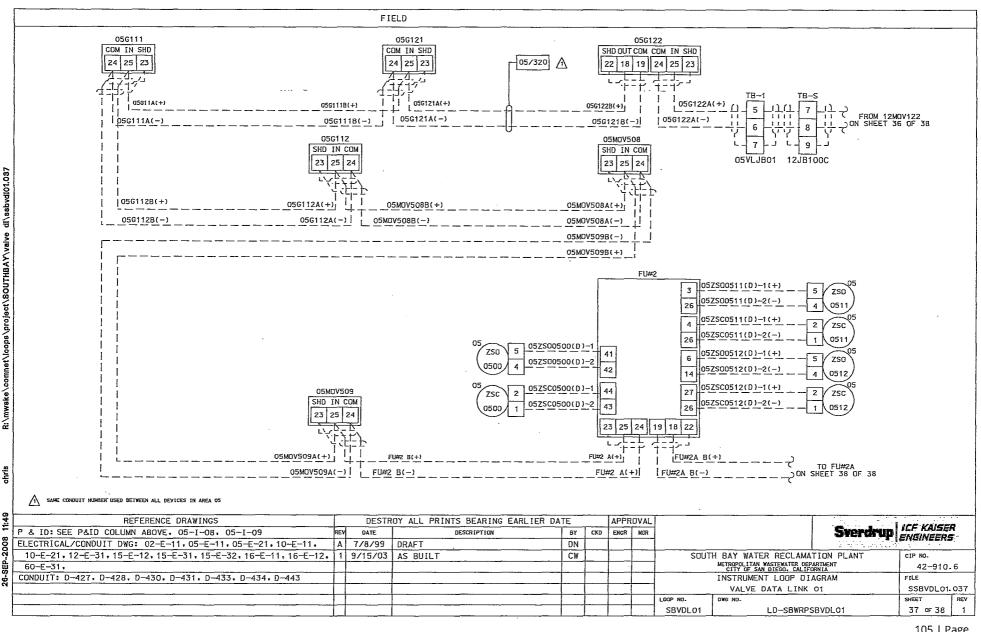
Appendix F - VMS Loop As-Builts and Schematics Drawings

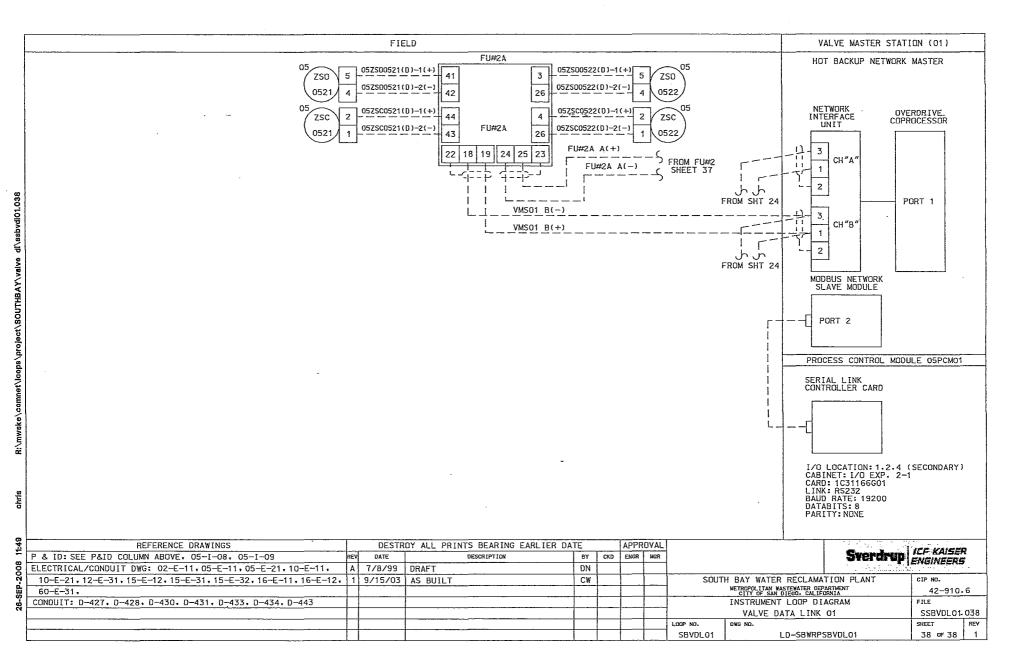
South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements



Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements





Proposal Documents Appendix F – VMS Loop As-Builts and Schematics Drawings

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

## **APPENDIX G**

# ADVANCED METERING INFRASTRUCTURE (AMI) DEVICE PROTECTION

# **Protecting AMI Devices in Meter Boxes and on Street Lights**

The Public Utilities Department (PUD) has begun the installation of the Advanced Metering Infrastructure (AMI) technology as a new tool to enhance water meter reading accuracy and efficiency, customer service and billing, and to be used by individual accounts to better manage the efficient use of water. All AMI devices shall be protected per Section 5-2, "Protection", of the 2015 Whitebook.

AMI technology allows water meters to be read electronically rather than through direct visual inspection by PUD field staff. This will assist PUD staff and customers in managing unusual consumption patterns which could indicate leaks or meter tampering on a customer's property.

Three of the main components of an AMI system are the:

#### A. Endpoints, see Photo 1:

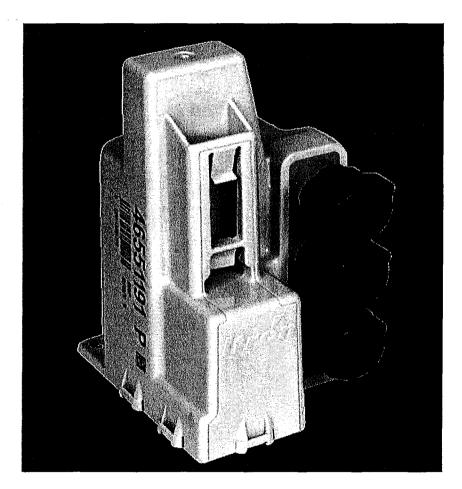


Photo 1

B. AMI Antenna attached to Endpoint (antenna not always required), see Photo 2:

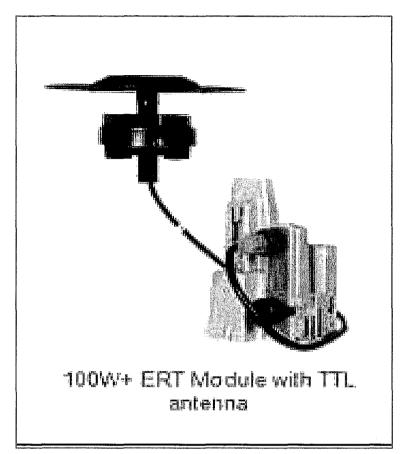
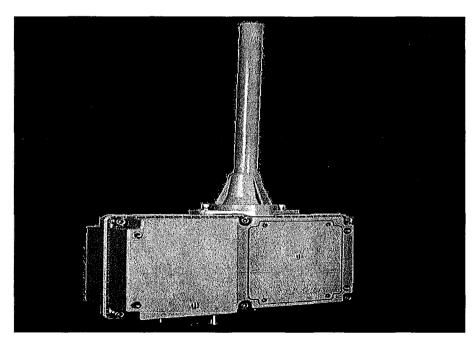


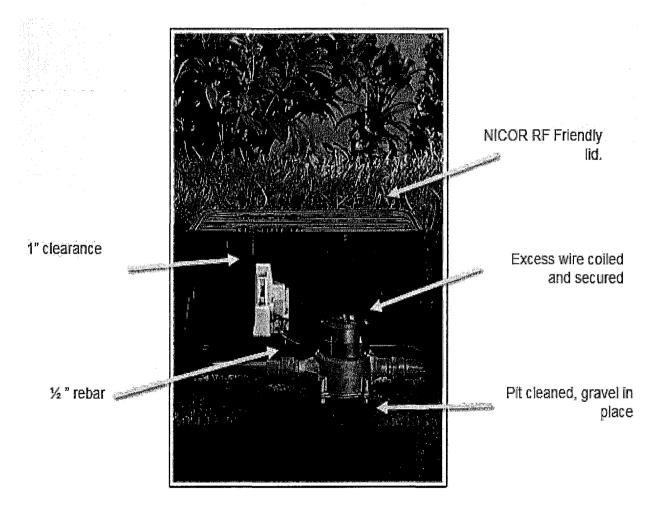
Photo 2

Network Devices, see Photo 3:

Photo 3



AMI endpoints transmit meter information to the AMI system and will soon be on the vast majority of meters in San Diego. These AMI devices provide interval consumption data to the PUD's Customer Support Division. If these devices are damaged or communication is interrupted, this Division will be alerted of the situation. The endpoints are installed in water meter boxes, coffins, and vaults adjacent to the meter. A separate flat round antenna may also be installed through the meter box lid. This antenna is connected to the endpoint via cable. The following proper installation shall be implemented when removing the lid to avoid damaging the antenna, cable, and/or endpoint. Photo 4 below demonstrates a diagram of the connection:



# Photo 4

The AMI device ERT/Endpoint/Transmitter shall be positioned and installed as discussed in this Appendix. If the ERT/Endpoint/Transmitter is disturbed, it shall be re-installed and returned to its original installation with the end points pointed upwards as shown below in Photo 5.

# The PUD's code compliance staff will issue citations and invoices to you for any damaged AMI devices that are not re-installed as discussed in the Contract Document

Photo 5 below shows a typical installation of an AMI endpoint on a water meter.

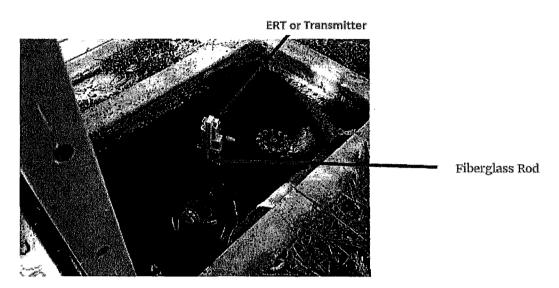
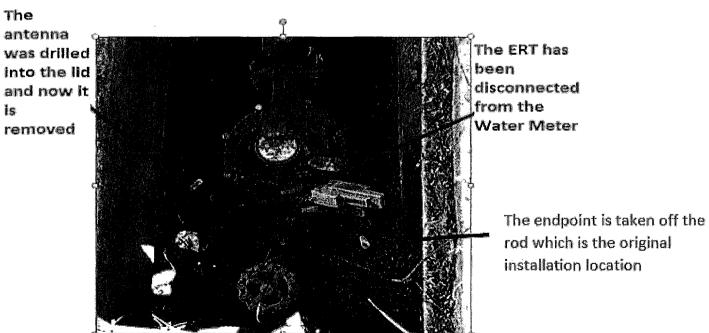


Photo 5

Photo 6 below is an example of disturbance that shall be avoided:



# Photo 6

**You are responsible when working in and around meter boxes.** If you encounter these endpoints, use proper care and do not disconnect them from the registers on top of the water meter. If the lid has an antenna drilled through, do not change or tamper with the lid and inform the Resident Engineer immediately about the location of that lid. Refer to Photo 7 below:



Photo 7

Another component of the AMI system are the Network Devices. The Network Devices are strategically placed units (mainly on street light poles) that collect interval meter reading data from multiple meters for transmission to the Department Control Computer. **If you come across any of these devices on street lights that will be removed or replaced (refer to Photos 8 and 9 below), notify AMI Project Manager Arwa Sayed at (619) 362-0121 immediately.** 

Photo 8 shows an installed network device on a street light. On the back of each Network Device is a sticker with contact information. See Photo 9. **Call PUD Water Emergency Repairs at 619-515-3525 if your work will impact these street lights.** These are assets that belong to the City of San Diego and you shall be responsible for any costs of disruption of this network.

Photo 8

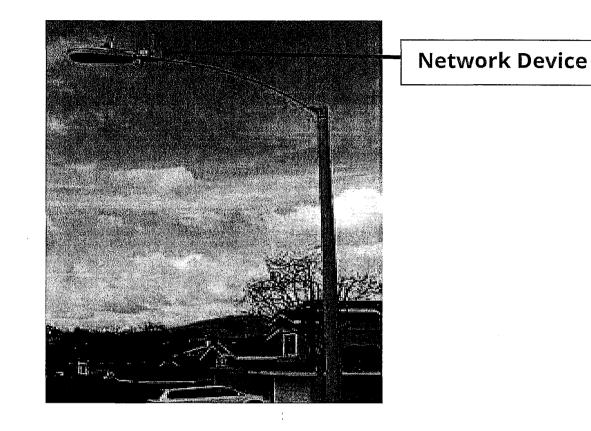
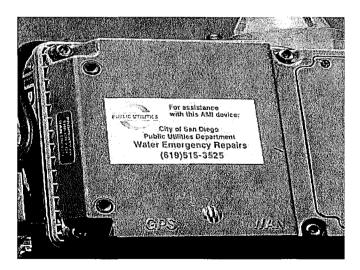


Photo 9



If you encounter any bad installations, disconnected/broken/buried endpoints, or inadvertently damage any AMI devices or cables, notify the Resident Engineer immediately. The Resident Engineer will then immediately contact the AMI Project Manager, Arwa Sayed, at (619) 362-0121.

# ATTACHMENT F

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# ATTACHMENT G

# **EVALUATION AND SELECTION**

# **EVALUATION AND SELECTION**

Proposals will be ranked according to the criteria described below:

# 1. Addenda to this RFP – Pass / Fail

- 1.1. The Proposer shall acknowledge each addendum issued in connection with this RFP, by listing all issued addenda on an Addenda Acknowledgement sheet to be submitted with the Proposal. Failure to acknowledge all issued addenda may result in the Proposal being considered **non-responsive** and ineligible for further consideration.
- 1.2. Including copies of addenda with the Proposal shall not constitute acknowledgement of issued addenda.

# 2. Proposer Exceptions to this RFP – Pass / Fail

2.1. If the Proposer takes exception to any portion of the contract terms, the Proposer must identify and explain to the City in writing the basis for the exception. The Proposer must submit any claimed exception a minimum of 10 calendar days prior to the due date for submission of Proposals. Exceptions taken after the submission period for this RFP may be cause for rejection of the Proposal as being **non-responsive**.

## 3. Summary of Proposal (5 Points Max)

3.1. Each Proposer must submit a one to two page summary of its Proposal.

## 4. **Project Team (5 Points Max)**

- 4.1. Describe the proposed management plan for this Project. Describe the qualifications of key proposed construction and technical personnel, and subcontractors, from applicable fields including the following:
  - 4.1.1 Mechanical
  - 4.1.2 Electrical
  - 4.1.3 Instrumentation and Controls

## 5. Technical Approach and Design Concept (25 Points Max)

5.1. Describe in detail the proposed design concept for this Project. Include detailed descriptions, conceptual design drawings, schematics, a list of major equipment, and any other information deemed necessary to allow the City to make an informed evaluation of the Proposer's technical approach. The completeness and technical merit of the design concept will be evaluated.

The following elements shall be included in this Technical Proposal:

- 5.1.1. The City will select a Proposer that will offer the best value for the design and construction of South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements per the scope shown in Attachment 'A' and the requirements of this contract. The Work and Services required of the Proposer include those during design, construction, and startup of the Project. The Proposer shall provide all management, supervision, labor, services, temporary services, equipment, tools, supplies, and any other item of every kind and description required for the complete design and construction, of the Project, as described in Attachment 'A'.
- 5.1.2. The Project Manager will assemble a team which will evaluate the proposals and utilize the point system described below to rank the Proposer. The Proposers will be notified in writing of the City's final decision. Selection of the Proposer will be based on the following criteria:
- 5.1.3. Project Implementation (6 points): Include a statement of work that describes the work to be accomplished and any deliverables; each task description should be written to facilitate evaluation and acceptance without the need for major rewrites prior to incorporation into the resulting contract.
- 5.1.4. Instrumentation and Controls & Coordination with City Staff (6 points): Describe and layout a plan for a successful I&C results and your coordination with City Operations and Maintenance.
- 5.1.5. Milestone/Schedule (4 points): Develop a program milestone chart which includes a detailed list of tasks and subtasks, and the duration of each.

## 6. Construction Plan (25 Points Max)

- 6.1. Describe the proposed construction plan for this Project, including the following, at a minimum:
  - 6.1.1. Construction approach and methods
  - 6.1.2. Plan for operation of facility during construction
  - 6.1.3. Plan for phasing of construction activities
  - 6.1.4. General plan for functional testing and start-up.
  - 6.1.5. Proposed safety program
  - 6.1.6. Proposed emergency response plan
  - 6.1.7. Proposed construction schedule

# 7. Equal Employment and Contracting Opportunity (25 Points Max)

- 7.1. Failure to submit the required EOCP information will result in Proposal being determined as **non-responsive**.
- 7.2. Subcontractor Documentation
  - 7.2.1. The Proposer shall, at a minimum, provide with its Price Proposal a listing of at least 3 of the largest Subcontractors (constructors only) for the Project and all other Subcontractors (design professionals, etc.) that are known at the time it submits its Proposal using form AA05 and AA25. **Note:** Subcontractors include design professionals, as well.
  - 7.2.2. Work which requires Subcontractors that are not listed by Proposer at time of Award shall be let by Proposer in accordance with a competitive bidding process performed solely at Proposer's expense. Proposer shall provide public notice of the availability of the Work to be subcontracted, obtain competitive bids, and provide a fixed date and time on which the subcontracted work will be awarded. Subcontractors bidding on subcontracts pursuant to this provision shall be afforded the protection of all applicable laws, including Public Contract Code sections 4100 through 4114, inclusive.
  - 7.2.3. The Proposer may select Subcontractors and Suppliers in one of 3 competitive ways i.e., lowest responsible bidder, best value for price and qualifications, or highest qualifications. Prior to construction NTP, the Proposer shall do the following:
    - 7.2.3.1. Submit the selection method used to the City in accordance with 2-5.3, "Submittals."
    - 7.2.3.2. Pre-qualify Subcontractors and Suppliers, in a manner at least as stringent as the City's pre-qualification standards.
    - 7.2.3.3. Review the Subcontractors and Suppliers ultimately chosen to verify that that they have not been debarred and are in good standing as a licensed contractor in California.
  - 7.2.4. Open all Subcontract bids and provide to the City one copy without reservation or redaction. All records relevant to the award and performance of Subcontractors and Suppliers shall be public and provided to the City upon request and without redaction. The City may administer bidding itself for Subcontractors and Suppliers, or to direct the bidding procedures to be used by the Proposer.
  - 7.2.5. The Proposer may use its corporate-generated subcontractor agreement to retain Subcontractors or Suppliers, provided the subcontractor agreement contains the terms required to be included in Subcontracts by this Contract.

7.2.6. The points will be awarded according to the chart below, based upon actual subcontract award amounts, as set forth in the price proposals.

	OUTCOME	MAXIMUM POSSIBLE POINTS			
1	5% - 9% participation SLBE, ELBE or DVBE	5			
2	10%-14%participation SLBE, ELBE or DVBE	10			
3	15%-19% participation SLBE, ELBE or DVBE	15			
4	20%-24% participation SLBE, ELBE or DVBE	20			
5	25% participation SLBE, ELBE or DVBE	25			
	In no case the points shall exceed 25.				

## 8. Presentation and Interview (10 Points Max)

- 8.1. Project Team Experience
- 8.2. Technical Approach Project Management
- 8.3. Construction Plan Project Management
- 8.4. Technical Approach and Construction Plan to Address Challenges
- 8.5. EOCP Commitment

# 9. Reference Checks (5 Points Max)

3 references will be required.

# **TOTAL POINTS: 100**

## 10. Review of Technical Proposal

- 10.1. Following the receipt of the Technical Proposal, the City anticipates allotting 3 weeks for review of the Technical Proposals. At City's discretion, City may choose to seek clarifications about the proposal in a form of writing or presentation, and give an opportunity for the Design/Builder to elaborate on significant items in the proposal.
- 10.2. Subsequent to receipt, the City will provide written notice of the schedule for technical presentations. The purpose of the presentations is to allow the Panel to ask questions and to seek clarifications about the Proposal. It also provides an opportunity for the Design-Builders to elaborate on and highlight significant parts of their Proposals. This schedule will be on a random draw basis and has no bearing on the potential for award or other significance.

- 10.2.1. Interviews will consist of thirty (30) minute presentations by each Design-Builder; and (30) minutes for questions and answers. The presentations shall be given by the Design-Builders' key personnel who will be continuously involved on site or in San Diego in proportion to their level of involvement.
- 10.2.2. The Design-Builders are responsible for bringing any and all equipment and materials that are required for the presentation. The City will not provide any equipment or materials for presentations.

# 11. Final Selection Based on the Lowest Price for an Acceptable Design

- 11.1. The City will select a Design-Builder who offers the lowest price for an acceptable design and construction plan of the Project per the scope described in Attachment A and in accordance with the requirements of this solicitation. The Panel will use the point system described herein to evaluate the acceptability of the Proposals. Only Proposals scored at 80 points or higher will be deemed acceptable. The selected Design-Builder will then be chosen based on the lowest price.
- 11.2. The Design-Builder must demonstrate that the complete design and construction can be accomplished for the Contract Price.

# ATTACHMENT H

# **PRICE FORMS**

#### PRICE PROPOSAL FORM

The Design-Builder agrees to the design and construction of **South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements.**, for the City of San Diego, in accordance with these contract documents for the lump sum prices listed below. The Design-Builder guarantees the proposed prices for a period of 120 Days from the date Proposals are due. The duration of the price guarantee may be extended as required by mutual consent.

lte mN o.	NAICS CODE	Description	Quantity	D*	Unit	Unit Price	Extension
		BASE PROPO	SAL				
1	238210	Bonds (Payment and Performance)	1		LS		\$12,383.00
2	541330	Engineering and Design Services	1	D	LS	$\mathbf{>}$	\$119,460.00
3		City Contingency	1		AL	$\mathbf{>}$	\$32,412
4	541330	Water Pollution Control Plan Development (WPCP)	1		LS		\$ 1,920.00
5	237990	Water Pollution Control Plan Development (WPCP)	1		LS		\$900.00
6	238990	Disposal of Class I Regulated Waste Material	2		TON	$\geq$	\$5,170.00
7	238290	Field Construction	1		LS	$\triangleright$	\$ 1,588,568.00
TOTAL DESIGN-BUILD BASE PROPOSAL (ITEMS NO 1 THROUGH 7 INCLUSIVE <b>): \$</b>					\$1,760,813.00		

\* Design Element (For City Use)

March 10, 2017 ADDENDUM "2" South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements Page 6 of 8

Total Price for Design-Build Proposal, (items 1 through 7, inclusive) amount written in words:

One Million Seven Hundred Sixty Thousan	d Eight Hundred Thirteen Dollars				
Design-Builder:_Baker Electric, Inc.					
Title: CFO	Fitle: CFO				
Signature: Brian Miliate	Signature: Brian Miliate				
The names of all persons interested in the	e foregoing proposal as principals are as follows:				
Ted N. Baker, President	Mark Baker, Treasurer				
Ted N. Baker, Secretary	Brian Miliate, CFO				
Ted N. Baker, Manager	No Corporate Vice President				

IMPORTANT NOTICE: If Design-Builder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Design-Builder or other interested person is an individual, state first and last names in full.

### NOTES:

- A. The Contract Price to be used in the selection process as described in Attachment G of the RFP will be determined by the base proposal alone.
- B. After the selected Design-Builder has been determined, the City may, at its sole discretion, award the contract for the Base Proposal alone or for the Base Proposal plus one or more alternates.
- C. Proposals shall not contain any recapitulation of the Work. Conditional Proposals may be rejected as being **non-responsive**. Alternative proposals will not be considered unless called for.
- D. Subcontractors' License Numbers must be filled in. Failure to provide the information specified may deem the bidder **non-responsive**.
- E. Blank spaces must be filled in. The Design-Builder's failure to submit a price may render the Proposal non-responsive and ineligible for award.
- F. Unit prices shall be entered for all unit price items. Unit prices shall not exceed two (2) decimal places. If the Unit prices entered exceed two (2) decimal places, the City will only use the first two digits after the decimal points without rounding up or down.
- G. All extensions of the unit prices bid will be subject to verification by the City. In the case of conflict between the Product of the Quantity x Unit Price and the written Extension, the Product shall govern.

In the case of conflict, between the sum of the Extensions and the Bid Total, the sum of the Extensions shall govern.

#### DESIGN-BUILD LIST OF SUBCONTRACTORS TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the Public Contract Code (PCC), The Design-Builder is to list below the name and address of each Subcontractor who will perform work, labor, render services or specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of0.5% of the Design-Builder's total Bid. The Design-Builder is to list below the portion of the work which will be done by each Subcontractor. The Design-Builder is to list only one Subcontractor for each portion of the Work. The **DOLLAR VALUE** of the total Bid to be performed by the Subcontractor is to be stated for all Subcontractors listed. Failure to comply with the listing of the Subcontractors as specified may result in the Bid being rejected as non-responsive and ineligible for award. The Design-Builder is to list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, WoSB, SDB, HUBZone, and SDVOSB Subcontractors that Design-Builder are seeking recognition towards achieving any subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTION OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSBO	WHERE CERTIFIEDØ	CHECK IF JOINT VENTURE PARTNERSHIP
Name:       Tharsos, Inc.         Address:       7839 University Avenue #210         City:       La Mesa,       State:         Zip:       91942       Phone:(619)464-1261         Email:       mlopez@tharsos.com	Construction	980621	Mechanical Support	\$848,294.00 Subcontract includes value of Actuators listed on Page 126	ELBE Certificate # 10TH0091	CITY	N/A
Name: Electrical Design, Inc. (EDI)         Address: 9565 Waples Street #205         City: San Diego       State: CA         Zip: 92121       Phone: (858) 869-8747         Email: boker@edi-engineers.com	Designer	P.E. Licenses: Rodelio Dantes: E14116 Tim Cooper: C38018 Control Systems: CS7490	Planning Design Documents	\$119,500.00	ELBE Certificate # 12ED0779	CITY	N/A

D As appropriate, Design-Builder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

	Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
	Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
	Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
	Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
	Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
	Service-Disabled Veteran Owned Small Business	SDVOSB		
Ð	As appropriate, Design-Builder shall indicate if Subcontractor is co	ertified by:		
	City of San Diego	CITY	State of California Department of Transportation	CALTRANS
	California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
	State of California's Department of General Services	CADoGS	City of Los Angeles	LA
	State of California	CA	U.S. Small Business Administration	SBA

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

Proposal Documents (Rev. Jan. 2017) Attachment H – Form AA05 – Design-Build List of Subcontractors South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

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#### DESIGN-BUILD NAMED EQUIPMENT/MATERIAL SUPPLIER LIST TO BE INCLUDED IN THE PRICE PROPOSAL ONLY

For credit calculations for City-funded contracts, see Chapter 11 in The WHITEBOOK. For non-City funded contracts, refer to the Funding Agency Provisions. If no indication of the supplier, manufacturer, or non-supplier is provided, listed firm will receive no credit for purpose of calculating the Subcontractor Participation Percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIEDØ
Name: Rotork Controls, Inc.         Address: 1460 Cader Lane, Suite A         City: Petaluma       State: CA         Zip: 94954       Phone: (760)815-0137         Email: tom.roberts@rotork.com	Actuators	\$0.00 Acutators are shown under Tharsos, Inc. below	No	Yes	N/A	N/A
Name:Tharsos, IncAddress:7839 University Avenue #210City:La MesaState:CAZip:91942Phone:(619) 464-1261Email:mlopez@tharsos.com	Actuators	\$681,424.00 Value of Acutators is included in Subcontract Value shown on Page 125	Yes	No	ELBE Certificate # 10TH0091	CITY

O As appropriate, Design-Builder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

Ø As appropriate, Design-Builder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBÁ

The Design-Builder will not receive any subcontracting participation percentages if the Design-Builder fails to submit the required proof of certification.

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# **ATTACHMENT I**

# **CERTIFICATIONS AND FORMS**

The Proposer, by submitting its electronic proposal, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms and affidavits submitted as part of this bid are true and correct.

### **DESIGN-BUILD PROPOSAL**

- 1. The undersigned The Design-Builder proposes and agrees, if this Proposal is accepted, to enter into an agreement with the City in the form included in the Contract Documents to perform the Work as specified or indicated in said Contract Documents entitled the South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements Design - Build Contract
- 2. The Design-Builder accepts all of the terms and conditions of the Contract Documents, Including without limitation those in the RFP.
- 3. This Proposal will remain open for the period stated in the RFP unless otherwise required by law. The Design-Builder will enter into an agreement within the time and in the manner required in the RFP and will furnish the insurance certificates, Payment Bond, and Performance Bond required by the Contract Documents.
- 4. The Design-Builder has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as The Design-Builder deems necessary.

To all the foregoing, and including all Proposal schedule(s) and information required of the Design-Builder contained in this Proposal Form, said The Design-Builder further agrees to complete the Work and Services required under the Contract Documents within the Contract Time stipulated in said Contract Documents, and to accept in full payment therefore the Contract Price based on the Total Proposal Price(s) named in the aforementioned Proposal schedule(s).

Dated:\_\_\_\_April, 05, 2017

The Design-Bullder: Baker Electric, Inc.

By: Brian Miliate

(Signature)

Title: CFO

Proposal Documents (Rev Nov. 2016) Attachment I – Design-Build Proposal South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

### PROPOSAL

#### **Design-Builder's General Information**

To the City of San Diego:

Pursuant to the "Request for Proposal", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this proposal is not made in the Interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the proposal is genuine and not collusive or sham; that the proposer has not directly or indirectly induced or solicited any other proposer to put in a false or sham proposal, and has not directly or indirectly colluded, conspired, connived, or agreed with any proposer or anyone else to put in a sham proposal, or that anyone shall refrain from proposing; that the proposer has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price of the proposer or any other proposer, or to fix any overhead, profit, or cost element of the proposal price, or of that of any other proposer, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the proposal are true; and, further, that the proposer has not, directly or indirectly, submitted his or her proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, proposal depository, or to any member or agent thereof to effectuate a collusive or sham proposal. The undersigned proposer(s) further warrants that proposer(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Proposal Documents therefore, and that by submitting said Proposal Documents as its proposal, proposer(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Proposal Documents,

#### IF A SOLE OWNER OR SOLE CONTRACTOR SIGN HERE:

(1)	Name under which business is conducted1	N/A			
(2)	Signature (Given and surname) of proprietor <u>N/A</u>				
(3)	Place of Business (Street & Number) N/A	L			
(4)	City and State <u>N/A</u>		Zip Code	N/A	
(5)	Telephone No. <u>N/A</u>	Facsimile No	N/A		
(6)	Email AddressN/A				

Proposal Documents (Rev. Nov. 2016) Attachment I – Design-Builder's General Information South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

### IF A PARTNERSHIP, SIGN HERE:

.

(1) Name under which business is conducted <u>N/A</u>	
(2) Name of each member of partnership, indicate charac special (limited):	ter of each partner, general or
N/A	
(3) Signature (Note: Signature must be made by a general p	artner)
N/A	
Full Name and Character of partner	
N/A	
(4) Place of Business (Street & Number) <u>N/A</u>	
(5) City and State <u>N/A</u>	
(6) Telephone No. <u>N/A</u> Facsimi	le No,N/A
(7) Email Address <u>N/A</u>	
A CORPORATION, SIGN HERE:	
(1) b)	ia Tua
(1) Name under which business is conducted <u>Baker Electr</u>	IC, IIIC.
(2) Signature, with official title of officer authorized to sign f	for the corporation:
	2
(Signature)	• •
Brian Miliate	
(Printed Name)	
CFO	
(Title of Officer)	(Impress Corporate Seal Here)
(3) Incorporated under the laws of the State of	a
(-,	ـــــــــــــــــــــــــــــــــــــ
oposal Documents (Rev. Nov. 2016) tachment L – Design-Builder's General Information	<b>130   Page</b>

Attachment I – Design-Builder's General Information South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements (4) Place of Business (Street & Number) <u>1298</u> Pacific Oaks Place

(5)	City and State	Escondido,	Zip	Code	CA
-----	----------------	------------	-----	------	----

\_\_\_\_\_ Facsimile No.(760)745-0321 (6) Telephone No. <u>(760)74</u>5-2001

(7) Email Address \_\_mfarrell@baker-electric.com

### THE FOLLOWING SECTIONS MUST BE FILLED IN BY ALL PROPOSERS:

In accordance with the "Request for Proposal", the proposer holds a California State Contractor's license for the following classification(s) to perform the work described in these specifications:

B, C10 LICENSE CLASSIFICATION\_\_\_\_

EXPIRES 08/31/2017 LICENSE NO. 161756

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000000466

This license classification must also be shown on the front of the proposal envelope. Failure to show license classification on the proposal envelope may cause return of the proposal unopened.

TAX IDENTIFICATION NUMBER (TIN):

mfarrell@baker-electric.com E-Mail Address:

#### THIS PROPOSAL MUST BE NOTARIZED BELOW:

I certify, under penalty of perjury, that the representations made herein regarding my State Contractor's license number, classification and expiration date are true and correct.

Signature

5th \_\_\_\_ DAY OF April, 2017 SUBSCRIBED AND SWORN TO BEFORE ME, THIS

Notary Public in and for the County of <u>San Diego</u>, State of <u>California</u>

See ATTached

(NOTARIAL SEAL)

Proposal Documents (Rev. Nov. 2016) Attachment I - Design-Builder's General Information South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

# California Jurat with Affiant Statement

X See Attached Document (Notary to cross out II □ See Statement Below (Lines 1–6 to be complet	
12 3 45 6SIgnature of Document Signer No. 1	Signature of Document Signer No. 2 (if any)
	cate verifies only the identity of the individual who signed the the truthfulness, accuracy, or validity of that document.
State of California County of <u>San Diego</u> DANA RASMUSSEN Commission # 2147531 Notary Public - California San Diego County My Comm. Expires Apr 22, 2020	Subscribed and sworn to (or affirmed) before me on this <u>5</u> <u>M</u> day of <u>Mprcl</u> , 20 <u>17</u> , by <u>Date</u> <u>Month</u> <u>Year</u> (1) <u>Brian Milate</u> (and (2) <u>,</u> <i>Name(s) of Signer(s)</i> proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me. Signature <u>Manual Signature of Notary Public</u>
Seal Place Notary Seal Above	
Though this section is optional, completing th	PTIONAL Is information can deter alteration of the document or his form to an unintended document.
Title or Type of Document:	Document Date:
Number of Pages: Signer(s) Other Than I	Named Above:

## PERFORMANCE BOND AND LABOR AND MATERIAL MEN'S BOND

### FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

 Baker Electric, Inc.
 , a corporation, as principal, and

 Fidelity and Deposit Company of Maryland
 , a corporation authorized to do

 business in the State of California, as Surety, hereby obligate themselves, their successors and

 assigns, jointly and severally, to The City of San Diego a municipal corporation in the sum of

 One Million Seven Hundred Sixty Thousand Eight Hundred Thirteen Dollars and Zero

 Cents (\$1,760,813.00)
 for the faithful performance of the annexed contract, and in the sum of

<u>Cents (\$1,760,813.00)</u> for the benefit of laborers and materialmen designated below.

#### **Conditions:**

If the Principal shall faithfully perform the annexed contract **South Bay Water Reclamation Plant Loop Control System & Valve Master Station**, Bid No. **K-17-1383-DB1-3-A** San Diego, California then the obligation herein with respect to a faithful performance shall be void; otherwise it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for or performing labor in the execution of this contract, and shall pay all amounts due under the California Unemployment Insurance Act then the obligation herein with respect to laborers and materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants, (iii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives notice of same.

# PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND (Cont.)

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

August 21, 2017 Dated\_\_\_

Approved as to Form

Baker Electric, Inc.

Principal

Ted N. Baker, President Printed Name of Person Signing for Principal

Mara W. Elliott, City Attorney

**Deputy City Attorney** 

Fidelity and Deposit Company of Maryland

Surety

By\_

Lawrence F. McMahon Attorney-in-fact

Approved:

By:

ela Riego

Senior Contract Specialist **Public Works Department**  777 S. Figueroa Street, Ste. 3900

Local Address of Surety

Los Angeles, CA 90017

Local Address (City, State) of Surety

(213) 270-0600

Local Telephone No. of Surety

Premium \$\_\_\_\_12,608.00\_\_\_

Premium is for Contract Term & Subject to Adjustment Based on Final Contract Price 7654301 Bond No.\_\_\_\_

Proposal Documents (Rev. Nov. 2016) Attachment I - Performance and Payment Bonds South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

A notary public or other officer completing this certificate verifice only the identity of the individual who signed the document, to which this certificate is attached, and not the truthulness, accuracy or validity of that document. STATE OF CALIFORNIA County of <u>San Diego</u> on <u>AUG 21 2017</u> before me, <u>Rachel A. Mullen</u> , Notary Public, <u>Date</u> before me, <u>Rachel A. Mullen</u> , Notary Public, <u>Date</u> before me, <u>Rachel A. Mullen</u> , Notary Public, <u>Date</u>	CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189					
STATE OF CALIFORNIA         County of San Diego         On       AUG 21 2017         Data       before me, Rachel A. Mullen         Data       Insert Name of Kolary swactry as It appears on the official seat         personally appeared       Lawrence F. MoMahon         Nume(s) of Signer(s)       Nume(s) of Signer(s)         Image: Notary Public - California       Nume(s) of Signer(s)         Nume(s) of Signer(s)       who proved to me on the basis of satisfactory evidend to the weight provide to the weight in the person(b) who me mane in his/fift/Milliff subforced to the weight provide to the secure of the same in his/fift/Milliff subforced to the weight provide to the instrument.         Notary Public - California       San Diego County Data Counter Provide to the secure of the official seal.         Signature       Notary Gamm. Expire Jun 23, 2021       I certify under PENALTY OF PERJURY under the laws of the Signature (Molary Sout Above)         Place Notary Sout Above       Description of Attached Document       Signature         Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and restlachment of the form to another document.         Decarrent Date:						
County of <u>San Diego</u> on <u>AUG 21 2017</u> before me, <u>Rachel A. Mullen</u> Insent Name of Notary exactly as it appears on the official seal personally appeared <u>Lawrence F. MoMahon</u> Numo(o) of Signar(s) N						
On       AUG 21 2017 Due       before me, Rachel A. Mullen Insert Name of Notary exactly as it appears on the official seat         personally appeared       Lawrence F. McMahon         Name(s) of Signer(s)         Who proved to me on the basis of satisfactory evidence to be the person(#) whose name(#) is/figner(#)         Who proved to me on the basis of satisfactory evidence to be the person(#) whose name(#) is/figner(#) subscribed to the within instrument.         Within instrument and acknowledged to me that her/fign(#) Within instrument.         I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.         Witness my hapd and official seal.         Signature         Place Notary Seal Above         OPTIONAL         Though the information below is not required by law. it may prove valuable to persons relying on the document.         Title or Type of Document:         Document Date:         Signer(s) Other Than Named Above:         Signer(s) Other Than Named Above:         Capacity(ies) Claimed by Signer(s)         Signer is Name:         Or Jourden or Conservator         Or of ditumb here         Or of ditumb here         Or of ditumb here         Or of ditumb here	STATE OF CALIFORNIA	1				
Date       Insert Name of Notary exactly as it appears on the official seal         personally appeared       Lawrence F. McMahon         Name(s) of Signer(s)         Who proved to me on the basis of satisfactory evidence to be the person(iii) whose name(iii) isignify subscribed to the ontivulation into more intermediate the instrument and activity and the intervence of a part which instrument and activity and the instrument.         Notary Public       California to the ontivulation into more intervence of the ontivulation into another document.         Place Notary Seal Above       Signature of Notary Public Restriction into another document.         Description of Attached Document       Individual         Individual       Signer is Name:         Signer is Name:       Signer is Name:         Capacity(les) Claimed by Signer(s)       Signer is Name:	County of San Diego	<b>}</b>				
personally appeared Lawrence F. McMahon Nama(e) of Signer(e)  who proved to me on the basis of satisfactory evidence to be the person(b) whose name(b) is striff subscribed to the within instrument and acknowledged to me that he/####################################	On AUG 21 2017 before me, Rachel A					
Name(s) of Eigner(s)  Who proved to me on the basis of satisfactory evidence to be the person(M) whose name(M) is/AffM subscribed to the within instrument and acknowledged to me that he/#fMITMM executed the same in his/HIIIMM autoraced capacity(HMA, and that by his/HIIIMM autoraced capacity(HMA, autoraced capacity) autoraced and correct.  Description of Attached Document  Title or Type of Document:  Document Date:  Document Date:  Document Date:  Document Date:  Document Capacity(HMA, autoraced and capacity)  Signer's Name:  Document Date:  Document Date:  Document Date:  Document Date:  Document Capacity(HMA, autoraced and cap		reality of Hotary exactly as it appears of the binoid sea				
MACHEL A. MULLEN     Notary Public - California     San Oiego County     Commission # 2181212     My Comm. Expires Jan 23. 2021     He entity upon behalf of which the person(#)     and that by his//#/Wilk/#/signature(#)     san Oiego County     Commission # 2181212     He entity upon behalf of which the person(#)     and that by his//#/Wilk/#/signature(#)     san Oiego County     Commission # 2181212     He entity upon behalf of which the person(#)     and that by his//#/Wilk/#/signature(#)     acted, executed the instrument.     I cerify under PENALTY OF PERJURY under the laws of     the State of California that the foregoing paragraph is true     and correct.     Witness my hand and official seal.     Signature     Mached A. Mullen     OPTIONAL     Though the information below is not required by law, it may prove valuable to persons relying on the document     and could prevent fraudulent removal and reattachment of the form to another document.  Description of Attached Document  Title or Type of Document:     Document Date:     Signer's Name:     Individual     Corporate Officer — Title(s):     Partor file(s):     Partor file(s):     Orporate Officer — Title(s):	personally appeared Lawrence F. McMahon	Name(s) of Signer(s)				
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.     Witness my hand and official seal.     Signature	Notary Public - California	be the person(緣) whose name(緣) is/놹拼 subscribed to the within instrument and acknowledged to me that he/拼∰//拼/// executed the same in his///拼/////// authorized capacity(////////////////////////////////////				
Place Notary Seal Above       Signature <u>Rec.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M</u>	My Comm. Expires Jan 23, 2021	the State of California that the foregoing paragraph is true				
Place Notary Seal Above       Signature <u>Rec.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M</u>		Witness my hand and official seal.				
OPTIONAL         Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.         Description of Attached Document         Title or Type of Document:         Document Date:         Signer(s) Other Than Named Above:         Capacity(ies) Claimed by Signer(s)         Signer's Name:         Individual         Corporate Officer         Title d) General         Attorney in Fact         Trustee         Guardian or Conservator         Other:         Signer is Representing:		Signature Packa Q. Muller				
OF HONAL         Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.         Description of Attached Document         Title or Type of Document:	Place Notary Seal Above	Signature of Notary Public Rachel A. Mullen				
OF HONAL         Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.         Description of Attached Document         Title or Type of Document:						
Document Date:       Number of Pages:         Signer(s) Other Than Named Above:         Capacity(ies) Claimed by Signer(s)         Signer's Name:		w, it may prove valuable to persons relying on the document ad reattachment of the form to another document.				
Signer(s) Other Than Named Above:         Capacity(ies) Claimed by Signer(s)         Signer's Name:	Title or Type of Document:					
Signer's Name:	Document Date:	Number of Pages:				
Signer's Name: Signer's Name:   Individual Individual   Corporate Officer — Title(s): Individual   Partner Limited   General   Attorney in Fact Partner   Trustee Attorney in Fact   Guardian or Conservator Top of thumb here   Other: Other:   Signer is Representing: Signer is Representing:	Signer(s) Other Than Named Above:					
□ Individual       □ Individual         □ Corporate Officer — Title(s):       □ Corporate Officer — Title(s):         □ Partner       □ Limited □ General         ☑ Attorney in Fact       □ Partner         □ Trustee       □ Attorney in Fact         □ Guardian or Conservator       □ Top of thumb here         □ Other:       □ Other:         □ Signer is Representing:       □ Signer is Representing:	Capacity(ies) Claimed by Signer(s)					
	□ Individual         □ Corporate Officer — Title(s):         □ Partner       □ Limited □ General         ✓ Attorney in Fact       RIGHT THUMBPRIN         □ Trustee       OF SIGNER         □ Guardian or Conservator       Top of thumb here         □ Other:	□ Individual         □ Corporate Officer — Title(s):         □ Partner       □ Limited □ General         □ Attorney in Fact       RIGHT THUMBPRINT         □ Trustee       OF SIGNER         □ Guardian or Conservator       Top of thumb here         □ Other:				

#### ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **MICHAEL BOND, Vice President,** in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Lawrence F. MCMAHON, Maria GUISE and Sarah MYERS, all of San Diego, California, EACH its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 13th day of September, A.D. 2016.

ATTEST:

ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND



Vice President Michael Bond

By Mychel

Secretary Michael McKibben

State of Maryland

County of Baltimore

On this 13th day of September, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **MICHAEL BOND, Vice President, and MICHAEL MCKIBBEN, Secretary,** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Constance a. Dunn



Constance A. Dunn, Notary Public My Commission Expires: July 9, 2019

#### EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, <u>Attorneys-in-Fact</u>. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify of revoke any such appointment or authority at any time."

#### CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this \_\_\_\_\_\_ day of \_\_\_\_\_\_ AUG 21 2017, 20\_\_\_\_.



Scrald 7. Habey

Gerald F. Haley, Vice President

# TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:

Zurich American Insurance Co. Attn: Surety Claims 1299 Zurich Way Schaumburg, IL 60196-1056

#### CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

#### CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California County of	Diego )
On 8-29-17	before me, <u>Dana Rasmussen</u> , Notary Public
Date	Here Insert Name and Title of the Officer
personally appeared	Ted N Baker
	Name(s) of Signer(s)

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



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

WITNESS my hand and official seal.

Signature

Signature of Notary Public

Place Notary Seal Above

OPTIONAL -

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

	cument Document Date: Signer(s) Other Than Named Above:		
Number of Pages:	Signer(s) Other Than I	Named Above:	
Capacity(les) Claimed by S Signer's Name: Corporate Officer — Title( Partner — D Limited D Individual Attorne Trustee Guardi Other: Signer Is Representing:	s): General ay in Fact an or Conservator	Corporate Office Partner — Lli Individual Trustee Other:	er — Title(s): mited

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### NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23 UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106

# State of California County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid

# CONTRACTOR CERTIFICATION

# **DRUG-FREE WORKPLACE**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 7-13.3, "Drug-Free Workplace", of the project specifications, and that;

This company has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

. . .

# AMERICAN WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the American With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 7-13.2, "American With Disabilities Act", of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

# **CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE**

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 7-13.4, ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors whose subcontracts are greater than \$50,000 in value has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

# CONTRACTOR CERTIFICATION

# **Equal Benefits Ordinance Certification**

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

# **AFFIDAVIT OF DISPOSAL**

# (To be submitted upon completion of Construction pursuant to the contracts <u>Certificate of Completion</u>)

WHEREAS, on the \_\_\_\_\_ DAY OF \_\_\_\_\_, 2\_\_\_\_ the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

South Bay Water Reclamation Plant Loop Control System & Valve Master Station (Name of Project)

as particularly described in said contract and identified as Bid No. **K-17-1383-DB1-3-A**; SAP No. (WBS) **B-16132**; and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

**NOW, THEREFORE**, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

and that they have been disposed of according to all applicable laws and regulations.

Dated this \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_,

\_\_\_\_\_ Contractor

by

ATTEST:

State of County of

On this\_\_\_\_\_\_ DAY OF \_\_\_\_\_\_, 2\_\_\_\_\_, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared known to me to be the \_\_\_\_\_\_\_ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

Proposal Documents (Rev. Nov. 2016) Attachment I – Affidavit of Disposal South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

#### CONTRACTORS CERTIFICATION OF PENDING ACTIONS

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

#### CHECK ONE BOX ONLY.

V

 $\square$ 

The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.

The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL

Contractor Name: Baker Electric, Inc.
Certified By Brian Miliate Title CFO
Name
Date April 05, 2017
Signature

#### USE ADDITIONAL FORMS AS NECESSARY

Proposal Documents (Rev. Nov. 2016)

Attachment I - Contractors Certification of Pending Actions

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

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#### **ATTACHMENT J**

#### **DESIGN-BUILD AGREEMENT**

Proposal Documents (Rev. Nov. 2016) Attachment J – Design-Build Agreement South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

#### **DESIGN-BUILD AGREEMENT**

This Design-Build agreement [Contract] is made and entered into this <u><u>J</u> <u>C</u> <u>day of </u><u>2017</u>, by and between The City of San Diego [City], a municipal corporation, and Baker Electric Inc., [Design], for the purpose of designing and constructing the South Bay Water Reclamation Plant Loop Control System & Valve Master Station (Project) in the amount of <u>One</u> <u>Million Seven Hundred Sixty Thousand Eight Hundred</u> <u>Thirteen Dollars and Zero Cents (\$1,760,813.00)</u>. The City and Design-Builder are referred to herein as the "Parties".</u>

#### RECITALS

- A. The City desires to construct the Project located in the City of San Diego, California.
- B. The City desires to contract with a single entity for design and construction of the Project, as set forth in this Agreement.
- C. The City has issued Request for Proposal (RFP) number **K-17-1383-DB1-3-A** for **South Bay Water Reclamation Plant Loop Control System & Valve Master Station**, pursuant to which the City solicited Proposals from designbuild teams to design, rehabilitate, and build the Project.
- D. In accordance with City's RFP, Design-Builder submitted a Proposal for the Project and is prepared to enter into this Agreement.
- E. The City has selected the Design-Builder to perform, either directly or pursuant to Subcontracts, hereinafter defined, the design, engineering, and construction services set forth in this Agreement and the Contract Documents, hereinafter defined.
- F. The Design-Builder is ready, willing, and able to perform the services required in accordance with the terms and conditions of this Agreement.
- G. Execution of this Agreement by the Design-Builder is a representation that the Design-Builder has visited the Site, become familiar with the local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

In consideration of the above recitals and the mutual covenants and conditions set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby set forth their mutual covenants and understandings as follows.

#### AGREEMENT

- A. <u>Recitals and Attachments</u>. The above referenced recitals are true and correct and are incorporated into this Agreement by this reference. All attachments referenced in this Agreement section are incorporated into the Contract by this reference.
- B. <u>Contract Performance</u>. The Design-Builder shall design and construct the Project in a good and workmanlike manner to the satisfaction of the City, llen free and in compliance with the Contract Documents and within the time specified, in return for timely payment by the City in accordance with the Contract.
- C. <u>Attachments</u>. All attachments e.g., Reference Standards in the RFP, Supplementary Special Provisions (SSP), the attached Faithful Performance and Payment Bonds, Agreement and Supplemental Agreements, and the attached Proposal included in the Proposal documents by the Contractor are incorporated into the Contract by this reference.
- D. Contract Documents. This Contract incorporates the 2015 Edition of the Standard Specifications for Public Works Construction [The GREENBOOK], including amendments set forth in the 2015 edition of the San Diego Specifications for Public Works Construction [The WHITEBOOK]. The Contract Documents shall include the items mentioned in section 2-5.2 of The WHITEBOOK and shall follow that order of precedence.

**IN WITNESS WHEREOF**, this Agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to Municipal Code <u>§22.3102</u> authorizing such execution.

Βv

Print Name:

Date:

#### THE CITY OF SAN DIEGO

#### APPROVED AS TO FORM

Mara W. Elliott, City Attorney

nne.

Deputy City Attorney

eone

By

Print Name: <u>Rosa Isela Riego</u> Senior Contract Specialist Public Works Department

Date:

CONTRACTOR

Βv

Print Name: Ted N. Baker

Title: President

8(2210 Date:

City of San Diego License No.: <u>B197400</u>6075

State Contractor's License No.: 161756

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# **City of San Diego**

CITY CONTACT: Rosa Riego Contract Specialist, Email: RRiego@sandiego.gov Phone No. (619) 533-3426, Fax No. (619) 533-3633

## ADDENDUM "3"

# REQUEST FOR PROPOSAL (RFP)



## FOR

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

RFP NO.:	K-17-1383-DB1-3-A	
SAP NO. (WBS/IO/CC):	B-16132	
CLIENT DEPARTMENT:	2000	
COUNCIL DISTRICT:	8	
PROJECT TYPE:	BO	

PROPOSAL DUE:

### 12:00 NOON APRIL 6, 2017 CITY OF SAN DIEGO PUBLIC WORKS CONTRACTS 1010 SECOND AVENUE, 14<sup>th</sup> FLOOR, MS 614C SAN DIEGO, CA 92101

#### A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the RFP are hereby made effective as though originally issued with the RFP. The Design-Builders are reminded that all previous requirements to this solicitation remain in full force and effect.

THE SUBMITTAL DATE FOR THIS PROJECT HAS BEEN **EXTENDED AS STATED ON THE COVER PAGE.** 

#### B. BIDDER's QUESTIONS

- Q1. Attachment G Evaluation and Selection Criteria, Item 5, on page 116 of the RFP assigns a maximum of 25 points for the Technical Approach and Design Concept. Subparagraphs 5.1.3, 5.15, and 5.1.5 assign 6, 6, and 4 points to these respective paragraphs, for a total of 16 points. How will the remaining 9 points under Item 5 be awarded?
- A1. The points assigned to Technical Approach and Design Concept have been corrected. Refer to Section C, Changes to the Request for Proposal, Item 3, page 5 in this Addendum.
- Q2. Please clarify how many design submittals will be required. Will the City require 30%, 60%, 100% and Final Design submittals as they would on a Design-Build pipeline or building project, or can we eliminate some of the design submittals? Also, please confirm how much time the City requires to review each design submittal.
- A2. For the City's requirements regarding design submittals, refer to Section C, Changes to the Request for Proposal, Item 2, 3.3., Submittals, page 3 in this Addendum. For review of design submittals, refer to the "Whitebook", General Provisions (C), Section 2-6.6, Procedures for Review of Design Materials.

#### C. CHANGES TO THE REQUEST FOR PROPOSAL

- To Section 1, Introduction and Project Overview, page 4, Sub-section
   1.7., Contract Period, **DELETE** in its entirety and **SUBSTITUTE** with the following:
  - 1.7. **CONTRACT PERIOD:** The Project, including the Plant Establishment Period, shall be completed within **200** Working Days from the Notice to Proceed (NTP).

 To Attachment A, Project Description, Scope of Work, Technical Specifications, and Bridging Documents, page 25, Item 3, Sub-section 3.3., Submittals, **DELETE** in its entirety and **SUBSTITUTE** with the following:

#### 3.3. SUBMITTALS

The Design-Builder shall deliver 60%, 100%, and Final Design submittals. Final submittals shall include all of the requirements shown below:

- **A.** Manufacturer's product data including catalogue cuts: The Design-Builder shall submit all product's data.
- **B.** Manufacturer's installation instructions: The Design-Builder shall submit all installation instructions that come with the equipment from the manufacturer.
- **C.** Shop drawings showing details and dimensions: The Design-Builder shall submit all required drawings.
- **D.** Manufacturer's certification: The Design-Builder shall submit all relevant certifications that products comply with the indicated requirements.
- **E.** Schedule of valves indicating valve identification and location.
- **F.** Manufacturer's certification that epoxy coatings have been factory tested and comply with the indicated requirements.
- **G.** Equipment specifications and data covering materials used, parts, devices, and other accessories forming part of the equipment.
- **H.** Complete assembly, layout, and installation drawings with clearly marked dimensions. This information shall be in sufficient detail to serve as a guide for assembly and disassembly and for ordering parts.
- **I.** Listing of all lubricants required for the equipment, if required.

- **J.** Safety Plan and Job Safety Analysis: The design-Builder should provide complete and detailed safety plan.
- K. Project Schedule and Work Plan: The Design-Builder identification of the key milestones from Notice to Proceed through Completion Date. The schedule shall identify major construction milestones, their duration and completion dates based on Construction duration provided by the City considering allowances for City review periods during the design development documents, Construction documents and final plans and specifications. The schedule shall be in color and in 11"x 17" foldout format.
- **L.** As specified in this specification.
- **M.** Furnish motorized operators submittals.
- **N.** Motor and gear type and design information.
- **O.** Design Data:
  - **1.** Submit operating calculations for max break torques and minimum safety factor.
  - **2.** Submit data and calculations to substantiate operating time.
  - **3.** Submit proposed operator configuration and dimensions for (each) actuator.
- **P.** Wiring schematics.
- **Q.** Operation and Maintenance Manuals.
- **R.** Warranty. Two (2) year, parts and service.
- **S.** Manufacturer qualifications.

To Attachment G, Evaluation and Selection, pages 116 and 117, Section
 5, Technical Approach and Design Concept (25 Points Max), DELETE in its entirety and SUBSTITUTE with the following:

#### 5. Technical Approach and Design Concept (25 Points Max)

5.1. Describe in detail the proposed design concept for this Project. Include detailed descriptions, conceptual design drawings, schematics, a list of major equipment, and any other information deemed necessary to allow the City to make an informed evaluation of the Proposer's technical approach. The completeness and technical merit of the design concept will be evaluated.

The following elements shall be included in this Technical Proposal:

- 5.1.1. The City will select a Proposer that will offer the best value for the design and construction of South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements per the scope shown in Attachment 'A' and the requirements of this contract. The Work and Services required of the Proposer include those during design, construction, and startup of the Project. The Proposer shall provide all management, supervision, labor, services, temporary services, equipment, tools, supplies, and any other item of every kind and description required for the complete design and construction, of the Project, as described in Attachment 'A'.
- 5.1.2. The Project Manager will assemble a team which will evaluate the proposals and utilize the point system described below to rank the Proposer. The Proposers will be notified in writing of the City's final decision. Selection of the Proposer will be based on the following criteria:

- 5.1.3. Project Implementation (11 points): Include a statement of work that describes the work to be accomplished and any deliverables; each task description should be written to facilitate evaluation and acceptance without the need for major rewrites prior to incorporation into the resulting contract.
- 5.1.4. Instrumentation and Controls & Coordination with City Staff (10 points): Describe and layout a plan for a successful I&C results and your coordination with City Operations and Maintenance.
- 5.1.5. Milestone/Schedule (4 points): Develop a program milestone chart which includes a detailed list of tasks and subtasks, and the duration of each.

James Nagelvoort, Director Public Works Department

Dated: *March 16, 2017* San Diego, California

JN/AR/lji

# City of San Diego

CITY CONTACT: Rosa Riego Contract Specialist, Email: RRiego@sandiego.gov Phone No. (619) 533-3426, Fax No. (619) 533-3633

## ADDENDUM "2"

# REQUEST FOR PROPOSAL (RFP)



## FOR

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

RFP NO.:	K-17-1383-DB1-3-A	
SAP NO. (WBS/IO/CC):	B-16132	
CLIENT DEPARTMENT:	2012	······································
COUNCIL DISTRICT:	8	
PROJECT TYPE:	во	

#### **PROPOSAL DUE:**

### 12:00 NOON MARCH 22, 2017 CITY OF SAN DIEGO PUBLIC WORKS CONTRACTS 1010 SECOND AVENUE, 14<sup>th</sup> FLOOR, MS 614C SAN DIEGO, CA 92101

#### A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the RFP are hereby made effective as though originally issued with the RFP. The Design-Builders are reminded that all previous requirements to this solicitation remain in full force and effect.

#### B. BIDDER'S QUESTIONS

- Q1. If possible, please clarify which of these two conflicting statements is correct:
  - a. 14.2.3: "The lowest proposed price is not the determining factor for award of this contract. See Attachment G......"
  - b. Attachment G, 11.1: "The selected Design-Builder will then be chosen based on the lowest price."
- A1. Both statements are correct. The lowest price is, in fact, **not** the determining factor for award of this contract. The proposer must first submit an acceptable design to be considered for award.

If a proposer's technical evaluation is scored at 75, it is therefore deemed not acceptable and that proposer's pricing will not be opened. It would be irrelevant if that proposer happened to offer the lowest price. And as stated in attachment G, Evaluation and Selection, Section Final Selection Based on the Lowest Price for an Acceptable Design, Sub-item 11.1, page 120, "Only Proposals scored at 80 points or higher will be deemed acceptable." Only then will the Design-Builder be chosen based on the lowest price.

- Q2. Please confirm that Microstation.dgn files are available for the loop diagrams included in the RFP.
- A2. Yes, the Microstation.dgn files for the loop diagrams in the RFP are available in the City Database.
- Q3. Please confirm whether the City intends for all relevant original Microstation.dgn files to be updated to reflect the proposed modifications.
- A3. Yes, the Design-Builder shall revise and update all relevant original Microstation.dgn for Mechanical/Electrical/Instrumentation drawings as the result of this project and submit the revised Microstation.dgn files to the City.

- Q4. If the answer to #3 is yes, can the City make available a set of as-built drawings prior to bid date?
- A4. Refer to Addendum #1, Item B, Changes to the Request for Proposals, page 2.
- Q5. Proposal Documents Attachment "A" page 22, states: "The new actuators and master stations shall be provided by the same Manufacturer to ensure compatibility of the overall system. This Manufacturer shall also be responsible for the satisfactory operation of the two (2) new loops and their compatibility with the City's Emerson Ovation Distributed Control System (DCS)."

Question: Will the Contractor be responsible for providing any Emerson Ovation Distributed Control System (DCS) equipment?

- A5. No, the existing DCS equipment will accommodate the new actuators and valve master stations. The Contractor will not be responsible for providing any additional DCS equipment.
- Q6. The Price Proposal Form on page 122 of the RFP includes Bid Item 6: Disposal of Class I Regulated Waster Material, with a quantity of 1 and unit description of "LS" (lump sum). We believe that the unit description should be "TON", as that is the unit description normally used for this bid item when included in City contracts. Please correct or clarify the Price Proposal form as necessary.
- A6. The unit for Bid Item 6: Disposal of Class I Regulated Waste Material, has been changed to TON. Refer to Item C.2, Changes to the Request for Proposals of this Addendum.

#### C. CHANGES TO THE REQUEST FOR PROPOSALS

- 1. To Request for Proposal, item 2, Subcontracting Participation Percentages, sub-item 2.1.2.3, page 6, **DELETE** in its entirety and **SUBSTITUTE** with the following:
  - **2.1.2.3** Submit Good Faith Effort documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Bidder made a good faith effort to outreach to and include SLBE-ELBE Subcontractors required in this document within 3 Working Days of the Proposal Due Date if the overall mandatory participation percentage is not met.
- 2. To Attachment H, Price Forms, Price Proposal Form, pages 121 through 124, **DELETE** in their entirety and **SUBSTITUTE** with pages 5 through 8 of this Addendum.

James Nagelvoort, Director Public Works Department

Dated: *March 10, 2017* San Diego, California

JN/AR/lji

#### ATTACHMENT H

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#### PRICE FORMS

#### PRICE PROPOSAL FORM

The Design-Builder agrees to the design and construction of South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements., for the City of San Diego, in accordance with these contract documents for the lump sum prices listed below. The Design-Builder guarantees the proposed prices for a period of 120 Days from the date Proposals are due. The duration of the price guarantee may be extended as required by mutual consent.

lte mN o.	NAICS CODE	Description	Quantity	D*	Unit	Unit Price	Extension
		BASE PROPOS	SAL				
1	238210	Bonds (Payment and Performance)	1		LS		\$
2	541330	Engineering and Design Services	1	D	LS		\$
3		City Contingency	1		AL		\$32,412
4	541330	Water Pollution Control Plan Development (WPCP)	1		LS		\$
5	237990	Water Pollution Control Plan Development (WPCP)	1		LS		\$
6	238990	Disposal of Class I Regulated Waste Material	2		TON		\$
7	238290	Field Construction	1		LS		\$
		TOTAL DESIGN-BUILD BASE PROPOS	SAL (ITEMS N	10 1 TH	ROUGH 7	INCLUSIVE <b>): \$</b>	

#### \* Design Element (For City Use)

March 10, 2017

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

Total Price for Design-Build Proposal, (items 1 through 7, inclusive) amount written in words:

Design-Builder:\_\_\_\_\_ Title:\_\_\_\_\_ Signature: The names of all persons interested in the foregoing proposal as principals are as follows:

IMPORTANT NOTICE: If Design-Builder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Design-Builder or other interested person is an individual, state first and last names in full.

#### NOTES:

- A. The Contract Price to be used in the selection process as described in Attachment G of the RFP will be determined by the base proposal alone.
- B. After the selected Design-Builder has been determined, the City may, at its sole discretion, award the contract for the Base Proposal alone or for the Base Proposal plus one or more alternates.
- C. Proposals shall not contain any recapitulation of the Work. Conditional Proposals may be rejected as being **non-responsive**. Alternative proposals will not be considered unless called for.
- D. Subcontractors' License Numbers must be filled in. Failure to provide the information specified may deem the bidder **non-responsive**.
- E. Blank spaces must be filled in. The Design-Builder's failure to submit a price may render the Proposal non-responsive and ineligible for award.
- F. Unit prices shall be entered for all unit price items. Unit prices shall not exceed two (2) decimal places. If the Unit prices entered exceed two (2) decimal places, the City will only use the first two digits after the decimal points without rounding up or down.
- G. All extensions of the unit prices bid will be subject to verification by the City. In the case of conflict between the Product of the Quantity x Unit Price and the written Extension, the Product shall govern.

In the case of conflict, between the sum of the Extensions and the Bid Total, the sum of the Extensions shall govern.

# **City of San Diego**

CITY CONTACT: Rosa Riego Contract Specialist, Email: RRiego@sandiego.gov Phone No. (619) 533-3426, Fax No. (619) 533-3633

**ADDENDUM "1"** 

# REQUEST FOR PROPOSAL (RFP)



FOR

South Bay Water Reclamation Plant Loop Control System & Valve Master Station Improvements

RFP NO.:	K-17-1383-DB1-3-A	
SAP NO. (WBS/IO/CC):	B-16132	
CLIENT DEPARTMENT:	2012	
COUNCIL DISTRICT:	8	
PROJECT TYPE:	ВО	

### **PROPOSAL DUE:**

12:00 NOON MARCH 22, 2017 CITY OF SAN DIEGO PUBLIC WORKS CONTRACTS 1010 SECOND AVENUE, 14<sup>th</sup> FLOOR, MS 614C SAN DIEGO, CA 92101

#### A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the RFP are hereby made effective as though originally issued with the RFP. The Design-Builders are reminded that all previous requirements to this solicitation remain in full force and effect.

#### B. CHANGES TO THE REQUEST FOR PROPOSALS

- To Attachment A, Project Description, Scope of Work, Technical Specifications, and Bridging Documents, page 25, Section 3, <u>General</u>, Subsection 3.2., References, **ADD** the following:
  - **D.** The original SBWRP As-Built drawings (Mechanical, Electrical, and Instrumentation) for the areas affected by loop modifications are available at the following link:

#### ftp://ftp.sannet.gov/OUT/1383A%20SBWRTP%20LOOP%20ASBUILTS/

James Nagelvoort, Director Public Works Department

Dated: *March 3, 2017* San Diego, California

JN/AR/lji









rotor<sub>f</sub> 5

#### 1. Proposal Requirements:

The proposal requirements included in the RFP are summarized below in Table 1:

	Table 1: Proposal	Requirements	
Legal Name of Company	Baker Electric		
Legal form of Entity	S Corporation		
Year of Establishment	1938		
Parent Company, if any	None		
Main Office Address	1298 Pacific Oaks Place		
	Escondido, CA 92029		
Contact Information	Name	Scott Schemmel	
	Title	Project Manager	
	Email Address	sschemmel@baker-electric.com	
	Phone Number	760-745-2001	
Number of Employees in San Diego County	395		
City of San Diego Business	575		
License Number	B1974006075		
State Contractor's License			
Number	161756		
DIR Registration Number	100000466		
Legal Name of Company		Rotork Controls Inc.	
Legal form of Entity	Corporation		
Year of Establishment	1957		
Parent Company, if any	None		
Main Office Address	1460 Cader Lane	, Suite A	
	Petaluma, CA 94	954	
Contact Information	Name	Tom Roberts	
	Title	Area Sales Manager – Southern	
		California	
	Email Address	tom.roberts@rotork .com	
	Phone Number	760-815-0137	
Number of Employees in San Diego County	2		
City of San Diego Business License Number	Not Applicable		
State Contractor's License Number	Not Applicable		
DIR Registration Number	1000030558		
	•		

	Table 1: Proposal I	Requirements	
Legal Name of Company	Tharsos Inc.		
Legal form of Entity	S-Corp		
Year of Establishment	S-Corp 9/012 Sole Proprietor from 6/2010		
Parent Company, if any	None		
Main Office Address	7839 University A	Avenue, #210	
	La Mesa, CA 919		
Contact Information	Name	Michael Lopez	
	Title	Project Manager	
	Email Address	mlopez@tharsosinc.com	
	Phone Number	619-464-1261	
Number of Employees in	7		
San Diego County			
City of San Diego Business	B2015020741		
License Number			
State Contractor's License	980621		
Number			
DIR Registration Number	1000012874		
	1		
Legal Name of Company		lectrical Design Inc (EDI)	
Legal form of Entity	S Corporation		
Year of Establishment	2008		
Parent Company, if any	None		
Main Office Address	9565 Waples Stre	et #205	
	San Diego, CA 92	2121	
Contact Information	Name	2121 Rodelio S. Dantes, P.E.	
	Name Title	2121	
	Name Title Email Address	2121 Rodelio S. Dantes, P.E. Vice President boker@edi-engineers.com	
	Name Title	2121 Rodelio S. Dantes, P.E. Vice President	
	Name Title Email Address	2121 Rodelio S. Dantes, P.E. Vice President boker@edi-engineers.com	
Contact Information	Name Title Email Address Phone Number 5	2121 Rodelio S. Dantes, P.E. Vice President boker@edi-engineers.com	
Contact Information Number of Employees in San Diego County City of San Diego Business	Name Title Email Address Phone Number	2121 Rodelio S. Dantes, P.E. Vice President boker@edi-engineers.com	
Contact Information Number of Employees in San Diego County City of San Diego Business License Number	Name Title Email Address Phone Number 5 B2009030604	2121Rodelio S. Dantes, P.E.Vice Presidentboker@edi-engineers.com858-869-8747	
Contact Information Number of Employees in San Diego County City of San Diego Business	Name Title Email Address Phone Number 5 B2009030604 Rodelio S. Dantes	2121         Rodelio S. Dantes, P.E.         Vice President         boker@edi-engineers.com         858-869-8747         s, P.E. License #E14116 (1992)	
Contact Information Number of Employees in San Diego County City of San Diego Business License Number	Name Title Email Address Phone Number 5 B2009030604	2121         Rodelio S. Dantes, P.E.         Vice President         boker@edi-engineers.com         858-869-8747         s,       P.E. License #E14116 (1992)         P.E. License #C38018 (1984)	
Contact Information Number of Employees in San Diego County City of San Diego Business License Number	Name Title Email Address Phone Number 5 B2009030604 Rodelio S. Dantes	2121         Rodelio S. Dantes, P.E.         Vice President         boker@edi-engineers.com         858-869-8747         s, P.E. License #E14116 (1992)	

#### 2. Acknowledgement of Addenda to RFP No. K-17-1383-DB1-3-A

Baker Electric acknowledges receipt of the following addenda:

Addendum Number	Date Issued	By
1	March 3, 2017	2
2	March 10, 2017	-24
3	March 16, 2017	4

#### 3. Proposer Exceptions to this RFP

Baker Electric takes no exception to the RFP.

#### 4. Summary

Baker Electric is pleased to submit this Technical Proposal in response to RFP No. K-17-1383-DB1-3-A, 'South Bay Water Reclamation Plant Loop Control System and Valve Master Station Improvements', issued by the City of San Diego Public Works Department (City).

Successful completion of this project depends two factors: first, consistent communication between City Staff and Baker to ensure that each party is fully aware of the progress of work throughout the life of the project; second, a clear understanding of the project's technical and tactical aspects, and the relationship between the two.

#### **Project Understanding – Technical Aspects**

South Bay WRP currently operates a network of electric actuators and field control units (FCU's) which are controlled on a single two-wire communications loop by a master control station. This master station, in turn, communicates with the existing Ovation DCS via serial controller cards at the PCM cabinet for the Headworks area.

Plant Staff have encountered several difficulties with the existing network which are listed below:

- Aging of the existing EIM actuators and 2-wire control system and component failure.
- Inconsistent support services from the local manufacturer's representative.

• Plant-wide DCS malfunctions caused by unknown anomalies which occur when the existing valve master control station transitions from the primary channel to the back-up channel.

To address these issues, the City plans to replace the existing system with a new system, and in the process, divide the existing single loop into two smaller loops as shown in the RFP. In response, Baker Electric intends to provide the products and expertise of Rotork Controls Inc, an actuator manufacturer with proven installations of actuators and its Pakscan two-wire control system. The City is familiar with Rotork control systems at its other City of San Diego treatment facilities – the Metropolitan Biosolids Center (MBC), and the Point Loma Wastewater Treatment Plant (WWTP).

In general, the concept proposed in the RFP is constructible so this Proposal responds directly to the RFP. Depending on the results of field investigations, there may be other technical issues worth considering in the preliminary design. These issues are discussed in Section 6.

#### **Project Approach – Tactical Issues**

The primary challenge for the Baker Team is to develop and implement a plan that manages the transition between the two configurations: the current single loop, and the final pair of independent loops, Loop 1A and Loop 1B. During this transition, each valve must be taken out of service to remove the existing actuator from the valve and install the new actuator. Once installed and re-terminated, each new actuator, with its existing valve, must be tested and commissioned on Loops 1A and 1B.

The Baker Team understands that City Staff have several concerns in managing the transition:

- **No discharge violations**. All unit processes must operate to provide a level of treatment that complies with the requirements of the South Bay WRP NPDES discharge permit.
- No unplanned changes to South Bay WRP Operations. To complete the work, the Baker team must plan a number of partial shut-downs to unit processes at the South Bay WRP. To the greatest extent possible, Baker must avoid any unplanned changes to plant operations.
- Work to be scheduled during normal business hours. To the greatest extent possible, work must be planned and sequenced to coincide with normal hours of work when City Staff are present on-site.
- No Compromises to Safety

During the planning/design phase, the Baker team will do the following:

- Field-verify existing conditions and mark up existing design drawings
- Evaluate existing plant operations and available unit-process redundancy
- Rank the importance of each valve and actuator
- Develop and submit detailed outage plans for replacing the most critical valve actuators
- Prepare and submit updated drawings for the new network.

During the transition to the final configuration, each valve must be taken out of service to remove the existing actuator from the valve and install the new one. Once installed, the new valve and actuator must be tested and commissioned. In some locations, actuator installation will require specialized labor and equipment.

Successful project completion depends on how the Baker team plans the work, and communicates that plan to the City so that the project can stay on schedule and be completed with a manageable number of short-term changes in plant operations.

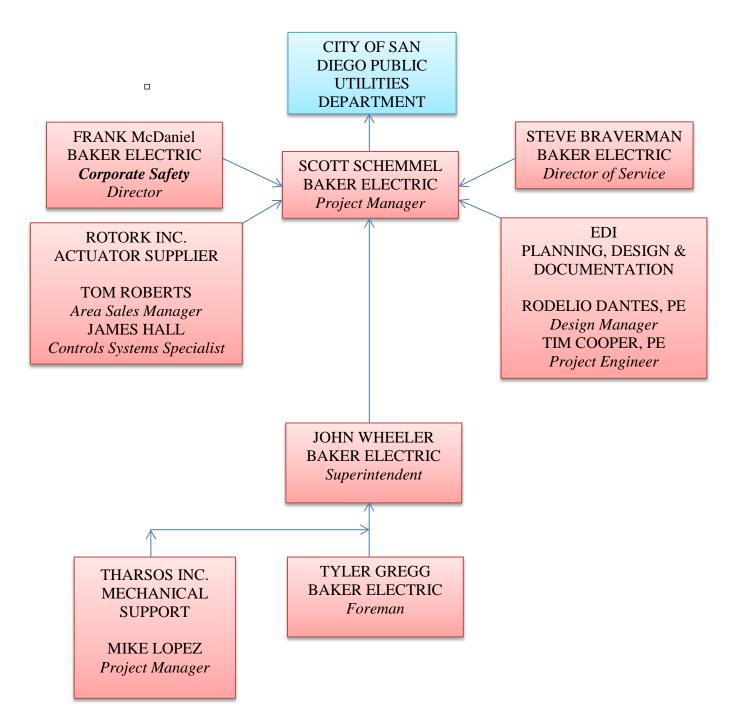
#### 5. Project Team

#### a. Management Plan

Figure 1 depicts the Organization Chart for the project. Scott Schemmel will serve as the Project Manager for the project and will conduct monthly progress meetings in addition to the two kickoff meetings – one scheduled at the start of planning and design and the second scheduled at the start of construction. Scott will ensure that proper lines of communication are maintained between the City and Baker, and will serve as the conduit for communications with suppliers and subcontractors to ensure that the City's needs and concerns are met. Baker's Project Plan will summarize the contact information for both Baker Team Members and key City staff. The Project Plan will be submitted to the City after Notice to Proceed and prior to the design phase kickoff meeting. Scott will review the Project Plan with City staff at the first Kickoff meeting and revise it to reflect input received at the meeting.

To the greatest extent possible, the Baker Team intends to use the design kickoff meeting, the workshop with Plant Operations and Maintenance Staff, and the submittal process for the Construction Sequencing and Operations Plan (CSOP) to advanced-plan the work. Once the CSOP is finalized and the detailed schedule is revised to reflect the roadmap of responsibilities for both the Baker Team and City Staff, the monthly meetings will provide a way to check progress against the CSOP, and to review any mid-course corrections that may arise due to unforeseen circumstances.

#### FIGURE 1 – ORGANIZATION CHART



Scott has over 27 years of experience and has managed numerous large-scale electrical construction projects. He is knowledgeable in Industrial Process and Instrumentation, Motor Controls SCADA, Telemetry, PLC Programming, Ladder Logic, and Panel Layout/Design. John Wheeler has over 30 years' experience, and has an extensive background in managing projects involving clean and wastewater treatment, power generation, utility substation construction and medium voltage distribution systems. See Attachment 1 for Scott and John's resumes.

This project is an invasive retrofit that entails intricate work within the confines of existing wastewater treatment facilities. Worker exposure is continuous over the course of the project, and all of these existing facilities must remain on line at all times. As a result, the Job Safety Analysis must address the specific needs of the project. Frank McDaniel, Baker's Corporate Safety Director, will oversee preparation of a site-specific Job Safety Analysis that addresses the safety concerns associated with wastewater treatment in addition to general safety requirements. Frank has over 30 years of experience in the construction industry with more than 20 years in safety. For more than 15 years he has held safety director/risk manager positions and has demonstrated the ability to address safety concerns in diverse work environments. See Attachment 1 for Frank's resume.

#### b. Qualifications of Key Personnel

#### i. Mechanical

Although the project is principally an electrical/instrumentation and control project, there are mechanical considerations to the project because matching the new valve actuators to the existing valves requires an understanding of the mechanical requirements of the valves. Tom Roberts of Rotork will assume the lead role in ensuring that the actuator assemblies are compatible with the torque requirements of the existing valves. Although Rotork will remove the majority of the EIM actuators and mount the new actuators, some of the installations require use of construction equipment that is beyond Rotork's typical installation capabilities. Baker has included Tharsos Inc, a mechanical subcontractor, to provide the equipment and labor to install the actuators which require crane operation, or use of specialty equipment in locations that are difficult to access. Mike Lopez, a Project Manager with Tharsos Inc., will lead this effort. Mr. Lopez is familiar with the South Bay WRP through his work on the primary sludge pumping project installing new pumps and grinders. Mike's resume is included in Attachment 1.

#### ii. Electrical

Rodelio S. (Boker) Dantes, P.E. is an electrical engineer with over 40 years of experience; he will manage the overall design effort and will oversee development of the drawings documenting the modifications to the facility. See Attachment 1 for Boker's resume.

#### iii. Instrumentation and Control

The instrumentation and control capabilities of the team take two different forms. James Hall of Rotork will serve as the Control Systems Specialist responsible for coordinating with the City's Comnet Staff and Consultants who will be modifying the existing Ovation DCS programming to interface with the new Loop 1A and Loop 1B Master Stations. James has a long working relationship with the City of San Diego on former projects while working for Westinghouse.

Tim Cooper is a licensed Civil/Process Engineer, and a licensed Control Systems Engineer, with more than 30 years of experience in design, commissioning, and testing of treatment facilities. Tim will lead the effort to document the constraints of existing plant operations at South Bay WRP; he will lead the Operations and Maintenance Workshop and prepare the submittal of the Construction Sequencing and Operations Plan (CSOP). He will be responsible for the day-to-day elements of the planning and design phases of the project.

#### 6. Technical Approach: Design Concept and Implementation Plan

The Baker Team anticipates dividing the existing loop into two independent loops following the topology outlined in the RFP<sup>1</sup> assuming no complications associated with maintaining plant operations, conduit routing, physical constraints, or unforeseen field conditions.

Baker's Technical Approach and Project Implementation can be summarized in terms of four phases, each of which will be discussed below:

- Planning and Design Phase (Section 6a)
- Pilot Phase (Section 7b)
- Construction Phase (Section 7c)
- Closeout/Documentation Phase (Section 7f)

#### a. Planning and Design Phase

After Notice to Proceed, the Baker Team will schedule the site-specific safety training and start the planning and design phase tasks including field verification. The following planning

<sup>&</sup>lt;sup>1</sup> If there were no constraints on the design concept, the design of two separate loops would be configured so that each loop manages its share of each unit process: Loop 1A would serve bar screen 1, grit tank 1, primary sedimentation tanks 1-3, aeration basins 1-4, and agitation air blower 1. Loop 1B would serve bar screen 2, grit tank 2, primary sedimentation tanks 4&5, aeration basins 5-8, and agitation air blower 2. This design concept would require significant modifications to existing runs of communication conduit and cable.

and management documents will be prepared and submitted after Notice to Proceed and before the Design Phase Kickoff Meeting:

- Project Plan (Summary of administrative and management procedures.)
- Job Safety Analysis and Emergency Response Plan
- Requests for Information
- Vehicle Information for preparation of Access Passes Planning and Design Staff

The Baker Team will develop the construction sequencing and operations plans (CSOP's) and schedule a workshop with South Bay Operations and Maintenance Staff. Draft CSOP's will be submitted for critical valves three weeks before the week of the Design Phase kickoff meeting. At the meeting, the Baker Team will receive review comments on the CSOP's and other submittals. Following the meeting, Baker will respond to City comments and revise the submittal documents.

Within the framework of the RFP, there may be design questions which The City may wish to investigate prior to development of the 60% drawings.

• Is there a strategically better location for breaking the existing loop into two separate loops? Currently, the existing loop is being divided between Field Unit #6 and 10-FCV-0800. Because 10-FCV-0800 is a critical valve, it will be important to minimize the overall number of times that the valve is out of service due to terminations and determinations. If we move the dividing point for the two loops so that 10-FCV-0800 is not "on the end", we can reduce the number of outages to 10-FCV-0800 needed for termination and determination.

#### **Construction Sequencing and Operations Plan (CSOP)**

The Baker Team will prioritize each of the actuators based on the criteria listed below. As part of the process, the Baker Team will hold a workshop with South Bay WRP Operations and Maintenance and Operations Staff to solicit input to the decision-making process on consequence of failure.

- Consequence of Failure What happens to the plant if a valve is unavailable for operations?
- Valve duty cycle frequency of valve open/close operations
- Process Unit Redundancy the degree to which a set of valves for a process unit can be taken out of service without impacts on the overall process.

After the Workshop, the Baker Team will develop the CSOP which will group the priority valve actuators into a series of up to 6 groups<sup>2</sup>. The CSOP will summarize the short-term modifications to plant operations which Staff at South Bay WRP will need to implement before the Baker Team can begin work on a particular group of actuators. The valve actuator group numbers will be assigned in order of priority. The Group 1 valves will be more important than the Group 2 valves, and so on. It may be possible for one valve to be so important that it occupies a group by itself. It is likely that the actuator for the flow equalization control valve 10-FCV-0800 is the most critical of the actuators being replaced.

The group designations will be used in the construction phase for executing the work. Valve actuators will be taken out of service one group at a time for replacement and re-termination. The Baker Team will replace the valve actuators in the highest priority group first. By adopting this approach, the most important applications are supported by the newer, more reliable system as soon as possible. Valve actuators that operate rarely, or can be easily taken out of service without any serious consequences, will be classified as non-critical actuators that can be replaced based on a standard outage request/lockout-tagout.

#### Planning and Design Role of the Control Systems Specialist

As part of the Planning and Design Phase, Rotork will prepare and submit technical submittals for the valve actuators and Pakscan Controls. After review and receipt of comments from the City, Rotork's James Hall will schedule a meeting with City Comnet Staff, and coordinate the work to be completed by Comnet staff for interfacing the existing Ovation DCS with the new Pakscan control networks. There is a hardware component and a software component to the coordination process.

In terms of hardware, Rotork will coordinate with Comnet to ensure that the necessary communications cards are provided to interface new Loop 1A Master Station with the existing PCM at the Blower Building Control Room, and the New Loop 1B Master Station

The optimal solution lies somewhere between the two extreme scenarios. The challenge for the City and the Baker team is to find a middle ground that guarantees project completion with a manageable number of changes to plant operations <u>and</u> within the allowed project duration.

<sup>&</sup>lt;sup>2</sup> In theory, each individual address on the loop could have its own individual priority resulting in over 100 separate shutdown operations. While this approach minimizes the impact of any one shutdown, it results in a long construction schedule. At the opposite extreme, the Contractor could decommission the entire loop and replace all actuators and FCU's in one operation to finish in the shortest time possible, but this approach would be unacceptable from the standpoint of maintaining plant operations.

with the PCM at the Headworks Control Room. The existing EIM system will need to remain fully functional at the same time as the Rotork actuators are being installed and interfaced with the two new Master Stations. It is important to field-verify existing conditions at the PCM Cabinet and coordinate any work to be completed by Comnet in anticipation of the arrival of the actuators on-site. Hardware modifications at the PCM cabinets need to be completed prior to the start of the construction phase.

From a software standpoint, each group of valve actuators that Baker moves from the existing loop to the proposed loops has a ripple effect. In conjunction with the installation of new actuators, the DCS control strategies need to be modified to locate the existing valve at its new address on the new loop. James Hall will lead the effort to maintain viable DCS control during this transition.

The deliverables to be submitted during the planning/design phase include following main items:

- Construction Sequencing and Operations Plans (CSOP)
- Valve and Actuator schedule identifying valve number, process area, location, duty cycle, actuator type, and any special appurtenances (remote control station, torque tube, etc.)
- Preliminary Schedule
- 60% Design Submittal Drawings
- Preliminary Loop Wiring Diagrams and Conduit Plans.
- Valve actuator and Field Control Unit (FCU) technical submittals

#### 7. Construction Plan and Construction Phasing

#### a. Approach and Methods

The RFP requires a kickoff meeting 8 weeks before the start of work. Because the actuators will take from 6 to 12 weeks to arrive on site after return of shop drawings, this second "construction phase" kickoff meeting will be scheduled once actuator shop drawings are returned by the City. Prior to the construction kickoff meeting, the Baker Team will submit the following:

- Final Schedule
- Operations Manuals
- Functional Testing and Commissioning Checklists
- 100% Submittal Drawings.

- Factory Test Certifications
- Lists of on-site personnel and their contact phone numbers for emergency response use.
- Vehicle information for preparation of access passes Construction Staff
- Documentation provided by the I&C System Specialist
- List of information needs, if any, needed by the I&C System Specialist.

#### b. Pilot Phase

Construction will begin with a pilot phase. The goal of the pilot project is to ensure that both the new Loop 1A and Loop 1B Pakscan Master Stations are fully functional before the removal and replacement of actuators begins. There are several benefits to this approach:

- By testing and commissioning the new master stations first, the Baker Team and the City have a "Plan B" option if the existing EIM master station fails during construction. Under Plan B, any priority valve actuators deemed critical could be replaced and temporarily networked to either one of the new master stations to allow the plant to manage critical valve operations until the work can be completed.
- We ensure that any future problems commissioning the 1A and 1B loops are isolated to the field devices. This approach which will simplify troubleshooting during testing and commissioning.
- The Baker Team has an opportunity to provide South Bay WRP Operations Staff with hands-on experience prior to final training. This approach will ease the transition process between the old system and the new Rotork Pakscan systems.

Under the pilot project, the Baker Team will install the master stations in their permanent locations in the Headworks Building Control Room and the Blower Building control, and all interfacing conduit, power<sup>3</sup>, communications cable, and communications cards to interface with their respective PCM. A field unit and one typical actuator of each type will be temporarily housed in the adjacent electrical room and supplied with temporary power. A temporary communications loop will interconnect the new master station with the temporary field devices. With the pilot system operational, the Baker Team, in conjunction with Comnet staff will be able to verify system control from the DCS before the process of switching out actuators begins.

<sup>&</sup>lt;sup>3</sup> For the Loop 1B master station, it may be necessary to provide temporary power to the master station until the existing master station is demolished.

#### c. Construction

After completion of pilot testing of the Loop 1A and 1B Master stations, the installation of the new valve actuators will proceed in the order of the groups identified in the CSOP. These groups are discussed under Section 6. It is likely that work will begin on Loop 1A first because 10FCV-0800 is on Loop 1A and will probably be the highest priority valve. Work on transitioning valve actuators to Loop 1B will probably happen once Loop1A is complete. This discussion that follows is based on the assumption that new buried conduit and junction boxes will be needed to segregate the single loop into two separate loops

The same general approach to retrofitting an actuator group will apply:

- Operations and Maintenance will open and close each valve or gate via the existing actuator to confirm operations prior to starting the retrofit process.
- Baker will submit an Outage Request to the City and will attach the CSOP for that particular valve group to the City.
- Plant Operations Staff will make any changes in process operations and take process units offline as needed based on the CSOP.
- Baker will highline temporary communications cable that will be ready for use in maintaining the remaining actuators on the existing loop and bypassing the actuator group that are being replaced.
- Plant Operations and Baker will lockout the actuators in the group and determinate power conductors.
- Plant Operations will temporarily lockout the two actuators on either side of the group and take the entire existing loop off line so that the Baker can determinate the existing network cable at the endpoints for the group and terminate the temporary communications cable.
- Plant Operations will then re-commission the existing loop minus the group of valve actuators that have been isolated.
- Rotork or Tharsos will remove the existing actuators and install the new actuators for the valve group.
- Baker will temporarily take the new Loop off line and re-terminate power connections and communications cable connections for the new actuators on the new loop.
- Baker will re-energize the new actuators and the new Master Station.
- Rotork will commission and test the new actuators in the group on the new loop.
- Baker and Rotork, in conjunction with the City, will confirm communications and control for each new actuator from the DCS.

Once Loops 1A and 1B are separated, the only sections of temporary, high-lined communications cable left will be the temporary sections that require new conduit and junction boxes. The last step will be to furnish and install new buried conduit, ductbanks, and junction boxes with the permanent runs of communications cable. In one final shutdown of each loop, the temporary cable will be de-terminated and removed, and the permanent cabling will be terminated to complete the construction phase.

#### d. Plan for Operations of Facility during Construction

All work coordinating changes in plant operations to accommodate the installation work will be according the CSOP for each group that will be developed during the planning phase. See Section 6 for further discussion.

#### e. Construction Phasing

Construction Phasing will proceed according to the actuator groups developed during the planning phase. These groups were discussed previously under Section 6.

#### f. Final Functional Testing, Startup, and Closeout

Final Functional Testing and Startup will mark the start of the 'closeout' phase of the project. The Baker Team will prepare a commissioning and testing checklist for each actuator as part of the submittals prepared prior to the construction kickoff meeting. Field testing will be grouped according to the location of control and will be organized from the field level up to the DCS. It is important to note that some existing process units, which are currently off line, may become flooded with process wastewater during testing of the new actuators under 'live' conditions. Baker has not made provisions in its bid to clean these process units once testing and startup is completed.

Field Testing will begin with power up/down checks and verification of the branch circuit supplying power to the actuator. Other field checks include field testing of local controls, documentation of opening and closing times, and documentation of torques (torque graphs). Field tests at the actuator will be conducted by Rotork and witnessed by City Staff. The checklist will include provisions for documentation of remote control from the Pakscan Master Station and the DCS. For modulating valves, the checklist will include documentation of position feedback versus position indication at the actuator and at the DCS (% open).

Once City Staff have completed review of the commissioning and testing checklists, signed versions will be return to the Baker Team for inclusion in the final documentation submittal. The final documentation submittal will include:

- Final Submittal Drawings
- Microstation .dgn files for relevant updated drawings.
- Final Commissioning and Testing Checklists with supporting documentation.

The existing EIM actuators will be stockpiled on site during construction. As part of closeout, the salvaged EIM actuators will be removed from the site.

#### g. Safety Program

The Baker Electric, Inc. corporate IIPP is available upon request. Following award, a site specific IIPP will be developed and submitted as per contractual agreement.

Baker Safety Summary

While most construction companies are focusing on adaptations of the "Zero" concept, at Baker Electric, Inc. we are committed to achieving <u>100%SAFE!</u> That means, we are committed to providing:

- A safe work environment for all employees through the elimination or control of all hazards in the work area.
- Safe work guidelines for each task.
- An expectation that required PPE is not only available but will be used for every task.
- A site specific IIPP developed to address specific hazards associated with every task assignment.
- Opportunities for active employee participation with our safety efforts.

At Baker, we are focused on the activities that will achieve the desired outcomes. Some of those activities include:

- Corporate safety team members conduct what is arguably the most advanced safety audit in the construction industry. One that not only evaluates site supervision for compliance with regulations or policies, but a system that also gathers and trends at-risk behaviors before a worker experiences an injury.
- Most construction companies conduct a tailgate meeting a week, but few educate. At Baker Electric, we conduct two tailgate training sessions per week, the majority includes not only instruction but also a quiz to ensure learning is taking place.
- Every task will have a hazard assessment conducted to ensure our employees are not exposed to uncontrolled hazards while accomplishing their task assignments.

Achieving <u>100%SAFE!</u> requires the participation of every Baker employee in activities that are meaningful not only to the company, but to the employee as well. The result is a safer project for Baker Electric. A safer project for our employees. A safer project for the City of San Diego Public Works Department.

#### h. Emergency Response Plan

Although Baker strives for zero incidents through the implementation of our advanced safety processes, we establish site specific emergency response protocols.

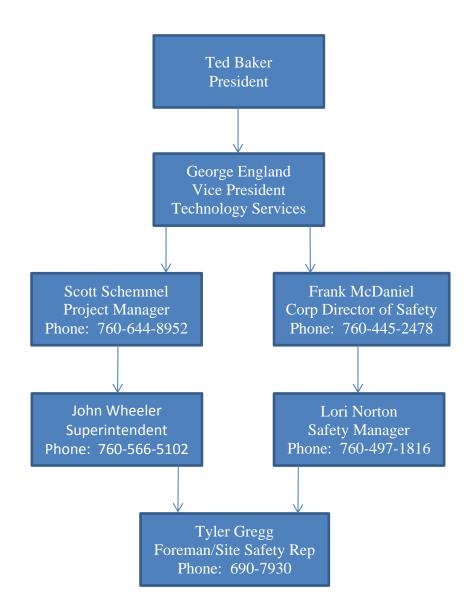
Prior to assigning a crew to a particular worksite, each Baker Electric Supervisor will:

- Provide workers a map along with clear and precise directions (such as streets or road names, distinguishing features and distances to major roads) of the site, to avoid a delay of emergency medical services.
- Ensure that a qualified, appropriately trained and equipped person will be available at the site to render first aid, if necessary.
- Determine if a language barrier is present at the site and take steps (such as assigning the responsibility to call emergency medical services to the foreman or an English speaking co-worker) to ensure that emergency medical services can be immediately called in the event of an emergency.
- Carry cell phones or other means of communication, to ensure that emergency medical services can be called and check that these are functional at the worksite prior to each shift.

The contents of the site specific emergency response process will be covered during the new to site orientation and posted for easy access and review.

The site specific emergency response process will be developed in cooperation with the processes established for the project by the City of San Diego Public Works Department.

# Responsible Lines of Authority & Contact Information



#### i. Proposed Schedule/Program Milestone Chart

Figure 2 shows an estimated schedule which outlines the sequence of the work. Table 2 below summarizes milestone dates based on the estimated schedule. Because we do not know the detailed operating constraints or the final grouping of the valves, Figure 2 is a general estimate only.

The estimated schedule is based on a June 1, 2017 start date; it typically shows 3 weeks for review by the City and allocates 4 weeks for each of the six actuator groups. The draft schedule will be submitted prior to the Design Kickoff meeting, and the final schedule will be submitted prior to the end of the planning/design phase and prior to the start of the construction phase.

									FIGURE 2																	
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$\vdash$		BY		ne 2017	July 2017 5 6 7 8	Aug. 2017	Sept. 20		Oct 2017		Nov 21 22			Dec 201			2018			6 37 38				May		June 2018
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		-	THAKS	US INC.																						
	NOTICE TO PROCEED		x																							
1	PLANNING AND MANAGEMENT	1												1	1 1		-					1 1	1			
	Prepare Project Plan			x x x																						
	Prepare Job Safety Analysis Prepare RFI's for Files			x x x x x x																						
	Prepare Emergency Response Plan Prepare and Submit Schedule			x x x x x x																						
	City Review of Project/Mgmt Plan	C	x	X X X	x x x																					
2																										
2	DESIGN KICKOFF MEETING Attend Design Kickoff Meeting	B/E/R			x			1					1 1				1									1 1 1
3	ACTUATOR PROCUREMENT AND COMNET COORDINATION BY ROTORK																									
	Prepare and Submit Rotork Product Submittals to Baker	R	x	x x																						
	In-house review by EDI before submittal to City City Review of Rotork Submittal	E		x	x x x		+						+ - 1						$\square$	+ $-$		+ $-$	+			+++
	Respond to Comments	E/R			x x x x																					
	Order and ship Actuators to job site (See Note 1)     Submit O&M Manuals	R				x x x x	x x x	x	x x x	x							-									+
	O&M Manual Review by City	С					x x	x																		
	Submit Factory Test Certifications for City Review Review by the City	R							x x x	x										_						+
	Schedule I&C Coordination Meeting with the City	R			x					^																
	I&C Coordination Meeting with the City City-related Work in PCM Cabinets prior to Construction Phase	R/B/C C				x x x x	x x x	x					_				_									
		- C						Â																		
4	PREPARATION OF CONSTRUCTION SEQUENCE AND OPERATIONS PLANS Attend Safety Training	ALL	х	1 1				1					1 1	1	1 1		1		1 1	1 1		1 1	1 1 1	1 1		
	Field Verification	B/E/R	х	x x x																						
	Prepare Develop 6 CSOP's Workshop with O&M Staff	E	x	x x x	x												_									
	Submit CSOP's for City Review	С			x x x																					
	Respond to Comments Finalize CSOP's	E				x							_				_									
5	PREPARATION OF DRAFT DRAWINGS FOR SUBMITTAL Receive Microstation dgn files from the City	1			x			1					1 1	1	1 1		1		1 1	1 1		1 1		1 1		
	Prepare Draft Loop Diagrams for submittal	E			x x x																					
	Prepare Draft Conduit Plans for Area 5 and Area 16. Submit 60% Drawings to the City	E				x x x											-									
	City Review of Draft Drawings	С					x x x																			
6	CONSTRUCTION KICK OFF MEETING PREP AND ACTIVITY	1														I						1 1	1			
	Notify City of Construction Kickoff Meeting - 8 weeks Prior Notice	В				x x x x	x x x	x																		
	Prepare and Submit Updated Schedule Prepare Startup Testing and Commissioning Checklists	B				x											_									
	Prepare and Submit Emergency Response Contact List	В				x																				
	City Review	С				x x	x																			
7	CONSTRUCTION KICKOFF MEETING Construction Kick off Meeting	ALL											1 1				1									
		ALL							*																	
	INSTALLATION OF LOOP 1A AND LOOP 1B MASTER STATIONS AND PILOT TESTS Furnish and Install Loop 1A Master (Core Drills, conduit & conductor install Furnish and Install Loop 1B Master (Core Drills, conduit & conductor install	В							x x x x x																	
	Temp Installation of actuator and interim power and control conductors Test and Commission the Loop 1A Master with the Temporary Actuator	B									x x						_									+
	Test and Commission the Loop 1B Master with the Temporary Actuator ACTUATOR GROUP 1 CONSTRUCTION										~															
10	ACTUATOR GROUP 2 CONSTRUCTION	B/R/T						1		I I		X X	x	^	1	1										
11	ACTUATOR GROUP 3 CONSTRUCTION	B/R/T						1						x	×	x x										
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13	ACTUATOR GROUP 5 CONSTRUCTION						· · · · ·	1		I I 		ı I			1 I							1 1	· · · ·			
14	ACTUATOR GROUP 6 CONSTRUCTION	B/R/T																			x x	x x				
14		B/R/T																					x x	x x		
15	CLOSEOUT AND FINAL DOCUMENT REVISIONS AND SUBMITTALS	R						1			1 1		- ·	1			1 1								x	
	Final Drawing Submittals	Е																							x x x	x
	Torque Graph Submittals Completed Startup, Testing, and Checkout Forms	R					+	-															+		x x x	+ $+$ $+$
	City Review	C																							× ×	x
NOTES																										

TABLE 2	
ESTIMATED MILESTONE CHA	ART
Milestone Description	Milestone Date
Notice to Proceed	June 5, 2017
Rotork Submittal to the City	July 3, 2017
Workshop with City Operations and Maintenance Staff	July 10. 2017
Design Phase Kickoff Meeting	July 17. 2017
Notification of Construction Phase Kickoff Meeting	July 31, 2017
I&C Coordination Meeting with Comnet	July 31, 2017
Submit 60% Drawings	August 28, 2017
Construction Phase Kickoff Meeting	September 25, 2017
Start Pilot Phase of Work	October 2, 2017
Start Construction Phase – Group 1	November 20, 2017
Start Construction Phase – Group 2	December 20, 2017
Start Construction Phase – Group 3	January 20, 2018
Start Construction Phase – Group 4	February 20, 2018
Start Construction Phase – Group 5	March 20, 2018
Start Construction Phase – Group 6	April 20, 2018
Start Closeout Phase	May 20, 2018
Final Submittal to the City	May 30, 2018
Project Completion	June 30, 2018

#### 8. Equal Employment and Contracting Opportunity

This Proposal exceeds the City's expectations for ELBE/SLBE participation. Attachment 2 includes ELBE/SLBE certifications for Tharsos Inc. and EDI. The percent participation from ELBE's in this proposal is greater than 25% and exceeds the minimum participation requirements set forth by the City of San Diego. Attachment 3 includes Baker Electric's current "Work Force Report" and City of San Diego approval of Baker Electric's EOE Plan.

#### 9. Presentation and Interview

If given the opportunity to present, the Baker Team will use the presentation to expand on some of the topics covered in this Proposal. Baker Electric looks forward to the opportunity to contribute to the project.

#### **10. References**

Attachment 3 of this Proposal includes lists of references for each of the organizations that form the team.

#### ATTACHMENT 1 RESUMES

# Baker Electric

## Education

IBEW Electrical Apprenticeship JATC Training Certified Welder MSHA IBEW Project Management Training, IIT Project Management

# Certifications

Lockout/ Tagout CPR / First Aid OSHA 10 OSHA 30 Competent Person Confined Space Fiber Optics Forklift Training Code Training Fall Protection High Voltage Splicing Low Voltage

# **Construction Experience** 40 years

## Years with Baker

2 years



McCarran International Airport Las Vegas, NV

# **Steve Braverman**

Director of Service

# Experience

As Project Executive, Steve's comprehensive portfolio of projects includes multi-family, cogeneration, education, industrial, manufacturing, military, commercial, hospitality, clean room and service. He fully supports peers, managers and staff across all business groups, in a manner that is consistent with, and in the best interest of, the overall goals and objectives.

# Relevant Project Experience

### McCarran International Airport Terminal 3 Expansion, Las Vegas, NV

\$147,000,000 Electrical Value Expansion

Twentynine Palms Marine Base North Side Utility Upgrade, Twentynine Palms, CA \$8,000,000 Electrical Value Utility Upgrade

#### Apra Habor Utility Upgrade, Guam

\$7,000,000 Electrical Value North Main Side Utility Upgrade

#### Aegis Ashore Defense System PMRF, Kauai, Hawaii \$39,000,000 Electrical Value

Royal Bank of Canada Data Center, Stratford, Canada \$39,000,000 Electrical Value

#### Anderson AFB, Guam

\$17,500,000 Electrical Value Base wide utility distribution upgrade



# Baker Electric

# Certifications

Construction Risk & insurance Specialist Associate Loss Control Management Risk Management Essentials OSHA 10 OSHA 30 Lockout / Tagout CPR / First Aid Competent Person Confined Space Scaffold Arc Flash Fall prorection

# **Construction Experience**

30 years

# Years in current position

### Years with Baker

1 year



Pechanga Resort Hotel Expansion Temecula, CA

# Frank McDaniel, cris

Director of Safety

# Experience

Frank is a leader in the field of construction safety, began his career as a journeyman carpenter. After leaving the Carpenters Union he progressed to superintendent and project management positions. He has more than 30 years of experience in the construction industry with more than 20 years in safety, giving him a unique perspective on safety improvement. For more than 15 years he has held safety director/risk manager positions, he has demonstrated an ability to address safety concerns in diverse work environments.

# Project Experience

#### Pechanga Resort Hotel Expansion, Temecula CA

Role: Safety Director \$27,000,000 Electrical Value Hospitality 695,000 SF 14-story hotel, spa, pool complex and amphitheater

#### Stateline Solar Phase 2, Nipton, CA

Role: Safety Director \$17,783,042 Electrical Value Utility Scale Solar 169.21MWDC fixed system, consisting of 1,480,920 modules.

#### Universal Studios, Island of Adventure, Orlando, FL

*Role: Site Safety and Risk Manager* \$1,400,000,000 Contract Value Theme Park

#### Orange County Convention Center Phases 3 & 4, Orlando, FL

*Role: Site Safety and Risk Manager* \$400,000,000 Contract Value Convention Center

#### Barns-Jewish Washington University, St. Louis, MO

*Role: Site Safety and Risk Manager* \$300,000,000 Contract Value Hospital and medical offices



IBEW Apprenticeship JATC Training

### Certifications

NECA Supervision & Management Commercial Solar Power Installations OSHA 10 OSHA 30 Lockout / Tagout Arc Flash Training Competent Person Confined Space Training NEC Code Training Forklift Training Forklift Training Fall Protection Scaffold Training CPR / First Aid

# **Construction Experience**

31 years

## Years with Baker

19 years

# Years with Position

10 years



UC Riverside Student Housing Riverside, CA

# **Bill Roland** Director of Field Operations

# Experience

Bill has over 27 years of field experience. Supervising projects from design/build to fast-track, while motivating field crews, monitoring labor, ensuring compliance of OSHA, CAL-OSHA and building code regulations, he continues to deliver quality projects for Baker Electric.

# **Relevant Project Experience**

#### BEQ Package 9, Twenty-Nine Palms, CA

\$22,079,0228 Electrical Value Military 200-unit Bachelor Enlisted Quarters, 4-Story Parking Garage, 1.4 MW Solar System

#### Valley View Casino, Valley Center, CA

\$8,100,000 Electrical Value Indian Gaming Casino Gut and Expansion

#### Agua Caliente Casino Headliner Room, Rancho Mirage, CA

\$6,300,000 Electrical Value Indian Gaming Casino Expansion

#### CUF Cogeneration Plant, Santa Ana, CA

\$6,000,000 Electrical Value Cogeneration/Central Plants 40 miles of electrical wiring, two 5 megawatt solar turbine generators

#### Brawley Wastewater Treatment Plant, Brawley, CA

\$2,300,000 Electrical Value Industrial Waste Water treatment plant expansion for the city of Brawley

#### Yorba Linda High School Modernization, Yorba Linda, CA

\$4,500,000 Electrical Value K-12 Construction, site lighting and interior lighting install, power infrastructure





Ohio State University Architecture Apprenticeship Program IBEW Apprecticeship NECA Training: Trenching Safety Home Automation Fiber Optics Effective Supervision Progran-Supervising N.J.A.T.C - Electrical Apprenticeship

## Certifications

Medium Voltage-Certificate Splicing/Terminations 69KV OSHA 30 Hour Certified Construction Safety and Health Rockwell Automation-Certificate RSLogix 5 PLC Programming Digital Dimensions-Certification AutoCAD CA Electrical State Cert. VFD Training-Cutler Hammer SVX9000 Certified Course #719 PC Basics 3 Raychem Electrical Products Training EAP Manager/Supervisor Training-HHRC-Course

## **Construction Experience**

27 years

## Years with Baker

1 year

# Scott Schemmel

Senior Project Manager

# Experience

Scott's comprehensive portfolio includes design/create engineered drawings, submittals, specifications, estimating and implementation of industrial process for instrumentation, automation and control systems. He is knowledgeable in Industrial Process and Instrumentation, Motor Controls, SCADA, Telemetry, PLC Programming, Ladder Logic, Panel Layout/Design using AutoCAD, Instrumentation calibration and documentation including Start Up, Loop Drawings per ISA Standards, and Submittal Processes, Estimating and Project Management.

# Relevant Project Experience

#### Twin Oaks Valley Water Treatment Plant, San Diego, CA

\$13,000,000 Electrical Value Instrumentation/Controls-SCADA Panel and Layout and Design and Start Up

#### South Bay Water Reclamation Plant, San Diego, CA

\$11,000,000 Electrical Value Electrical I&C

#### Miramar Water Treatment Plant Phase II-City of San Diego, San Diego, CA

\$3,000,000 Electrical Value Panel Layout and Design and Start Up

#### Alvarado Water Treatment Plant, San Diego, CA

\$2,700,000 Electrical Value Upgrade and Expansion Phase 2 &4 Panel Layout and Design, Start Up

#### North City Water Reclamation Plant, San Diego, CA

\$2,500,000 Electrical Value Electrical I&C

#### Imperial Waste Water Treatment Plant, Imperial, CA \$150,000 Electrical ValueElectical I&C

#### Black Mountain Booster Pump Station, San Diego, CA \$300,000 Electrical Value Instrumentation/Controls-SCADA Panel Layout and Design, Start Up





Palomar College AA Electrical Technology IBEW Apprenticeship Program JATC Training

# Certifications

Lockout/Tagout Competent Person Confined Space OSHA 30 Arc Flash CCO Hoisting Forklift Training Code Training

# **Construction Experience**

30 years

### Years with Baker

1 year



Lake Hodges Escondido, CA

# John Wheeler Superintendent

# Experience

John Wheeler brings with him over 30 years of industry experience. John is responsible for managing, coordinating and facilitating the field staff for each of the various components of the project construction process on his jobs. He specializes in clean and waste water treatment facilities, power generation utility substation construction and medium voltage distribution systems.

# Relevant Project Experience

#### San Diego Unified School Medium Voltage Maintence, San Diego, CA

\$3,000,000 Electrical Value Preventative maintenance and emergency repair of 5kV and 12kV distribution

#### Lake Hodges Stored Water and Pump Project, Escondido, CA

\$ 6,000,000 Electrical Value 12kV pump motors and turbines for power generation,12kV to 69kV GSU and Switchgear

#### Miramar Pump Station San Diego County Water Authority, San Diego, CA

\$1,200,000 Electrical Value New utility service pump motors/VFD and PLC control

#### Metropolitan Biosolids Center, San Diego, CA

\$3,000,000 Electrical Value Chemical building rehab and odor control rehab

#### Basilone Substation, San Diego, CA

\$1,000,000 Electrical Value Concrete control shelter all V.G. conduit

#### Miramar Water Plant, San Diego, CA \$2,500,000 Electrical Value U.V. treatment facility





IBEW Electrical Apprenticeship

# Certifications

Lockout/Tagout CPR / First Aid Competent Person Confined Space Arc Flash Forklift Training OSHA 40 Hazwoper

# **Construction Experience**

23 years

Years with Baker 1 year

Years in Position



Alvarado Water Treatment Plant San Diego, CA

# **Tyler Gregg** Foreman

# Experience

Tyler has over 23 years of experience. He manages, coordinates and facilitates the field staff for each of the various components of the project construction process. He has the ability to troubleshoot and repair electrical control systems, as well as diagnose malfunctioning systems and components, using test equipment to locate the cause of a breakdown and correct the problem.

# Project Experience

#### Alvarado Water Treatment Plant, San Diego CA

\$1,200,000 Electrical Value New MCC's, PLC's, feeder, branch circuits, control devices and conduit

San Elijo Joint Power Electrical Upgrades, San Diego, CA \$1,100,000 Electrical Value Main switchgear upgrades, new wire and conduit

#### Encina FY2012 Rehabilitation Pollution Control, San Diego, CA

\$111,300 Electrical Value MCC & PLC upgrades, underground conduit, above ground conduit, new wire

#### Santa Fe Irrigation Group 1&2 Pipeline Project, San Diego, CA

\$673,450 Electrical Value Nine pressure reducing stations. Control cabinets, conduit & wire for valves and metering instruments

#### Twin Oaks Water Treatment Plant, San Marcos, CA

\$1,000,000 Electrical Value New MCC's, PLC's, underground conduit, wire and control devices

#### Encina Third Centrifuge Addition & Centrate Piping Rehab, Carlsbad, CA

\$381,100 Electrical Value Install new centrifuge, pumps, control instruments and control panels. Upgrade MCC's and switchgear

#### West Basin Municipal Water District Barrier Pumps VFD Upgrade, El Segundo, CA \$252,200 Electrical Value

Install new VFD's, conduit and wire



Wednesday March 22, 2017

To: Tom Roberts

Ref: Resume for Gordon Dixon regarding Pakscan Experience

Experience; Twelve years in field service directly working on Rotork products and supporting their customers. Ten years as a field service Engineer and two years as the Site Service Manager – South.

# **rotork** Site Services

Rotork Controls Inc 1460 Cader Lane, Suite A Petaluma, Ca. 94954 USA Office:707-769-4880 xt 14121 Fax: 866-251-7035 Cellular: 909-747-7474 mailto:gordon.dixon@rotork.com

Due to the large number of installed Pakscan networks in Southern California I was required to become very familiar with Pakscan in order to support our customers. Due to my knowledge and experience I have traveled to other states and assisted other Engineers and customers with Pakscan startups, diagnostics and training.

Pakscan Masterstation Installations I have personally been involved with. There are many more sites but here are the highlights.

- Tesoro Carson Refinery, Retrofit installation/startup/maintenance of the 2<sup>nd</sup> P3 MS ever installed in the US.
- Vopak storage and handling facility, Retrofit installation/startup/maintenance of four P3 MS with a combined 150+ field units.
- Valero Refinery, CA, Retrofit installation/startup/maintenance of one IIS MS with a 30+ field units.
- Clark County Water Reclamation, NV, Retrofit installation/startup/maintenance of one IIE, one IIS and one P3 MS with a combined 200+ field units.
- Swissport Fuel Storage, AZ, Retrofit installation/startup/maintenance of one IIE MS with 30+ field units.
- DFSP, San Pedro, CA, Retrofit installation/startup/maintenance of four P3 MS with a combined 200+ field units.
- Chino I DeSalter, Retrofit installation/startup/maintenance of two P3 MS with a combined 100+ field units.
- Chino II DeSalter, Retrofit installation/startup/maintenance of seven P3 MS and 1 IIE MS with a combined 200+ field units.
- Ivanpah Solar Power Plant, Installation/startup/maintenance of twelve P3 MS with a combined 600+ field units.
- Ann Arbor Michigan WWTP, Installation/startup/maintenance of one P3 MS with 60+ field units.
- LAX Fuels, Retrofit installation/startup/maintenance of four P3 MS with a combined 200+ field units.
- Afton Generating Station, NM, Retrofit installation/startup/maintenance of one P3 MS with 50+ field units.



Rotork Controls Inc 1460 Cader Lane, Suite A Petaluma, Ca. 94954 USA Office:707-769-4880 xt 14121 Fax: 866-251-7035 Cellular: 909-747-7474 mailto:gordon.dixon@rotork.com

- Tesoro Golden Eagle Refinery, Rodeo CA, Retrofit installation/startup/maintenance of two P3 MS with a combined 60+ field units.
- Plains Pipeline, Retrofit installation/startup/maintenance of seven IIS MS with a combined 250+ field units.
- City of Escondido HAARF, Retrofit installation/startup/maintenance of one P3 MS with a combined 30+ field units.
- City of San Diego, Point Loma, Retrofit installation/startup/maintenance of three P3 MS with a combined 100+ field units.
- City of San Diego, Penasquitas Pump Station, Retrofit installation/startup/maintenance of one P3 MS with 20+ field units.
- City of San Diego, MBC, Retrofit installation/startup/maintenance of twenty one P3 MS with a combined 400+ field units. This work was conducted over a two day outage and completed in seamless upgrade with no issues. I have attached a report with some pictures of this installation should you choose to include it.

Sincerely,

Gordon Dixon West Coast RSS Manager - South

#### City of San Diego Metro Biosolids Center (MBC) P3 Upgrade Project

Tom Degaetano, Rob Cavell and Gordon Tipton under the Etex banner (a one time Rotork rep) initially sold and installed 21 IIE Pakscan Masterstations during the construction and startup of the MBC facility in 1996. These units controlled nearly 400 actuators in every part of the plant. The Pakscan IIE MS's, networks and actuators have performed well over the years. In a previous role with Westinghouse Process Control Inc. our own James Hall wrote most of the software for this site as the primary control systems integrator. One troubling point at the site involved 9 MS's, which the contractor located in a single cabinet with no rear access on the centrifuge room floor. These units were difficult to install and plagued with heat and dirt problems due to the poor environmental conditions in this room. From the date of the install and through startup Gordon Tipton suggested these units be relocated to another location but it was never done.



In 2006 during field service visits by Gordon Dixon it became obvious that the battery on most of the MS's were becoming an issue. In addition due to the firmware level the customer did not have the ability to download and save a copy of the MS configuration or tagging file.

In early 2007 during a service visit Gordon Dixon presented a P3 brochure to Branko Rupic the Instrumentation and Controls Supervisor. They discussed some of the new features and benefits of the P3 including elimination of the battery, built-in secure web server allowing a way to save configuration and tagging information and logging of host messages for diagnostics and troubleshooting. Branko expressed interest and several follow up calls were conducted by Rob Cavell to discuss all of the new features and benefits of the P3 and our aggressive exchange program

In March of 2007 Rob and Gordon conducted a demonstration of the new P3. Due to the interest generated by this visit a decision was made by the City of San Diego to purchase 22 new P3 MS's.

In February of 2008 Rob Cavell and Gordon Dixon were invited to join a planning commission developed to oversee the project which would include the retrofit installation of 21 P3's, relocation of the 9 units located on the centrifuge room to an environmentally controlled electrical room 2 stories up on the opposite side of the building and installation of local rack mounted PC's capable of accessing the P3 MS's as well as the customers site specific operating system thus giving their technicians local field interfaces. The final P3 would be used in their I&C shop as a diagnostic and training tool. The planning commission was tasked with the goal of performing this upgrade in less than 48 hours during a weekend shutdown.

In April of 2008 a demo P3 was installed for a two-week trial period to demonstrate the full Pakscan 2 protocol legacy support. The new P3 performed without any issues and confidence in the sites Operations and Management teams grew significantly.



In preparation for the install Gordon Dixon configured, tagged and labeled all 21 P3 units for each specific location at the site. This work was performed off site demonstrating the benefits of the built-in web server software. The upgrade installation took place on August 22<sup>nd</sup> and 23<sup>rd</sup> without a hitch. The site was brought back on line on the August 24<sup>th</sup> 2008 and has been in full operation with no down time related to the newly installed P3 MS's. MBC I&C technicians have a dedicated laptop which they store all of the configuration and tagging information on. This computer along with the rack-mounted units provides them with the ability to access, diagnose, configure and utilize all of the new features of the P3.



619-669-8377 cell

#### **PROFESSIONAL EXPERIENCE**

June 2010 – Present President of Tharsos Inc.

#### Selected Projects:

#### OCSD P2 North Scrubber Complex Rehab

Replaced 11 badly deteriorated metering pump pedestals, recoat chemical containment area. Installed new PVC piping, FRP supports and grating. Repaired concrete stairway, replaced rebar, and repaired leak in 3500 gallon FRP tank

#### P2 N. Scrubber Complex Bleach Tank Replacement

Replace 8500 gallon bleach tank with 3700 gallon bleach tank. Install temporary tank bypass to keep system in operation. Repair concrete tank foundation. Apply special coatings, Sancon 100. Replace 4" CPVC discharge and supply piping, install 4" diaphragm valves, FRP pipe supports, instruments, electrical conduits.

#### WBMWD Lime Silo Rehab Project

Painted exterior of lime silos, installed new dust collector and lime feed equipment, removed existing equipment. Installed new control panel and electrical systems. Extended platform out 12 feet. Provided training, start up and commissioning of equipment.

#### Sept 2005 – June 2010 Assistant Project Manager – Archer Western Contractors

#### Job Description:

Assigned to **Pump Turbine & Pipeline Coating Repair** in Rancho Penasquitos, CA. Dismantle Pump Turbine (\$150K) Assigned to **Alvarado WTP Ozone Project** in La Mesa, CA. Contract to build Ozone Building (\$47M) Assigned to **Lake Hodges Pump House Storage Facility** in Escondido, CA. Contract to build Pump House (\$56M) Assigned to **Alvarado WTP Phase II Expansion** in La Mesa, CA. Contract to build Floc/Sed Basins (\$29M) Responsibilities: Assist in estimating large public work projects, prepare contracts for vendors and subcontractors

Responsibilities: Assist in estimating large public work projects, prepare contracts for vendors and subcontractors, prepare and negotiate field orders and change orders, prepare and schedule for shut downs and tie-ins, prepare and process pay applications, review and process invoices, generate P&L reports, update and generate P3 schedules, perform safety walks, attend meetings with clients and owners, start and close jobs.

#### May 2004 – Sept 2005 Project Engineer – Archer Western Contractors

Assigned to **Alvarado WTP Phase II Expansion** in La Mesa, CA. Contract to build Floc/Sed Basins (\$29M) Responsibilities: maintain daily logs and project diary, review cost coding (time sheets and invoices), review daily production reports, review submittals, drafting- field sketches, interpreting contract drawing and specifications, maintain monthly photos, record equipment and material deliveries, prepare and monitor CPM schedule for project.

#### Aug. 1998 – Mar. 2003 Field/Mechanical Engineer – Cherne Contracting Corporation

Assigned to ARCO Polypropylene Project in Long Beach, CA. Contract to build polypropylene plant (>\$100M)
 Assigned to BP Amoco Refinery Butanediol Project in Lima, OH. Contract to build a butanediol plant (>\$100M)
 Assigned to Empire Electric State Line Project in Joplin, MO. Subcontract for mechanical side of Combined Cycle Power Plant (500MW) (\$50-100M)

Assigned to **Equilon Refinery in Long Beach**, CA. Contract to upgrade refinery for clean fuels (regulation capital improvements). (\$20-40M)

- Construction Management Activities included scheduling the installation of piping and mechanical equipment with the intent to meet completion dates as set by owner. Inspect work and verify compliance with applicable codes, and specifications. Work with superintendent and supervise up to 40-50 union craft employees during construction activities. Provide if possible most efficient construction path. Provide owners with options, solutions, and

estimated cost for design errors or for any problem that inhibit construction. Assure project was built to plans and specifications. Update construction schedule and plan out work for new proposed construction and shut down work. Generate progress reports and verify work efficiencies. Schedule final walk downs for turn over. Participate in construction meeting with client and owners. Organize all documentation. Communicate with vendors for equipment problems, handling, storage, start up, etc. Perform material takeoffs, draft isometrics for layout and construction.

#### Nov. 1995 - Aug. 1998 Field/Mechanical Engineer - Scott Company of Southern California

Assigned to **Mobil Boiler Feed Project in Torrance**. Contract to build RO/Microfiltration water treatment plant (>\$12M) - My duties included expediting submittals for approval, writing RFI's, inspecting fieldwork, investigating problems with construction and methods, corresponding with vendors and subcontractors, documentation control, concrete testing preparations, purchasing/scheduling equipment, material check-in, assisting Project Manager with technical assignments, generating reports, attending construction meeting.

#### Assigned to Hyperion Water Treatment Plant Full Secondary Facilities Phase 2 Project. (>\$100M)

- Assist Mechanical Superintendent with field operations and procurement of materials/equipment for projects involving liquid oxygen tank installation, large/small bore piping installations above and below grade, pumps, gas scrubber sys, chemical feed systems, clarifier equipment, reactor equipment, and other mechanical items. Other responsibilities included subcontract administration, documentation control, expediting submittals, preparing work schedules, tracking tests for piping and field welds, and working with vendors to establish priorities for equipment/materials deliveries and installations.

#### Sept. 1992 – Nov. 1995 **Project Estimator Assistant / Contract Administrator - Manhole Adjusting Inc.**

Manhole Adjusting Inc. is a General Engineering Contracting firm that specializes in the construction of roads and highways with Asphalt Rubber.

- My duties included working with Project Manager on scheduling, coordinating daily activities for workers, performing technical assignments, monitoring work operations in relation to schedule and budget criteria, develop cost reports for project functions on a daily, weekly and monthly basis, coordinate work requirements for subcontractors and material vendors, prepare technical documents (calculations, field designs, operation procedures) as required, provide quantity takeoffs and cost estimates for construction relative to plans and specifications.

#### EDUCATION

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA Bachelor of Science in Civil Engineering - Environmental Option



Edwardo David, President Electrical Design, Inc. 9565 Waples Street, Ste. 205 San Diego, CA 92121 (858) 869-8747 edavid@edi-engineers.com Years of Experience: 31

Years with Firm: 8

Education: 1978 Electrical Engineering Mapua Institute of Technology Manila,Philippines

#### **Qualifications:**

Edwardo David has extensive experience in electrical design for healthcare, laboratories, institutional, educational, military, commercial and industrial facilities. Design experience includes lighting, power, energy conservation, communications, fire alarm, security and industrial control systems.

Mr. David's professional experience includes a broad range of responsibilities such as: Planning, report preparation, design, economic analysis and construction management which included the preparation of plans, specifications, cost estimates, studies and reports for electrical repair projects, new construction, rehabilitation, and installation of electrical utilities.

#### Experience:

- Pier 160 Lighting and Sea Lion Deterrent
- San Clemente Pier Renovation
- P-781 Special Operations Forces Close Quarters Combat Facility at La Posta, California
- Repair Circuit 6 and Housing at Naval Base Ventura County, Port Hueneme, California
- Upgrade Base Power Buildings 1747 & 1763 at MCAGCC 29 Palms, California
- F-35 TES Facility Nellis Air Force Base, Nevada
- P-214 350 KW Solar Photovoltaic Power System at MCAS Miramar
- P-0875 and P-0876 1.4 MW Solar Photovoltaic System at SPAWAR Old Town Campus San Diego, California
- Renovation of the San Diego Naval Base Exchange Buildings
- Electrical System Upgrade at VA Long Beach
- El Camino High School Renovation/Modernization Oceanside, California
- Jonas Salk Elementary School San Diego, California



#### RODELIO DANTES, P.E., Vice-President Electrical Design, Inc. 9565 Waples Street, Ste. 205 San Diego, CA 92121

(858) 869-8747 boker@edi-engineers.com Years of Experience: 38

Years with Firm: 4

Registrations / Licenses: California #14116 (1992)

Education: 1972 BS, Electrical Engineering University of the Philippines

#### **Qualifications:**

Rodelio Dantes is a Professional Electrical Engineer with 38 Years of professional extensive experience in the design of various electrical engineering projects including substation and protection upgrade, transmission and distribution, street lighting, underground and overhead distribution, telecommunication, fiber optics, and grounding.

Mr. Dantes professional experience includes a broad range of responsibilities such as: Planning, report preparation, design, economic analysis and construction management which included the preparation of plans, specifications, cost estimates, studies, reports, and Supervision Control and Data Acquisition (SCADA) for electrical repair projects, new construction, rehabilitation, and installation of electrical utilities.

#### Experience:

- Agua Hedionda Lift Station Engineering Assessment
- City of San Diego Sewage Lift Pump Stations 21 and 41
- Ocean Outfall Pump Station Improvement
- Aeration Blower Electrical Improvement Assessment and Design
- Olivenhain-Hodges ESP/Pumped Storage Project, Twin 23mW Motor/Generators, Olivenhain, California
- Install Solid State Frequency Converter (SSFC) For Power Pit ACU-5, Marine Corps Base, Camp Pendleton, California (2010)
- South Cummings Twin 40 mVA and Ring Bus, 69kV Design, Naval Station, San Diego, California
- Colorado Aqueduct 230 kV Switchyard and Headgates, Colorado River (Various Sites), Metropolitan Water District
- Mohler Loop Drive Overhead to Underground Conversion Project, Anaheim, California
- Replace Transformer Substation C, Naval Base Coronado
- Ormond Beach Generating System 66 kV Line Replacement, Oxnard, California
- City of Anaheim 66 kV GIS Park Substation, Anaheim, California

#### TIM W. COOPER Water/Wastewater Design Associates.

619-884-6131 Cell <u>wawda@cox.net</u> P.O. Box 16987 San Diego, CA 92176-6987

Experience:	Tim Cooper has held a diverse range of leadership roles in planning, design, and startup of water and wastewater treatment facilities. An experience summary describing each project and Mr. Cooper's role on it is available on request. The list covers most projects, but not all.
<b>Employment History</b>	
Since 2002: From 1989 to 2002: From 1984 to 1989: From 1982 to 1984:	Independent Licensed Engineer and Subconsultant Malcolm Pirnie, Inc. (Now part of Arcadis Inc.) John S. Murk Engineers, Inc. (Bought by CDM in 1990) County Sanitation Districts of Los Angeles County (CSDLAC)
Education:	Certificate Program, Industrial Controls Technology, 2013 California State University Fullerton B.S. Civil Engineering, Stanford University, 1982 (Co-terminal Program) M.S. Environmental Engineering, Stanford University, 1982 (Co-terminal Program)
Professional Registrations:	California Licensed Engineer, Civil – License # C 38018 California Licensed Engineer, Control Systems – License # CS 7490
Insurance:	\$2M/\$2M Professional Liability and Commercial General Liability
Award-Winning Projects:	Tim Cooper has held leadership responsibilities in the following award-winning projects.
	Alvarado WTP Ozone Upgrade and Expansion Project 2013 American Society of Civil Engineers Outstanding Civil Engineering Acheivement Award
	Lee Hall Water Treatment Plant 2006 American Academy of Environmental Engineers Design Honor Award
	<b>Point Loma WWTP Chemical Feed Systems Upgrade Project</b> : Consulting Engineers and Land Surveyors of California (CELSOC) Engineering Excellence Award, 2005 – Large Firm Merit Award.
	<b>Lake Highland Water Treatment Plant</b> : FICE Excellence in Engineering – Grand Award, 1999.

#### ATTACHMENT 2 ELBE/SLBE CERTIFICATIONS BAKER ELECTRIC WORK FORCE REPORT BAKER ELECTRIC EOE CERTIFICATION-CITY OF SAN DIEGO



#### THE CITY OF SAN DIEGO

June 7, 2016

Electrical Design, Inc. Consulting Engineers Mr. Edwardo David 9565 Waples Street, Suite 205 San Diego, CA 92121

#### Subject: Small Local Business Enterprise Certification

Dear Mr. David:

Congratulations! We have reviewed your **renewal application** and you have been approved for re-certification as a City of San Diego Emerging Local Business Enterprise (ELBE). Your certification number is 12ED0779 and your classification is Professional Services. Please reference this certification number when bidding on City projects. For the City's Small Local Business Enterprise (SLBE) Program, your certification is effective June 7, 2016. This certification expires on June 7, 2018 at which time you will need to reapply in accordance with the SLBE guidelines.

To receive potential contracting opportunities, please ensure that you register with the City's web-based vendor registration and bid management system, BidsOnline<sup>TM</sup> hosted by PlanetBids System. For additional information go to:

#### http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml

<u>Construction Contractors</u>: Contractors desiring to bid as a prime contractor on City of San Diego public works construction projects must be prequalified in accordance with the San Diego Municipal Code §22.3004(a).

Contractors certified as an emerging or small local business under the City's SLBE program may, **upon submittal of their bond letter**, be prequalified to bid as a prime contractor for projects up to \$1 million or their single-project bond limit, **whichever is less**. To become prequalified, go to the "Prequalification" tab in the vendor profile on PlanetBids, select "Prequalification for City Certified SLBE", and upload a current bond letter, addressed to the City of San Diego, stating single project and aggregate bonding limits.

To become prequalified as a prime contractor and bid on large projects valued at **more than \$1 million**, complete the online Prequalification Program Application found on PlanetBids. Contractors will need to provide references, a complete, current reviewed or audited financial statement and a current bond letter via PlanetBids.

> Purchasing & Contracting Department Equal Opportunity Contracting 1200 Third Avenue, Suite 200 San Diego, CA 92101-4195 Tel (619) 236-6000 Fax (619) 236-5904

Page 2 of 2 Mr. David June 7, 2016

To bid on a specific project, the prequalification application must be received at least two weeks **prior** to the bid due date. Upon prequalification approval, an automated email notification will be forwarded from PlanetBids. Please be sure to print your prequalification approval letter for your records.

For questions regarding the Prequalification Program, please contact Dave Stucky at (619) 533-3474 or email <u>DStucky@sandiego.gov</u>.

For questions regarding the SLBE Program, please contact Equal Opportunity Contracting at (619) 236-6000 or e-mail <u>ContactEOC@sandiego.gov</u>.

If there are any changes in your firm's status during this certification period, you are required to notify this office *immediately*.

Equal Opportunity Contracting reserves the right to withdraw this certification at any time and request additional information and/or conduct on-site visits for purposes of verification.

Thank you,

Henry Foster III Program Manager Equal Opportunity Contracting

Purchasing & Contracting Department Equal Opportunity Contracting 1200 Third Avenue, Suite 200 San Diego, CA 92101-4195 Tel (619) 236-6000 Fax (619) 236-5904

# City of San Diego



# Small Local Business Enterprise (SLBE) Program Certification

Electrical Design, Inc. Consulting Engineers

# **Emerging Local Business Enterprise (ELBE)**

**Professional Services** 

(NAICS: 541330)

**Certification Number: 12ED0779** 

Effective: 6/7/2016 - 6/7/2018

Henry Foster III Equal Opportunity Contracting Program Manager



THE CITY OF SAN DIEGO

April 14, 2015

Tharsos Inc. Michael Lopez 7839 University Ave. La Mesa, CA 91942

#### Subject: Small Local Business Enterprise Certification

Dear Michael:

Congratulations! We have reviewed your **renewal application** and you have been approved for re-certification as a City of San Diego Emerging Local Business Enterprise (ELBE). Your certification number is 10TH0091 and your classification is General Construction. Please reference this certification number when bidding on City projects. For the City's SLBE Program, your certification is effective April 13, 2015. This certification expires on April 13, 2017 at which time you will need to reapply in accordance with the SLBE guidelines.

To receive potential contracting opportunities, please ensure that you register with the City's web-based vendor registration and bid management system, BidsOnline<sup>TM</sup> hosted by PlanetBids System. For additional information go to:

http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml

For questions please call (619) 236-6092 or e-mail KPatton@sandiego.gov.

If there are any changes in your firm's status during this certification period, you are required to notify this office *immediately*.

Equal Opportunity Contracting reserves the right to withdraw this certification at any time and request additional information and/or conduct on-site visits for purposes of verification.

Thank you,

Henry Foster III Program Manager Equal Opportunity Contracting

Purchasing & Contracting Department Equal Opportunity Contracting 1200 Third Avenue, Suite 200 San Diego, CA 92101-4195 Tel (619) 236-6000 Fax (619) 236-5904





# Small Local Business Enterprise Certification

Tharsos Inc.

**Emerging Local Business Enterprise (ELBE) General Construction** (NAICS: 237110, 237120, 237990 238110, 238910, 238990) Certification Number: 10TH0091

Effective Date: 4/13/2015

KIN XXX IN XXX IN XXX II

Expiration Date: 4/13/2017

Henry Foster III Equal Opportunity Contracting Program Manager



February 24, 2017

Kim Molzahn Baker Electric, Inc. 1298 Pacific Oaks Place Escondido, CA 92029

RE: Equal Employment Opportunity (EEO) Plan Approval

Dear Ms. Molzahn:

This office has reviewed your firm's equal employment opportunity policies and practices and has determined the following:

Subject to the commitments detailed in your Equal Employment Opportunity (EEO) Plan, it is the determination of this office that your Plan meets the requirements of the City's Equal Opportunity Contracting Program and **is hereby approved**.

Your Plan will be maintained in this office and will be reviewed each time your firm seeks a contract with the City of San Diego. Although under representations were noted within your work force, your Plan is **approved** because the equal employment policies and practices and outreach efforts described in your Plan are expected to remedy the deficiencies in your work force. Be advised that this office will review and compare this EEO Plan with future work force reports and EEO Plans to determine if progress has been made in correcting those under representations.

The City of San Diego appreciates your cooperation in our mutual efforts to secure equal employment opportunities to all, including people of color and women.

If you have any questions, please feel free to contact me at 619-236-6077.

Sincerely,

Brett Kim Contract Compliance Officer

Cc: Claudia Arbarca, Interim Program Manager, Equal Opportunity Contracting File City of San Diego **EQUAL OPPORTUNITY CONTRACTING (EOC)** 1200 Third Avenue • Suite 200 • San Diego, CA 92101 Phone: (619) 236-6000 • Fax: (619) 236-5904

## WORK FORCE REPORT

The objective of the *Equal Employment Opportunity Outreach Program*, San Diego Municipal Code Sections 22.3501 through 22.3517, is to ensure that contractors doing business with the City, or receiving funds from the City, do not engage in unlawful discriminatory employment practices prohibited by State and Federal law. Such employment practices include, but are not limited to unlawful discrimination in the following: employment, promotion or upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeship. Contractors are required to provide a completed *Work Force Report (WFR)*.

#### NO OTHER FORMS WILL BE ACCEPTED CONTRACTOR IDENTIFICATION

	□ Construction □ Consultant	□ Vendor/Supplier □ Grant Recipient	□ Financial Inst □ Insurance Cor		□ Lessee/Lesso □ Other	r
Name of Company:						
ADA/DBA:						
Address (Corporate Heat	adquarters, where app	licable):				
City:		County:		State:		_ Zip:
Telephone Number: (	)		_ Fax Number: (	)		
Name of Company CEO	O:					
Address(es), phone and Address:						
City:		County:		_ State: _		_ Zip:
Telephone Number: (	)	_ Fax Number: ( ).		_ Emai	il:	
Type of Business:			_ Type of License:	:		
The Company has appo	ointed:					
employment and affirm Address:	-		•	ted at:		
Telephone Number: (	)	Fax Number: ( )		_ Emai	il:	
Telephone Number: (		☐ Fax Number: ( ) ☐ One San Diego Co ☐ Branch Work Foro ☐ Managing Office	ounty (or Most Loc ce *			
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<i>Check the bo</i> * <i>Submit a se</i> I, the undersigned repre	ox above that applies a parate Work Force R esentative of	One San Diego Co Branch Work Fore Managing Office to this WFR. eport for all participat ,	ounty (or Most Loc ee * Work Force ing branches. Combi Firm Name) ute)	cal Cour	nty) Work Force s if more than one certify that inform	- Mandatory branch per county.

#### WORK FORCE REPORT – Page 2

NAME OF FIRM: \_

OFFICE(S) or BRANCH(ES):\_\_\_\_\_

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- (1) Black, African-American
- (2) Hispanic, Latino, Mexican-American, Puerto Rican
- (3) Asian
- (4) American Indian, Eskimo

- (5) Filipino, Asian Pacific Islander
- (6) White, Caucasian
- (7) Other ethnicity; not falling into other groups

\_\_\_\_\_ COUNTY: \_

ADMINISTRATION OCCUPATIONAL CATEGORY	(1) African American		(2) Hispanic or Latino		(3 Asi		(4 Amer Ind	rican	(5) Asian Pacific Islander		(6) Caucasian		(7) Other Ethnicity	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Management & Financial														
Professional														
A&E, Science, Computer														
Technical														
Sales														
Administrative Support														
Services														
Crafts														
Operative Workers														
Transportation														
Laborers*														

\*Construction laborers and other field employees are not to be included on this page

1	 1	-	-	
TILE LOL				
Totals Each Column				•
Totals Each Column				

Grand Total All Employees	Page 2 = 435
1 5	Pages 2 & 3 = 760

Indicate by Gender and Ethnicity the Number of Above Employees Who Are Disabled:

Disabled							
Non-Profit Organizations Only:							
Board of Directors							
Volunteers							
Artists							

\_\_\_\_ DATE:\_\_\_\_\_

#### WORK FORCE REPORT – Page 3

NAME OF FIRM: \_\_\_\_\_\_ DATE: \_\_\_\_\_

OFFICE(S) or BRANCH(ES):\_\_\_\_\_ COUNTY: \_\_\_\_\_

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or parttime basis. The following groups are to be included in ethnic categories listed in columns below:

- (1) Black, African-American
- (2) Hispanic, Latino, Mexican-American, Puerto Rican
- (3) Asian
- (4) American Indian, Eskimo

- (5) Filipino, Asian Pacific Islander
- (6) White, Caucasian
- (7) Other ethnicity; not falling into other groups

		1) ican rican	Hispa	(2) Hispanic or Latino		3) ian	(4) American Indian		(5) Asian Pacific Islander		(6) Caucasian		(7) Other Ethnicity	
		(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Brick, Block or Stone Masons														
Carpenters														
Carpet, Floor & Tile Installers Finishers														
Cement Masons, Concrete Finishers														
Construction Laborers														
Drywall Installers, Ceiling Tile Inst														
Electricians														
Elevator Installers														
First-Line Supervisors/Managers														
Glaziers														
Helpers; Construction Trade														
Millwrights														
Misc. Const. Equipment Operators														
Painters, Const. & Maintenance														
Pipelayers, Plumbers, Pipe & Steam Fitters														
Plasterers & Stucco Masons														
Roofers														
Security Guards & Surveillance Officers														
Sheet Metal Workers														
Structural Metal Fabricators & Fitters														
Welding, Soldering & Brazing Workers														
Workers, Extractive Crafts, Miners														
Totals Each Column		i i i		1										
Grand Total All Employees	]	Pad	e 3 = 32 es 2 & 3	3 = 760	ļ _	_	_	_	_	_	_		_	_
lindicate By Gender and Ethnicity the Number of Disabled	Above E	mployee	es Who A	Are Disat	oled:									

#### **Baker Electric References**

Customer:East Municipal Water DistrictProject:Temecula Valley Regional Water Reclamation Facility ExpansionGeneral Contractor:Sukut ConstructionScope of Work:Image: Contractor of Work in the sector of W

Baker Electric worked as the Electrical subcontractor on this project. Baker electric provided electrical and controls for the project with a series of duct banks to pumps, diviserion gates and associated instruments. Baker Electric provided new and added to existing switchgear, installed new VFD's and lighting.

Customer:	City of Riverside
Project:	Evans Reservoir Replacement Project
<b>General Contractor:</b>	Gateway Pacific Contractors
Scope of Work:	

# Baker Electric worked as the Electrical sub-contractor on this project. Installed electrical feed from external source with controls feed from same source with added power, lighting, intrusion, and controls. Baker Electric installed power, lighting, fiber optic cabling and instrumentation based on the overall construction schedule.

Customer:	City of Brawley
Project:	Brawley Wastewater Treatment Plant Improvements
<b>General Contractor:</b>	CW Roen Construction Company
Scope of Work	

#### Scope of Work: Baker Electric was the prime electrical Contractor on this project working as a subcontractor to CW Roen. Baker Electric installed new electrical to support new bypass line, ponds, basins, pump stations, blower building, thickener, three (3) electrical buildings and a new administration building. Project included: extensive site work, installation of duct bank, transformers, controls, switchgear and SCADA.

Customer:	Eastern Municipal Water District
Project:	EMWD Reclamation Facility Preliminary Treatment and Acid Phase
	Anaerobic Digestion Project / Digester Upgrades
<b>General Contractor:</b>	Genesis Development

#### Scope of Work:

Baker Electric worked as a subcontractor to Genesis Development. Project involved electrical installation, switchgear, fixtures and close coordination with instrumentation subcontractor

Customer:	Department of the Navy Southwest Division (NFEC)
Project:	P-071 I/M Treatment Plant
<b>General Contractor:</b>	R.Q. Construction
Seens of Works	

#### Scope of Work:

Baker Electric performed all engineering in-house. Project elements included connection to the Base 12kV distribution system and transformation to 480 volt power for use at the plant; installation of an emergency generator system, UPS system, communications, controls and data distribution.

## **Electrical Design, Inc. References**

Customer: Project: Facility	HDR, Inc. City of San Diego Pure Water Pump Station and Pure Water Dechlorination
Scope of Work:	Design-Bid-Build
Customer:	Rancho Santa Margarita Water District
Project:	Encina JPA Condition Assessment
Scope of Work:	Planning
Customer:	Temescal Valley Water District
Project:	Lee Lake Water Reclamation Plant Phase 2 Expansion
Scope of Work:	Design-Bid-Build

## Water/Waste Water Design References

Customer:	Fallbrook Public Utility District
Project:	Plant 1 WRP Improvements, 2013
Scope of Work:	Design-Bid-Build
Customer:	City of San Diego Public Utilities Department
Project:	Dewatering Centrifuge Replacement
Scope of Work:	Design - Build
Customer:	Temescal Valley Water District
Project:	Lee Lake Water Reclamation Plant Phase 2 Expansion
Scope of Work:	Design-Bid-Build

# **Tharsos, Inc. References**

Customer:	Orange County Sanitation District
Project:	P2 N Scrubber Complex Bleach Tank Replacement
Scope of Work:	Design-Bid-Build
Customer:	West Basin Municipal Water District
Project:	West Basin Municipal Water District Lime Silo Rehab Project
Scope of Work:	Design –Bid - Build
Customer:	Sanitation Districts of Los Angeles County
Project:	Long Beach WRP Effluent Metering Weir Replacement
Scope of Work:	Design-Bid-Build