



**ENGINEERING, OPERATIONS, AND  
WATER RESOURCES  
COMMITTEE MEETING  
OF THE BOARD OF DIRECTORS  
INLAND EMPIRE UTILITIES AGENCY\*  
AGENCY HEADQUARTERS, CHINO, CALIFORNIA**

**WEDNESDAY, NOVEMBER 14, 2018  
9:45 A.M.**

*Or immediately following the  
Community & Legislative Affairs  
Committee Meeting*

**CALL TO ORDER**

**PUBLIC COMMENT**

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to complete and submit to the Board Secretary a "Request to Speak" form which is available on the table in the Board Room. Comments will be limited to five minutes per speaker. Thank you.

**ADDITIONS TO THE AGENDA**

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

**1. ACTION ITEMS**

**A. MINUTES**

The Committee will be asked to approve the Engineering, Operations, and Water Resources Committee meeting minutes of October 10, 2018.

**B. RP-1 1158 RECYCLED WATER PUMP STATION UPGRADES  
CONSTRUCTION CONTRACT AWARD**

Staff recommends that the Committee/Board:

1. Award a construction contract for the RP-1 1158 Recycled Water Pump Station Upgrades, Project No. EN14042, to Stanek Constructors, Inc., in the amount of \$4,430,000;

2. Approve a contract amendment to Stantec Consulting Services Inc., for engineering services during construction for the not-to-exceed amount of \$356,000; and
3. Authorize the General Manager to execute the contract and contract amendment, subject to non-substantive changes.

**C. RP-1 DIGESTER 6 AND 7 ROOF REPAIRS CONSTRUCTION CONTRACT AWARD**

Staff recommends that the Committee/Board:

1. Award a construction contract for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to W.A. Rasic Construction, Inc., in the amount of \$1,788,000;
2. Approve a consultant contract amendment for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to GHD Inc., for a not-to-exceed amount of \$69,627; and
3. Authorize the General Manager to execute the contracts, subject to non-substantive changes.

**D. RW SYSTEM CATHODIC PROTECTION IMPROVEMENTS CONSULTANT CONTRACT AMENDMENT**

Staff recommends that the Committee/Board:

1. Approve a consultant services contract amendment for the RW System Cathodic Protection Improvements, Project No. EN17080, to Corpro Companies Inc., for the not-to-exceed amount of \$560,670;
2. Approve an increase in budget allocation for FY 2018/19 from the FY 2019/20 budget in the amount of \$195,000; and
3. Authorize the General Manager to execute the contract amendment, subject to non-substantive changes.

**E. RP-5 LIQUIDS TREATMENT EXPANSION PRE-SELECTION OF THE MEMBRANE BIO-REACTOR SYSTEM**

Staff recommends that the Committee/Board:

1. Award a pre-selection agreement for the Membrane Bio-Reactor System for the RP-5 Liquids Treatment Expansion, Project No. EN19001, to Suez with a \$300,000 stipend for engineering services through design and a guaranteed price to be included in a future successful General Contractor's bid; and
2. Authorize the General Manager to execute the pre-selection agreement, subject to non-substantive changes.

**F. RP-1 MECHANICAL RESTORATION AND IMPROVEMENTS CONSULTANT CONTRACT AMENDMENT**

Staff recommends that the Committee/Board:

1. Approve a contract amendment for the RP-1 Mechanical Restoration and Improvements, Project No. EN17082, to Stantec Consulting Services, Inc., for the not-to-exceed amount of \$113,400; and
2. Authorize the General Manager to execute the contract amendment, subject to non-substantive changes.

**G. ON CALL ARCHITECTURAL MASTER SERVICES CONTRACT AMENDMENT**

Staff recommends that the Committee/Board:

1. Approve a master service contract amendment for Gillis+Panichapan Architects, Inc., for a not-to-exceed amount of \$84,000 with a one-year term extension through November 2019; and
2. Authorize the General Manager to execute the contract, subject to non-substantive changes.

**H. A.R.I. COMBINATION AIR AND VACUUM RELIEF VALVE SOLE SOURCE**

Staff recommends that the Committee/Board:

1. Adopt a finding pursuant to Public Contract Code 3400(b) that the use of A.R.I. combination air valves: 1) match existing valves on the recycled water lines use; 2) the valves are only available from A.R.I.; and
2. Authorize their procurement as a sole source for future O&M and capital projects for a duration of five years.

**2. INFORMATION ITEM**

**A. REGIONAL WATER USE EFFICIENCY PROGRAMS ANNUAL REPORT – FY 2017/18 (WRITTEN/POWERPOINT)**

**B. PLANNING & ENVIRONMENTAL RESOURCES REPORT (ORAL)**

**RECEIVE AND FILE INFORMATION ITEM**

**C. ENGINEERING AND CONSTRUCTION MANAGEMENT PROJECT UPDATES (POWERPOINT)**

**3. GENERAL MANAGER'S COMMENTS**

4. **COMMITTEE MEMBER COMMENTS**

5. **COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

6. **ADJOURN**

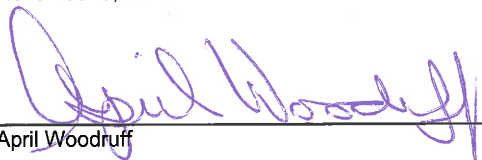
\*A Municipal Water District

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary (909-993-1736), 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

Proofed by: AK

**DECLARATION OF POSTING**

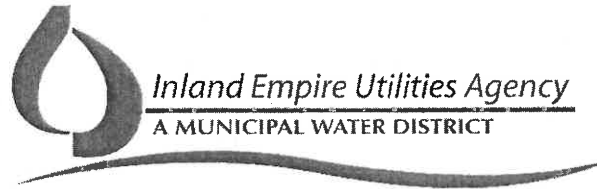
I, April Woodruff, Board Secretary of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of the agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Ave., Building A, Chino, CA on Thursday, November 8, 2018.



April Woodruff



**ACTION  
ITEM  
1A**



*Inland Empire Utilities Agency*  
A MUNICIPAL WATER DISTRICT

## MINUTES

### ENGINEERING, OPERATIONS, AND WATER RESOURCES COMMITTEE MEETING INLAND EMPIRE UTILITIES AGENCY\* AGENCY HEADQUARTERS, CHINO, CA

WEDNESDAY, OCTOBER 10, 2018  
9:45 A.M.

#### **COMMITTEE MEMBERS PRESENT**

Michael Camacho, Chair  
Kati Parker

#### **COMMITTEE MEMBERS ABSENT**

None

#### **STAFF PRESENT**

Halla Razak, General Manager  
Chris Berch, Executive Manager of Engineering/AGM  
Kathy Besser, Executive Manager of External Affairs & Policy Development/AGM  
Randy Lee, Executive Manager of Operations/AGM  
Shaun Stone, Acting Executive Manager of Engineering/AGM  
Christina Valencia, Executive Manager of Finance & Administration/AGM  
Joshua Aguilar, Senior Engineer  
Jerry Burke, Deputy Manager of Engineering  
Pietro Cambiaso, Environmental Compliance & Energy Supervisor  
Sally Lee, Executive Assistant  
Victoria Medinilla, Assistant Engineer  
Ken Monfore, Deputy Manager of Maintenance  
Lisa Morgan-Perales, Senior Water Resources Analyst  
Liza Munoz, Senior Engineer  
Rick Mykitta, Manager of Operations and Maintenance  
Nel Groenveld, Manager of Laboratories  
Matt Poeske, Construction Project Manager, P.E.  
Craig Proctor, Source Control and Environmental Resources Supervisor  
John Scherck, Senior Project Manager  
Rocky Welborn, Senior Associate Engineer, P.E.  
April Woodruff, Board Secretary/Office Manager

#### **OTHERS PRESENT**

None

The meeting was called to order at 9:40 a.m. There were no public comments received or additions to the agenda.

**ACTION ITEMS**

The Committee:

- ◆ Approved the Engineering, Operations, and Water Resources Committee meeting minutes of September 12, 2018.
- ◆ Recommended that the Board:
  1. Ratify the emergency project approval for the RP-2 Dewatering Decommissioned Structures in the amount of \$500,000;
  2. Approve the budget amendment in the amount of \$500,000 for Project No. EN19019, RO Emergency O&M Projects FY 2018/19; and
  3. Authorize the General Manager to approve the emergency task order subject to non-substantive changes and budget augmentation;

as a Consent Calendar Item on the October 17, 2018 Board meeting agenda.

- ◆ Recommended that the Board:
  1. Approve Contract No. 4600002632 to Aqua Ben Corporation, establishing a two-year contract for the supply of polymer with options for extensions up to three additional years, for a potential contract term of five years; and
  2. Authorize the General Manager to execute the contract with potential contract extensions;

as a Consent Calendar Item on the October 17, 2018 Board meeting agenda.

- ◆ Recommended that the Board:
  1. Award a construction contract for the RP-1 PRB and MCC Building Roof and Skylight Replacement, Project No. EN19037, to Best Contracting Services Inc., in the amount of \$343,555; and
  2. Authorize the General Manager to execute the contract;

as a Consent Calendar Item on the October 17, 2018 Board meeting agenda.

- ◆ Recommended that the Board:
  1. Award a one-year contract (\$210,000), with two one-year extension options, to ConServ Inc., for the implementation and administration of the Regional Residential Landscape Retrofit Program for a not-to-exceed amount of \$710,000 (three-year contract term); and
  2. Authorize the General Manager to execute the Agreement, subject to non-substantive changes;

as a Consent Calendar Item on the October 17, 2018 Board meeting agenda.

◆ Recommended that the Board:

1. Approve Task Order No. 4 with CBWM for the Chino Basin Project Evaluation and Conceptual Design Support, for a not-to-exceed amount of \$190,568, under the Master Cost Sharing Agreement; and
2. Authorize the General Manager to execute Task Order No. 4, subject to non-substantive changes;

as a Consent Calendar Item on the October 17, 2018 Board meeting agenda.

◆ Recommended that the Board:

1. Approve an amendment to Master Service Contract 4600002293 with K-VAC for vacuum truck services in the amount of \$123,000 for a total aggregate not-to-exceed amount of \$266,330; and
2. Authorize the General Manager to execute the amendment subject to non-substantive changes;

as a Consent Calendar Item on the October 17, 2018 Board meeting agenda.

**INFORMATION ITEMS**

The following information items were presented or received and filed by the Committee:

- ◆ Laboratory Semi-Annual Update
- ◆ Planning & Environmental Resources Reports
- ◆ 1<sup>st</sup> Quarter Planning & Environmental Resources Update
- ◆ Engineering and Construction Management Project Updates

**GENERAL MANAGER'S COMMENTS**

General Manager Halla Razak provided an update on the toxicity issue. Ms. Razak mentioned that the Agency is investigating the cause and working with a consulting team that will be assisting with finding the source of the issue. The Agency has also been in close contact with the Regional Water Quality Control Board, and the Regional Water Quality Control Board is aware that the Agency is managing the situation.

**COMMITTEE MEMBER COMMENTS**

There were no Committee Member comments.

**COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

There were no Committee Member requests for future agenda items.

With no further business, Director Camacho adjourned the meeting at 10:15 a.m.

Respectfully submitted,

April Woodruff  
Board Secretary/Office Manager

\*A Municipal Water District

**APPROVED: NOVEMBER 14, 2018**

**ACTION  
ITEM  
1B**



**Date:** November 21, 2018

HHR

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

11/14/18

Finance & Administration

11/14/18

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** RP-1 1158 Recycled Water Pump Station Upgrades Construction Contract Award

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**Executive Summary:**

The 2015 Recycled Water Program Strategy concluded that the Regional Water Recycling Plant No. 1 (RP-1) 1158 Zone pumps are inadequate to meet the future recycled water demands in the northern service area. In 2016, IEUA retained the engineering services of Stantec to perform a feasibility study to define the existing 1158 Zone pump system limitations and provide recommendations for improvement. The results of the study indicated that the existing system is undersized and needs to be upgraded and expanded.

On October 16, 2018, IEUA received five construction bids from pre-qualified contractors. Stanek Constructors, Inc., was the lowest responsive, responsible bidder with a bid price of \$4,430,000. The construction contract award was unanimously recommended for approval by the Regional Technical and Policy Committees.

For continuity, staff requests the existing contract with Stantec be amended by \$356,000 to include engineering services during construction, increasing the contract from \$552,498 to \$908,498. Additionally, this project is funded by a Clean Water State Revolving Fund grant and loan.

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**Staff's Recommendation:**

1. Award a construction contract for the RP-1 1158 Recycled Water Pump Station Upgrades, Project No. EN14042, to Stanek Constructors, Inc., in the amount of \$4,430,000;
2. Approve a contract amendment to Stantec Consulting Services Inc., for engineering services during construction for the not-to-exceed amount of \$356,000; and
3. Authorize the General Manager to execute the contract and contract amendment, subject to non-substantive changes.

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**Budget Impact** *Budgeted* (Y/N): Y *Amendment* (Y/N): N *Amount for Requested Approval:*

*Account/Project Name:*

EN14042/RP-1 1158 Recycled Water Pump Station Upgrades

*Fiscal Impact* (explain if not budgeted):

None.

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**Prior Board Action:**

On January 17, 2018, the Board of Directors amended the original contract with Stantec Consulting Services to the not-to-exceed amount of \$534,518.

On May 17, 2017, the Board of Directors awarded a consultant engineering services contract for the RP-1 1158 Recycled Water Pump Station Upgrades, Project No. EN14042, to Stantec Consulting Services for the not-to-exceed amount of \$428,000.

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**Environmental Determination:**

Categorical Exemption

CEQA identifies certain categories of projects as exempt from more detailed environmental review because these categories have been deemed to have no potential for significant impact on the environment. This project qualifies for a Categorical Exemption Class 1 as defined in Section 15301(b) of the State CEQA Guidelines.

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**Business Goal:**

The RP-1 1158 Recycled Water Pump Station Upgrades Project is consistent with IEUA's Business Goal of Wastewater Management, specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use.

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**Attachments:**

- Attachment 1 - PowerPoint
- Attachment 2 - Construction Contract
- Attachment 3 - Consultant Amendment

# **Attachment 1**



# RP-1 1158 Recycled Water Pump Station Upgrades Construction Contract Award

Project No. EN14042



# Project Location





# The Project

- Feasibility Study
  - Indicated pump system limitations and required upgrades
  - Inadequate pump capacity to meet future recycled water demand
- Scope includes:
  - Replace existing 400 HP pumps with 700 HP pumps
  - Perform upgrades to the electrical system
  - Provide surge protection upgrades
  - Perform coating repairs to the existing wet well structure



Existing 2,500 Gallon Surge Tank



RP-1 Recycled Water Pump Station

# Contractor Selection

- IEUA staff advertised the invitation for bid on September 6, 2018, to seven pre-qualified contractors
- On October 16, 2018, five bids were received:

Bidder's Name	Final Bid Amount
Stanek Constructors, Inc.	\$4,430,000
JF Shea Construction, Inc.	\$4,852,600
Olsson Construction, Inc.	\$4,926,372
W.A. Rasic Construction Company, Inc.	\$5,375,000
Kiewit Infrastructure West Co.	\$5,585,500
<b>Engineer's Estimate</b>	<b>\$7,000,000</b>

# Project Budget and Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$849,634</b>
Design Contracts	\$627,348
IEUA Design Services (actuals)	\$222,286
<b>Construction Services</b>	<b>\$706,000</b>
Engineering Services During Construction (~8%)(this action)	\$356,000
IEUA Construction Services (~8%)	\$350,000
<b>Construction</b>	<b>\$4,873,000</b>
Construction Contract (this action)	\$4,430,000
Contingency (10%)	\$443,000
<b>Total Project Cost</b>	<b>\$6,428,634</b>
<b>Grant Funding (Principal Forgiveness)</b>	<b>\$2,500,000</b>
<b>Total Project Budget</b>	<b>\$7,900,000</b>

Project Milestone	Date
<b>Construction</b>	
Construction Contract Award	November 2018
Construction Completion	January 2020

## Recommendation

- Award a construction contract for the RP-1 1158 Recycled Water Pump Station Upgrades, Project No. EN14042, to Stanek Constructors, Inc., in the amount of \$4,430,000;
- Approve a contract amendment to Stantec Consulting Services Inc., for engineering services during construction for the not-to-exceed amount of \$356,000; and
- Authorize the General Manager to execute the contract and contract amendment subject to non-substantive changes.

The RP-1 1158 Recycled Water Pump Station Upgrades Project is consistent with *IEUA's Business Goal of Wastewater Management*, specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use.

# **Attachment 2**



**1.0 CONTRACT**

THIS CONTRACT, made and entered into this 21 day of November, 2018, by and between Stanek Constructors, Inc., hereinafter referred to as "Contractor," and The Inland Empire Utilities Agency, a Municipal Water District, located in San Bernardino County, California, hereinafter referred to as "Agency".

**WITNESSETH:**

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

1. Contractor agrees to perform and complete in a workmanlike manner, all work required under the bidding schedule of said Agency's specifications entitled SPECIFICATIONS FOR RP-1 1158 Zone Recycled Water Pump Station Upgrades Project EN 14042, in accordance with the specifications and drawings, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said specifications to be furnished by said Agency, and to do everything required by this Contract and the said specifications and drawings.
2. For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said specifications and drawings; also for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the work until its acceptance by said Agency, and for all risks of every description connected with the work; also for all expenses resulting from the suspension or discontinuance of work, except as in the said specifications are expressly stipulated to be borne by said Agency; and for completing the work in accordance with the requirements of said specifications and drawings, said Agency will pay and said Contractor shall receive, in full compensation therefore, the price(s) set forth in this Contract.
3. That the Agency will pay the Contractor progress payments and the final payment, in accordance with the provisions of the contract documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in the Bidding and Contract Requirements, Section C - Bid Forms and accepted by the Agency, and set forth in this below.

Total Bid Price \$ Four Million, Four-Hundred Thirty Thousand Dollars  
and Zero Cents.

If this is not a lump sum bid and the contract price is dependent upon the quantities constructed, the Agency will pay and said Contractor shall receive, in full compensation



for the work the prices named in the Bidding and Contract Requirements, Section C - Bid Forms.

4. The Agency hereby employs the Contractor to perform the work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
5. The Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractors License Declaration, Specifications, Drawings, all General Conditions and all Special Conditions, and all addenda issued by the Agency with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
6. The Contractor agrees to commence work under this Contract on or before the date to be specified in a written "Notice To Proceed" and to complete said work to the satisfaction of the Agency four hundred twenty (420) calendar days after award of the Contract. All work shall be completed before final payment is made.
7. Time is of the essence on this Contract.
8. Contractor agrees that in case the work is not completed before or upon the expiration of the contract time, damage will be sustained by the Agency, and that it is and will be impracticable to determine the actual damage which the Agency will sustain in the event and by reason of such delay, and it is therefore agreed that the Contractor shall pay to the Agency the amount of four thousand (\$4,000) dollars for each day of delay, which shall be the period between the expiration of the contract time and the date of final acceptance by the Agency, as liquidated damages and not as a penalty. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by the Agency, and the Contractor agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the Contractor agrees that the Agency may deduct the amount thereof from any money due or that may become due to the Contractor by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount.
9. In addition to the liquidated damages, which may be imposed if the Contractor fails to complete the work within the time agreed upon, the Agency may also deduct from any sums due or to become due the Contractor, penalties and fines for violations of applicable local, state, and federal law.
10. That the Contractor will pay, and will require subcontractors to pay, employees on the work a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, contained in or referenced in the contract documents.
11. That, in accordance with Section 1775 of the California Labor Code, Contractor shall

forfeit to the Agency, as a penalty, not more than Fifty (\$50.00) Dollars for each day, or portion thereof, for each worker paid, either by the Contractor or any subcontractor, less than the prevailing rates as determined by the Director of the California Department of Industrial Relations for the work.

12. That, except as provided in Section 1815 of the California Labor Code, in the performance of the work not more than eight (8) hours shall constitute a day's work, and not more than forty (40) hours shall constitute a week's work; that the Contractor shall not require more than eight (8) hours of labor in a day nor more than forty hours of labor in a week from any person employed by the Contractor or any subcontractor; that the Contractor shall conform to Division 2, Part 7, Chapter 1, Article 3 (Section 1810, et seq.) of the California Labor Code; and that the Contractor shall forfeit to the Agency, as a penalty, the sum of Twenty-Five (\$25.00) Dollars for each worker employed in the execution of the work by Contractor or any subcontractor for each day during which any worker is required or permitted to labor more than eight (8) hours in violation of said Article 3.
13. That the Contractor shall carry Workers' Compensation Insurance and require all subcontractors to carry Workers' Compensation Insurance as required by the California Labor Code.
14. That the Contractor shall have furnished, prior to execution of the Contract, two bonds approved by the Agency, one in the amount of one hundred (100) percent of the contract price, to guarantee the faithful performance of the work, and one in the amount of one hundred (100) percent of the contract price to guarantee payment of all claims for labor and materials furnished.
15. The Contractor hereby agrees to protect, defend, indemnify and hold the Agency and its employees, agents, officers, directors, servants and volunteers free and harmless from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (including employees of the Agency and the Contractor) and damage to property, arising directly or indirectly out of the obligation herein undertaken or out of the operations conducted by the Contractor, its employees agents, representatives or subcontractors under or in connection with this Contract to the extent permitted by law.

The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands or suit at the sole expense of the Contractor.

IN WITNESS WHEREOF, The Contractor and the General Manager of Inland Empire Utilities Agency\*, thereunto duly authorized, have caused the names of said parties to be affixed hereto, each in duplicate, the day and year first above written.

Inland Empire Utilities Agency,\*  
San Bernardino County, California.

By \_\_\_\_\_  
General Manager

Contractor Stanek Constructors, Inc.

By George Foote   
Title Vice President 10/19/18

\*Municipal Water District

# Stanek Constructors, Inc.

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651 Corporate Circle  
Telephone (303) 980-8233

◆ Suite 108 ◆


Golden, Colorado 80401  
FAX (303) 980-8145

May 16, 2018


## CORPORATE RESOLUTION

This resolution shall serve as authorization for the following persons to sign any and all documents that are legally binding of the corporation on behalf of Stanek Constructors, Inc. a Colorado corporation.

Luke T. Spalj - CEO  
Robert S. Stanek - President  
Jerry E. Arguello – Secretary/CFO  
George E. Foote – Vice President/Operations Manager  
Josh T. Anthony – Assistant Corporate Secretary  
Lorena R. Mayor – Assistant Corporate Secretary

  
\_\_\_\_\_  
Robert S. Stanek  
President

5/16/18  
Date

  
\_\_\_\_\_  
Jerry E. Arguello  
Secretary

5/16/18  
Date

# **Attachment 3**



**Inland Empire Utilities Agency**  
 A MUNICIPAL WATER DISTRICT

**CONTRACT AMENDMENT NUMBER: 4600002313-004**  
**FOR CONSULTING ENGINEERING SERVICES**  
**REGIONAL RECLAMATION PLANT NO. 1 (RP-1)**  
**1158 RECYCLED WATER PUMP STATION UPGRADES**  
**PROJECT NO. EN14042**

AMENDMENT NUMBER FOUR is made and entered into this \_\_\_ day of \_\_\_\_\_, 2018, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "IEUA" and "Agency") and Stantec Consulting Services, Inc., with offices located in Irvine, California (hereinafter referred to as "Consultant"), for consulting services related to RP-1 1158 Recycled Water Pump Station Upgrades, Project No. EN 14042, and shall revise the Contract as amended:

**SECTION 4, SCOPE OF WORK AND SERVICES, IS HEREBY AMENDED TO ADD THE FOLLOWING:** Consultant shall also provide the additional consulting services outlined in Consultant's October 29, 2018 Proposal, which is referenced herein, attached hereto as **Exhibit A-004**, and incorporated herein by reference. Consultant shall provide such services at the time, place, and in the manner specified in **Exhibit A-004**, subject to the direction of the Agency through its staff.

**SECTION SIX, COMPENSATION, IS HEREBY AMENDED TO ADD THE FOLLOWING:** The total **NOT-TO-EXCEED** amount of the Contract, inclusive of this Amendment No. 4, is **\$908,498.00**, a net increase of **\$356,000.00** as compensation for additional work represented by **Exhibit A-004**, for all services provided throughout the term of this Contract and as authorized by SAP Purchase Requisition 10046565.

**ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED**

The parties hereto have mutually covenanted and agreed as per the above amendment item, and in doing so have caused this document to become incorporated into the Contract Documents.

**INLAND EMPIRE UTILITIES AGENCY:**  
 \*A MUNICIPAL WATER DISTRICT

**STANTEC CONSULTING SERVICES, INC.:**

\_\_\_\_\_  
 Halla H. Razak  
 General Manager

(Date)

\_\_\_\_\_  
 Robert Reid  
 Principal-In-Charge

10/31/18  
 (Date)

# **EXHIBIT A-004**

(Consultant's October 29, 2018 Proposal)



Stantec Consulting Services Inc.  
38 Technology Drive, Irvine CA 92618-5312

29 October 2018

File: 2042518702

**Attention: John Scherck**

Inland Empire Utilities Agency  
6075 Kimball Avenue  
Chino, CA 91708

Dear John,

**Reference: RP-1 1158 Recycled Water Pump Station Upgrades Project, EN 14042 – Proposal for Contract Amendment 4 – Engineering Services During Construction**

Dear John,

As requested, Stantec is providing you with this proposal for engineering support services during the construction of the RP-1 1158 RW Pump Station Upgrades Project, EN14042. The scope of work provided is based on the listed tasks as outlined in the email communication on August 2, 2018.

## Scope

### Task 1- Meetings and Site Visits

#### 1.1 Pre-Construction Meeting

We will attend a pre-construction meeting and will present an overview of project scope, Stantec's role and responsibilities during the course of construction of the project.

#### 1.2 Construction Workshops

We will attend the following workshops to provide assistance to the contractor or contractor's representative as required throughout the estimated 14 months duration of construction for the project to include:

- Overall System
- Mechanical (including surge tank/compressor), Concrete
- Electrical and Instrumentation & Control (including switchgear)
- Coatings and Installation Observations
- Process Control and SCADA (assumed to be conducted by TSI)
- 70% Completion
- Testing, Training, Start-Up and Commissioning

A total of up to ten workshops are anticipated. Each of these workshops are assumed to be approximately 2-hours in duration.

*Design with community in mind*



Reference: RP-1 1158 Recycled Water Pump Station Upgrades Project, EN 14042 – Proposal for Contract Amendment 4 – Engineering Services During Construction

### 1.3 Weekly Construction Progress Meetings

We will attend weekly construction progress meetings. We assume that the majority of these meetings will be via conference call. However, there will be meetings attended in person as required. For budgetary purposes, we anticipate forty (45) weekly conference calls, with fifteen (13) additional progress meetings attended in person.

### Task 2- Submittal Reviews

We will catalog information, review and process submittals per IEUA standard conditions using CIPO. We anticipate up to 120 submittals and up to 50 resubmittals.

### Task 3 - Respond to Requests for Information (RFIs)

We will respond to Contractor's RFI's using CIPO for all documentation. However, simple items may be discussed via conference call. We assume up to fifty (50) RFI's will require our response.

### Task 4 - Review of Construction Change Order Requests

We will assist with construction change order requests by reviewing the change order requests for validation of the quotes received from the contractor. We assume up to ten (10) such reviews.

### Task 5 - Startup and Testing Assistance

We will provide written start-up protocol and assistance with facilities integration upon construction. Specifically, we will provide:

- Guidance and Review of Contractors step-by-step Shut down tie-in plans
- Guidance and Review of Contractors step-by-step Startup plans

### Task 6 - Preparation of Record Drawings

We will prepare record drawings, or as-built drawings, based on the information provided to us. We assume the following:

- As-built changes will be created in AutoCAD from mark-ups made on the conformed set of plans provided by the Contractor redline as-built markups and IEUA's construction manager's markups
- We assume one (1) review set of record drawings by IEUA before finalizing
- We will submit final record drawings electronically in AutoCAD and PDF format

### Task 7 – Factory Witness Testing

We will send our project engineer of record to witness the pump factory acceptance testing at the manufacturer's testing facility prior to being shipped to the project site. We assume that IEUA will also send a representative for factory witness testing as well. We will witness and document that the factory test shows that the pumps meet the pump specification and intended operation as included with our project specifications.

Reference: RP-1 1158 Recycled Water Pump Station Upgrades Project, EN 14042 – Proposal for Contract Amendment 4 – Engineering Services During Construction

## Task 8- Project Management

We will perform the necessary project management activities such as, regular communications; monthly progress reports submitted with project invoice, scope and budget tracking with effort based on anticipated duration for construction. If applicable, we will assist IEUA with development of an Asset List.

## Exclusions

- Survey and construction staking services are not included in this scope of services
- Full Inspection services

## Budget

To perform the above scope of services, Stantec respectfully requests a budget of \$356,000 to be amended to the current contract. We have attached a breakdown of the proposed labor hours and costs for each task described above.

Regards,

**Stantec Consulting Services Inc.**



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**Jeff Dunn, PE**  
Senior Project Manager, Civil  
Phone: (949) 923-6974  
Fax: (949) 923-6121  
jeff.dunn@stantec.com



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**Robert Reid, PE**  
Senior Associate  
Phone: (949) 923-6071  
Fax: (949) 923-6121  
Robert.reid@stantec.com

Attachment: Labor Hours Breakdown by Task

c.

dj v:\2042\active\2042518702\0\_framework\6\_change\_orders\contract\_amendment\_4\_const\_support\let\_amendment\_4\_esdc\_en14042\_1158rwpumpstationupgrades\_rev2.docx

Design with community in mind

**Inland Empire Utilities Agency  
 Contract Amendment No. 4 - 1158 Recycled Water Pump Station Upgrades Project No. EN14042  
 Engineering Services During Construction  
 Proposed Labor Hours and Budget**



	LABOR HOURS								TOTAL STANTEC LABOR HOURS	TOTAL STANTEC LABOR FEES	Other	V&A	Other Direct Costs	TOTAL FEES
	QA/QC	Project Manager	Civil/Mechanical Project Engineer	Civil/Mechanical Designer/CAD	Electrical Engineer	Controls Engineer	Electrical Designer							
<b>1 Meetings and Site Visits</b>	<b>0</b>	<b>20</b>	<b>146</b>	<b>0</b>	<b>84</b>	<b>60</b>	<b>0</b>	<b>310</b>	<b>\$ 52,632</b>	<b>\$4,000</b>	<b>\$16,300</b>	<b>\$10,596</b>	<b>\$ 83,561</b>	
1.1 Pre-Construction Meeting		4	6		8	8		26	\$ 4,628		\$2,042	\$1,200	\$ 7,870	
1.2 Construction Workshops (10)		8	24		48	24		104	\$ 18,336	\$2,000	\$6,125	\$5,896	\$ 32,357	
1.3 Weekly Construction Progress Meetings (58)		8	116		28	28		180	\$ 29,668	\$2,000	\$8,166	\$3,500	\$ 43,334	
<b>2 Submittal Reviews (170)</b>	<b>4</b>	<b>24</b>	<b>294</b>	<b>40</b>	<b>140</b>	<b>80</b>	<b>80</b>	<b>662</b>	<b>\$ 108,140</b>	<b>\$5,000</b>	<b>\$9,705</b>		<b>\$ 122,845</b>	
<b>3 Respond to RFIs (50)</b>	<b>4</b>	<b>16</b>	<b>80</b>		<b>32</b>	<b>32</b>	<b>40</b>	<b>204</b>	<b>\$ 34,004</b>	<b>\$4,000</b>	<b>\$2,539</b>		<b>\$ 40,543</b>	
<b>4 Review of Construction Change Order Requests (10)</b>	<b>8</b>	<b>24</b>	<b>12</b>		<b>12</b>			<b>56</b>	<b>\$ 11,472</b>				<b>\$ 11,472</b>	
<b>5 Startup and Testing Assistance</b>		<b>12</b>	<b>60</b>		<b>60</b>	<b>80</b>		<b>212</b>	<b>\$ 36,300</b>			<b>\$4,849</b>	<b>\$ 41,149</b>	
<b>6 Preparation of Record Drawings</b>	<b>2</b>	<b>4</b>	<b>12</b>	<b>32</b>	<b>12</b>	<b>12</b>	<b>32</b>	<b>106</b>	<b>\$ 16,386</b>	<b>\$1,000</b>			<b>\$ 17,386</b>	
<b>7 Factory Witness Testing</b>		<b>4</b>	<b>96</b>					<b>100</b>	<b>\$ 15,876</b>			<b>\$2,948</b>	<b>\$ 18,824</b>	
<b>8 Project Management</b>	<b>4</b>	<b>56</b>			<b>36</b>			<b>96</b>	<b>\$ 20,220</b>				<b>\$ 20,220</b>	
<b>Total Base Hours</b>	<b>22</b>	<b>160</b>	<b>700</b>	<b>72</b>	<b>376</b>	<b>264</b>	<b>192</b>	<b>1,746</b>						
<b>Total Base Fees</b>	<b>\$5,478</b>	<b>\$35,000</b>	<b>\$109,200</b>	<b>\$9,720</b>	<b>\$69,184</b>	<b>\$49,560</b>	<b>\$21,888</b>		<b>\$ 295,088</b>	<b>\$14,000</b>	<b>\$28,544</b>	<b>\$18,398</b>	<b>\$ 355,030</b>	

**ACTION  
ITEM  
1C**



**Date:** November 21, 2018

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

#HR

11/14/18

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** RP-1 Digester 6 and 7 Roof Repairs Construction Contract Award

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**Executive Summary:**

To maintain the efficiency and reliability of the digestion process at the Regional Water Recycling Plant No. 1 (RP-1), the digesters need to be inspected, cleaned and maintained every seven to ten years to remove solids, debris, and deposits collected in the tank and piping system over years of operation. In June 2017, IEUA retained GHD Inc. (GHD) to provide, inspection, condition assessment, and consulting engineering services for the project. GHD completed the design for Digester 6 in August 2018. The intent of the project is to repair and re-surface Digester 6 interior wall and ceiling; repair, re-surface, and re-insulate the roof; and replace most of the gas and sludge piping and appurtenances.

Project construction (Digester 6) was posted on PlanetBids on September 13, 2018. On October 11, 2018, IEUA received three construction bids from prequalified contractors. W.A. Rasic was the lowest responsive and responsible bidder with the bid price of \$1,788,000.

For continuity, staff requests the existing contract with GHD be amended by \$69,627 to include engineering services during construction, increasing the contract from \$314,169 to \$383,796.

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**Staff's Recommendation:**

1. Award a construction contract for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to W.A. Rasic Construction, Inc., in the amount of \$1,788,000;
2. Approve a consultant contract amendment for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to GHD Inc., for a not-to-exceed amount of \$69,627; and
3. Authorize the General Manager to execute the contracts, subject to non-substantive changes.

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**Budget Impact** *Budgeted (Y/N): Y* *Amendment (Y/N): N* *Amount for Requested Approval:*

*Account/Project Name:*

EN17042/RP-1 Digester 6 and 7 Roof Repairs

*Fiscal Impact (explain if not budgeted):*

None.

**Prior Board Action:**

On May 16, 2018, the Board of Directors approved a contract amendment to GHD for the not-to-exceed amount of \$167,609.

On June 21, 2017, the Board of Directors approved a consultant engineering services contract to GHD for the not-to-exceed amount of \$130,406.

On April 19, 2017, the Board of Directors approved a digester cleaning service contract for Digesters 6 and 7 to Synagro-WWT in the amount of \$1,750,200.

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**Environmental Determination:**

Categorical Exemption

CEQA identifies certain categories of projects as exempt from more detailed environmental review because these categories have been deemed to have no potential for significant impact on the environment. This project qualifies for a Categorical Exemption Class 1 as defined in Section 15301(b) of the State CEQA Guidelines

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**Business Goal:**

The Digester 6 and 7 Roof Repairs Project is consistent with IEUA's Business Goal of Wastewater Management, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.

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**Attachments:**

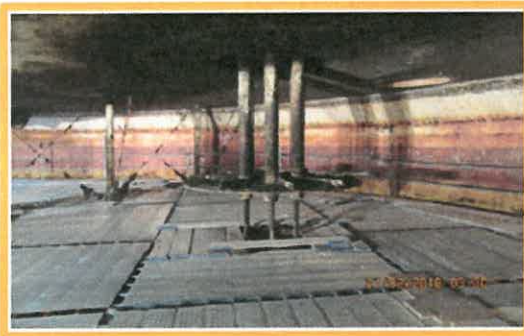
Attachment 1 - PowerPoint

Attachment 2 - Construction Contract

Attachment 3 - Contract Amendment

# **Attachment 1**

# RP-1 Digesters Nos. 6 and 7 Roof Repairs Construction Contract Award Consultant Contract Amendment Project No. EN17042



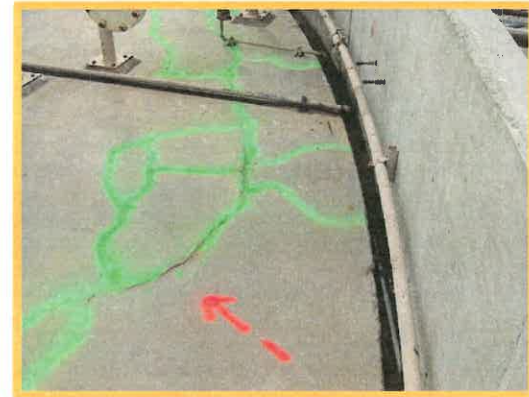


# Regional Water Recycling Plant No. 1 Project Location

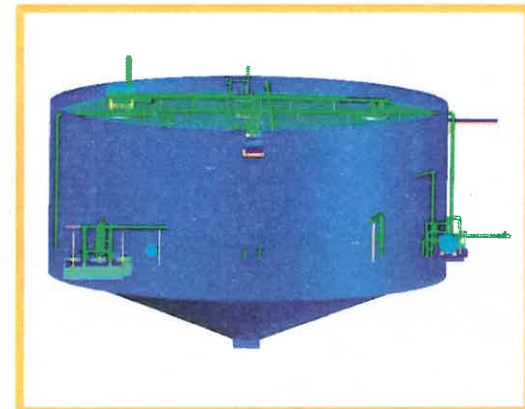


# Project Background/Scope – Digester 6

- **Background:**
  - Digesters originally constructed in 1988
  - Multiple roof cracks
  - Deteriorated condition of roof foam insulation
  - Failure of internal protective coating
  - Aging of mechanical piping system
- **Scope**
  - Design activities completed by GHD Inc. (Consultant):
    - Predesign
    - Condition assessment
    - Gas mixing system performance evaluation
    - Piping CCTV, 3-D Scan
    - Final design
    - Construction admin services
  - Repair, recoat and seal interior wall, ceiling and roof
  - Replace sludge and gas piping, revamp all hatches and manways



Digester #6 Roof Cracks



Digester #6 3-D Model

# Contractor Selection

Three bids were received on October 11, 2018:

## Bids Received

Bidder's Name	Total
W. A. Rasic Construction, Inc.	\$ 1,788,000
Stanek Constructors, Inc.	\$1,983,000
RSH Construction Services	\$3,183,942
<b>Engineer's Estimate</b>	<b>\$ 2,000,000</b>



# Project Budget and Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$394,767</b>
Project Development	\$67,000
Design Consultant (GHD)	\$149,300
IEUA Design Services – Digester 6	\$141,000
GHD Contract Amendment	\$37,467
<b>Construction Services</b>	<b>\$387,667</b>
Design Consultant Construction Services (GHD)	\$105,507
GHD Construction Services Amendment	\$32,160
IEUA Construction Services (w/ 3 <sup>rd</sup> party inspection)	\$250,000
<b>Construction</b>	<b>\$4,003,000</b>
Digester 6 Cleaning/Services (Synagro/IEUA)	\$1,265,000
Digester 7 Cleaning/Service (Synagro)	\$700,000
Construction Bid – Digester 6	\$1,788,000
Contingency	\$250,000
<b>Total Project Cost:</b>	<b>\$4,785,434</b>
<b>Total Project Budget:</b>	<b>\$4,868,387</b>

Project Milestone	Date
<b>Digester 6</b>	
Design Completion	August 2018
Construction/Repair Contract Award	November 2018
Consultant Contract Amendment	November 2018
Construction/Repair Completion	August 2019
<b>Digester 7</b>	
Cleaning (Synagro)	September 2019
Inspection/Repair Design	February 2020
Construction/Repair	December 2020

# Recommendation

- Award a construction contract for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to W.A. Rasic Construction, Inc., in the amount of \$1,788,000;
- Approve a contract amendment for the RP-1 Digester 6 and 7 Roof Repairs, Project No. EN17042, to GHD Inc., for the not-to-exceed amount of \$69,627; and
- Authorize the General Manager to execute the contracts subject to non-substantive changes.

The RP-1 Digester 6 and 7 Roof Repairs Project is consistent with the *IEUA's Business Goal of Wastewater Management*, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.

# **Attachment 2**

## SECTION D - CONTRACT AND RELEVANT DOCUMENTS

### **1.0 CONTRACT**

THIS CONTRACT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between W.A. Rasic Construction Company, Inc., hereinafter referred to as "Contractor," and The Inland Empire Utilities Agency, a Municipal Water District, located in San Bernardino County, California, hereinafter referred to as "Agency".

#### **WITNESSETH:**

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

1. Contractor agrees to perform and complete in a workmanlike manner, all work required under the bidding schedule of said Agency's specifications entitled SPECIFICATIONS FOR THE CONSTRUCTION OF THE REGIONAL PLANT NO. 1 (RP-1) DIGESTERS 6 AND 7 ROOF REPAIRS, in accordance with the specifications and drawings, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said specifications to be furnished by said Agency, and to do everything required by this Contract and the said specifications and drawings.
2. For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said specifications and drawings; also for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the work until its acceptance by said Agency, and for all risks of every description connected with the work; also for all expenses resulting from the suspension or discontinuance of work, except as in the said specifications are expressly stipulated to be borne by said Agency; and for completing the work in accordance with the requirements of said specifications and drawings, said Agency will pay and said Contractor shall receive, in full compensation therefore, the price(s) set forth in this Contract.
3. That the Agency will pay the Contractor progress payments and the final payment, in accordance with the provisions of the contract documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in the Bidding and Contract Requirements, Section C - Bid Forms and accepted by the Agency, and set forth in this below.

Total Bid Price \$1,788,000 – One Million Seven Hundred Eighty-Eight Thousand Dollars and Zero Cents.

If this is not a lump sum bid and the contract price is dependent upon the quantities constructed, the Agency will pay and said Contractor shall receive, in full compensation

for the work the prices named in the Bidding and Contract Requirements, Section C - Bid Forms.

4. The Agency hereby employs the Contractor to perform the work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
5. The Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractors License Declaration, Specifications, Drawings, all General Conditions and all Special Conditions, and all addenda issued by the Agency with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
6. The Contractor agrees to commence work under this Contract on or before the date to be specified in a written "Notice To Proceed" and to complete said work to the satisfaction of the Agency one hundred and eighty (180) calendar days after award of the Contract. All work shall be completed before final payment is made.
7. Time is of the essence on this Contract.
8. Contractor agrees that in case the work is not completed before or upon the expiration of the contract time, damage will be sustained by the Agency, and that it is and will be impracticable to determine the actual damage which the Agency will sustain in the event and by reason of such delay, and it is therefore agreed that the Contractor shall pay to the Agency the amount of four thousand (\$4,000) dollars for each day of delay, which shall be the period between the expiration of the contract time and the date of final acceptance by the Agency, as liquidated damages and not as a penalty. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by the Agency, and the Contractor agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the Contractor agrees that the Agency may deduct the amount thereof from any money due or that may become due to the Contractor by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount.

In addition to the liquidated damages, which may be imposed if the Contractor fails to complete the work within the time agreed upon, the Agency may also deduct from any sums due or to become due the Contractor, liquidated damages in accordance with the Bidding and Contract Requirements, Section B - Instruction to Bidders, Part 5.0 "Liquidated Damages", for any violation of the General Conditions, Section D - Contractor's Responsibilities, Part 8, "Law and Regulations"; Bidding and Contract Requirements Contract Section D -Contract and Relevant Documents, Part 1.0, Paragraphs 9 through 11; General Conditions , Section D - Contractor's Responsibilities, Part 4.0, "Labor, Materials and Equipment"; General Conditions Section D - Contractor's Responsibilities, Part 12.0, "Safety and Protection" or General Conditions Section H - Legal Responsibilities, Part 8.0, "Disturbance of the Peace".



9. That the Contractor will pay, and will require subcontractors to pay, employees on the work a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, contained in or referenced in the contract documents.
10. That, in accordance with Section 1775 of the California Labor Code, Contractor shall forfeit to the Agency, as a penalty, not more than Fifty (\$50.00) Dollars for each day, or portion thereof, for each worker paid, either by the Contractor or any subcontractor, less than the prevailing rates as determined by the Director of the California Department of Industrial Relations for the work.
11. That, except as provided in Section 1815 of the California Labor Code, in the performance of the work not more than eight (8) hours shall constitute a day's work, and not more than forty (40) hours shall constitute a week's work; that the Contractor shall not require more than eight (8) hours of labor in a day nor more than forty hours of labor in a week from any person employed by the Contractor or any subcontractor; that the Contractor shall conform to Division 2, Part 7, Chapter 1, Article 3 (Section 1810, et seq.) of the California Labor Code; and that the Contractor shall forfeit to the Agency, as a penalty, the sum of Twenty-Five (\$25.00) Dollars for each worker employed in the execution of the work by Contractor or any subcontractor for each day during which any worker is required or permitted to labor more than eight (8) hours in violation of said Article 3.
12. That the Contractor shall carry Workers' Compensation Insurance and require all subcontractors to carry Workers' Compensation Insurance as required by the California Labor Code.
13. That the Contractor shall have furnished, prior to execution of the Contract, two bonds approved by the Agency, one in the amount of one hundred (100) percent of the contract price, to guarantee the faithful performance of the work, and one in the amount of one hundred (100) percent of the contract price to guarantee payment of all claims for labor and materials furnished.
14. The Contractor hereby agrees to protect, defend, indemnify and hold the Agency and its employees, agents, officers, directors, servants and volunteers free and harmless from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (including employees of the Agency and the Contractor) and damage to property, arising directly or indirectly out of the obligation herein undertaken or out of the operations conducted by the Contractor, its employees agents, representatives or subcontractors under or in connection with this Contract.

The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands or suit at the sole expense of the Contractor.

IN WITNESS WHEREOF, The Contractor and the General Manager of Inland Empire Utilities Agency\*, thereunto duly authorized, have caused the names of said parties to be affixed hereto, each in duplicate, the day and year first above written.

Inland Empire Utilities Agency,\*  
San Bernardino County, California.

By \_\_\_\_\_  
General Manager

Contractor

By  \_\_\_\_\_  
Title Peter L. Rasic, President

*RF 2018-69 18TC13*  
*31 OCT 2018*

\*Municipal Water District

# **Attachment 3**



**CONTRACT AMENDMENT NUMBER: 4600002328-003**  
**FOR**  
**FOR CONSULTING ENGINEERING SERVICES**  
**DIGESTER 6 & 7 ROOF REPAIRS AT REGIONAL PLANT NO. 1 (RP-1)**  
**PROJECT NO. EN17042**

THIS CONTRACT AMENDMENT Three is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2018, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to interchangeably as "IEUA" and "Agency") and GHD Inc., with offices located in Irvine, California (hereinafter referred to as "Consultant"), for professional engineering consulting services for the RP-1 Digester 6 & 7 Roof Repairs, Project No. EN17042, and shall revise the Contract as herein amended:

**SECTION FOUR, SCOPE OF WORK AND SERVICES, IS REVISED TO ADD:** Additional Consultant services and responsibilities shall include and be in accordance with Consultant's Proposal, dated October 3, 2018, **Exhibit A**, which is attached hereto, referenced herein, and made a part hereof.

**SECTION SIX, PAYMENT, INVOICING AND COMPENSATION, ADDS THE FOLLOWING PARAGRAPH:**

H. As Compensation for the additional work performed as represented by Contract Amendment-003, Agency shall pay Consultant a ***not-to-exceed maximum of \$383,796.15*** as established in accordance with Exhibit A, for all additional work satisfactorily provided.

**Note: This represents an increase to the Contract of 69,627.40.**

**All Other Provisions Of This Contract Remain Unchanged.**

The parties hereto have mutually covenanted and agreed as per the above amendment item, and in doing so have caused this document to become incorporated into the Contract Documents.

**INLAND EMPIRE UTILITIES AGENCY:**  
**\*A MUNICIPAL WATER DISTRICT**

**GHD INC.:**

\_\_\_\_\_  
Halla H. Razak  
General Manager

\_\_\_\_\_  
(Date)  
Principal

  
\_\_\_\_\_  
Paul Hermann

 10/31/18  
\_\_\_\_\_  
(Date)

# **Exhibit A**



October 03, 2018

IEUA Reference No. EN17042  
GHD Reference No. 11136888

sent via email

Jamal Zughbi, P.E.  
Senior Engineer/Project Manager  
Inland Empire Utility Agency  
6075 Kimball Avenue, Bldg. "B"  
Chino, California, US  
91708

To Mr. Zughbi:

**Re: Request for Amendment to Contract No. 3 – Contract No. 46-2328 PO No. 45-28238 rev  
Digester 6 and 7 Roof Repairs at Regional Plant No. 1**

This request is to amend the subject Contract made between the Inland Empire Utility Agency (IEUA) and GHD Inc. (GHD) that became effective the 21<sup>st</sup> day of June 2017, amended on the 18<sup>th</sup> day of January 2018, and amended on the 11<sup>th</sup> day of May. The subject of this request pertains to approval for compensation based on work completed on the detailed design associated with Digester 6 and extended construction period identified during contractor bidding.

#### **Scope of Work Amendment Summary**

This revised fee estimate incorporates an updated understanding of engineering services required to complete the detailed design associated with Digester 6.

#### **Detailed Design Service (Digester #6)**

New design components identified during detailed design phase, including:

1. Electrical, Instrumentation, and Communication Detailed Design
  - a. Added electrical design drawing sheets and specifications
2. Supplemental Mechanical Detailed Design
  - a. Upsized gas withdrawal line, including incorporation of additional flame arrestor by pass, and review of purging and isolation plans
  - b. Added detailed design for recycled water line, including additional site inspections, drawings and specifications.
  - c. Added specifications and callout for additional valves including actuated TSL control valves
3. Construction Administration Services (Digester #6)



- a. In response to increased construction period by 60 days, GHD identify the following upcoming provisions as part of the basis for the original scoping: weekly construction progress meetings and site inspections.

### Scope of Work Amendment Description

#### 1. Electrical, Instrumentation, and Communication Detailed Design

During the course of detailed design activity for Digester 6, electrical and instrumentation and control engineering was required for incorporating the following:

- New flow meter on the gas mixing header
- Replacing actuated control valves on the sludge feed line
- Coordinating power and communication line routing

This task includes generating and responding to 90% and 100% design submittals and the following deliverables:

- Drawing sheets including
  - o D5 Demolition
  - o E1 Roof Level Electrical Plan
  - o E21 Conduit and Wire Fill Schedule I (Reference Sheet)
  - o E22 Conduit and Wire Fill Schedule II (Reference Sheet)
- Specifications, including:
  - o 40 05 66 Valve Actuator
  - o 40 71 23 Thermal Mass Flow Meters
  - o 40 91 10 Instrumentation and Controls General Requirements
  - o 40 91 23 Process Instrumentation

#### 2. Supplemental Mechanical Detailed Design

##### Upsized Gas Withdrawal Line and Line Isolation

Includes additional review of existing flow meter calibration and accuracy span, line size calculation checks, drafting and drawing updates, added scope of work items associated with third-party flame arrestor by-pass design per email May 30, and review of purging and isolation plans received after 90% design meeting held July 19 and emailed to GHD July 24.

##### Recycled Water Line

Includes incorporation of recycled water line pipe and hose assemblies on the digester tank outside and top per email request dated April 16, 2018. As part of this task, GHD reviewed the requested replacement program (PowerPoint), convened onsite review/recognition on June 5, 2018, and subsequently appended design drawings and specifications.



### Additional Mechanical Design

During the course of detailed design, several additional valves were requested to be considered per email June 14, 2018 and June 27, 2018. These include some of the transfer pump valves and others previously not indicated to GHD.

### Added Design Deliverable and Review Step

During the course of detailed design, GHD facilitated an additional review and response milestone associated with a 95% detailed design level. Previously the scope of work included the following milestones only.

- 50% interim review on June 20, 2018
- 90% design submitted July 5, 2018
- 90% design review meeting on July 19, 2018

### Construction Administration Services (Digester #6)

#### Increased Construction Period by 60 days

As part of this task, GHD has considered the proportion of requisite construction and contract administration activity associated with an increase of 60 calendar days on the construction contract duration.

### Schedule

The Schedule is proposed to be amended as follows. Note that we essentially utilized three (3) weeks for contractor pre-qualification activity; which we could makeup since the current schedule accounts for leak detection

Estimated Completion Date	Action/Milestone
4/4/2017	RFP Release
4/11/2017	Pre-Proposal Briefing - Job Walk
5/2/2017	Proposal Due Date
6/21/2017	Consultant Contract Award
6/28/2017	Project Kick Off Meeting
08/10/2017	Digester 6 Leak Investigation and Measurement
07/28/2017	Digester 1 Valves Replacement
08/21/2017	Digester 1 Start-up (IEUA Staff)
11/03/2017	Digester 6 Shutdown for Cleaning (IEUA)
01/10/2018	Digester 6 Valve Replacement Completion (by others)
01/22/2018	Digester 6 Cleaning Completion (by others)





Estimated Completion Date	Action/Milestone
02/06/2018	Digester 6 Scaffolding Installation (by others)
03/21/2018	Digester 6 Pre-Design Report
04/04/2018	IEUA Review Period Completion (Dig 6 pre-design)
04/04/2018	Pre Design Workshop (Digester 6)
04/04/2018	Digester 6 Detailed Design Proposal Update from GHD
05/16/2018	Digester 6 Board Approval to Proceed
06/27/2018	90% Digester 6 Detailed Design
07/11/2018	IEUA review period (Dig 6 90% design)
08/07/2018	Digester 6 - 100% Issued for Tender set (Extended 1 week on 90% Design Workshop dated July 19)
08/07/2018	Digester 6 Contractor Prequalification Issued (Planet Bids)
08/21/2018	Digester 6 Contractor Prequalification Packages Received (IEUA)
09/11/2018	Digester 6 Contractor Prequalification Decision by IEUA Board
09/13/2018	Digester 6 Construction Bid Advertised (Plant Bids)
09/20/2018	Digester 6 Contractor Pre-Bid Job Walk
10/02/2018	Digester 6 Contractor Questions Due
10/11/2018	Digester 6 Construction Bid Opening
10/17/2018	Digester 6 Construction Contract Award by the Board
11/14/2018	Digester 6 Contractor start/mobilization. 10 days for contract/bonds/COI/preconstruction + 10 days from Notice to Proceed.
12/05/2018	Digester 6 All shop drawings due.
07/06/2019	Digester 6 Completion of Work (240 calendar days from Notice of Award) (start-up by IEUA staff)
<del>06/07/2019</del>	<del>Digester 7 Leak Investigation and Measurement</del>
08/12/2019	Digester 7 Shutdown for Cleaning (IEUA)
09/23/2019	Digester 7 Cleaning Completion (by others)
10/26/2019	Digester 7 Valve Replacements Completion (by others)
10/13/2019	Digester 7 Scaffolding Installation (by others)
10/20/2019	Digester 7 Condition Assessment Completion
11/18/2019	Digester 7 Pre Design Report (Reviewed and Approved)
02/31/2020	Digester 7 Detailed Design (Board Approval, Detailed Design, Issued for Tender)
04/13/2020	Digester 7 Public Tender and Contract Award
10/11/2020	Digester 7 Construction Completion (start-up by IEUA staff)

### Updated Fee Estimate

The Contract Price in Section 4 of the aforementioned Contract is modified as follows:



Item Description	Contr. Value As At May 11, 2018	Requested Amendment Contr. Value	Total Contr. Value with Amendments
Pre Design Services (Dig #6)	\$71,092.50	\$0.00	\$71,092.50
Detailed Design Services (Dig #6)	\$62,102.40	\$37,467.40	\$99,569.80
Construction Administration Services (Dig #6)	\$95,669.20	\$32,160.00	\$127,829.20
Post Construction Services (Dig #6)	\$9,837.60	\$0.00	\$9,837.60
Pre Design Services (Dig #7)	\$59,313.40	\$0.00	\$59,313.40
Detailed Design Services (Dig #7)	—	\$0.00	—
Construction Administration Services (Dig #7)	—	\$0.00	—
Post Construction Services (Dig #7)	—	\$0.00	—
Work Plan Amendment 1 (3D Scanning)	\$16,153.65	\$0.00	\$16,153.65
	<hr/>		
	\$314,168.75	\$69,627.40	\$383,796.15

### Closing

It is noted that GHD will commence with the work of this Change Order immediately upon approval to proceed.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Yours truly,

GHD

Kyle Muffels

Encl.



**Table 2: Fee Estimate Breakdown**

cc: Steven Cano, IEUA  
Crystal Eleby, IEUA  
Casey Raines, GHD  
Frederick Tack, GHD  
Jamal Awad, GHD

**ACTION  
ITEM  
1D**



**Date:** November 21, 2018

HHR

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

11/14/18

Finance & Administration

11/14/18

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** RW System Cathodic Protection Improvements Consultant Contract Amendment

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**Executive Summary:**

Corrpro Companies Inc. (Corrpro) evaluated remaining corrosion monitoring test stations, not previously evaluated in 2014, and measured the soil corrosiveness along the pipeline network that does not have corrosion monitoring test stations. At the conclusion of their field evaluation, Corrpro submitted a technical memorandum identifying areas of corrosive soil and recommended engineering controls to determine the remaining life of the pipelines. This consultant contract amendment will allow Corrpro to expose and directly assess pipelines, install monitoring equipment near pipelines with corrosive soil that had no previous monitoring equipment, and repair existing corrosion monitoring test stations. Staff recommends the work be completed by Corrpro due to their expertise and knowledge of IEUA's recycled water pipeline network condition. A contract amendment is requested for an amount of \$560,670 for the additional scope of work, increasing Corrpro's contract from \$198,900 to \$759,570.

Further, the project is moving ahead of schedule, and to complete the project, funds will need to be brought forward from future fiscal year budget allocation. The FY 2018/19 budget is \$490,000; therefore, staff requests that \$195,000 be reallocated from FY 2019/20 into FY 2018/19 to fully fund the project through FY 2018/19.

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**Staff's Recommendation:**

1. Approve a consultant services contract amendment for the RW System Cathodic Protection Improvements, Project No. EN17080, to Corrpro Companies Inc., for the not-to-exceed amount of \$560,670;
2. Approve an increase in budget allocation for FY 2018/19 from the FY 2019/20 budget in the amount of \$195,000; and
3. Authorize the General Manager to execute the contract amendment, subject to non-substantive changes.

---

**Budget Impact** *Budgeted (Y/N): Y Amendment (Y/N): Y Amount for Requested Approval: \$ 195,000*

*Account/Project Name:*

EN17080/RW System Cathodic Protection Improvements

*Fiscal Impact (explain if not budgeted):*

The project is moving ahead of schedule, and to complete construction, funds will need to be brought forward from the FY 2019/20 fiscal year budget allocation. Staff request that \$195,000 be reallocated from FY 2019/20 budget of \$2,800,000 to FY 2018/19, increasing the current FY budget from \$490,000 to 685,000.

**Prior Board Action:**

On January 17 2018, the Board of Directors awarded a consultant engineering services contract for the RW System Cathodic Protection Improvements , Project No. EN17080, to Corpro for the not-to-exceed amount of \$198,900.

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**Environmental Determination:**

Categorical Exemption

CEQA identifies certain categories of projects as exempt from more detailed environmental review because these categories have been deemed to have no potential for significant impact on the environment. This project qualifies for a Categorical Exemption Class 1 and Class 6, as defined in Section 15301 and Section 15306 of the State CEQA Guidelines respectively.

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**Business Goal:**

The RW System Cathodic Improvements Project is consistent with IEUA's Business Goal of Water Reliability, specifically the Water Supplies objective that IEUA will support the region with the development of reliable, resilient, and sustainable water supplies from diverse sources.

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**Attachments:**

Attachment 1 - PowerPoint

Attachment 2 - Contract Amendment

# **Attachment 1**



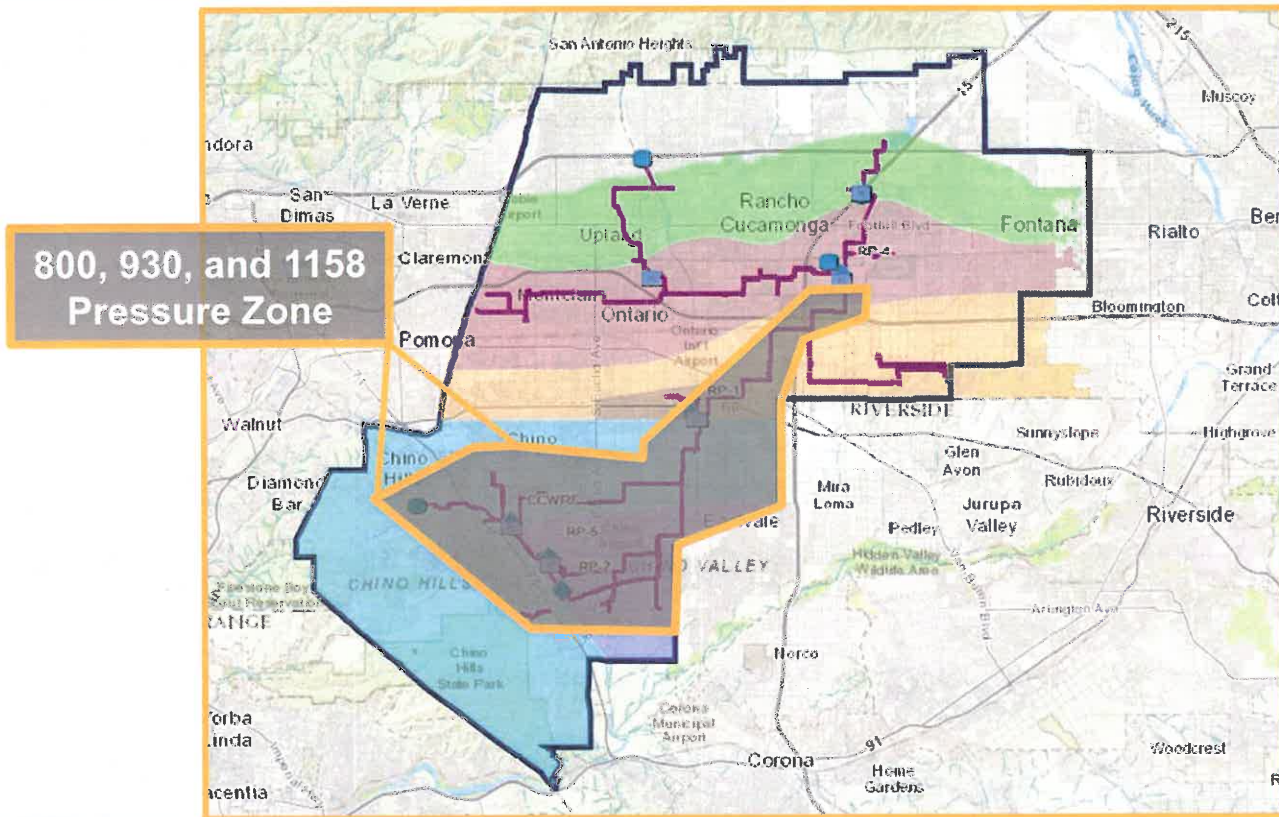
# Recycled Water System Cathodic Protection Consultant Contract Amendment Project No. EN17080



Travis Sprague  
November 2018

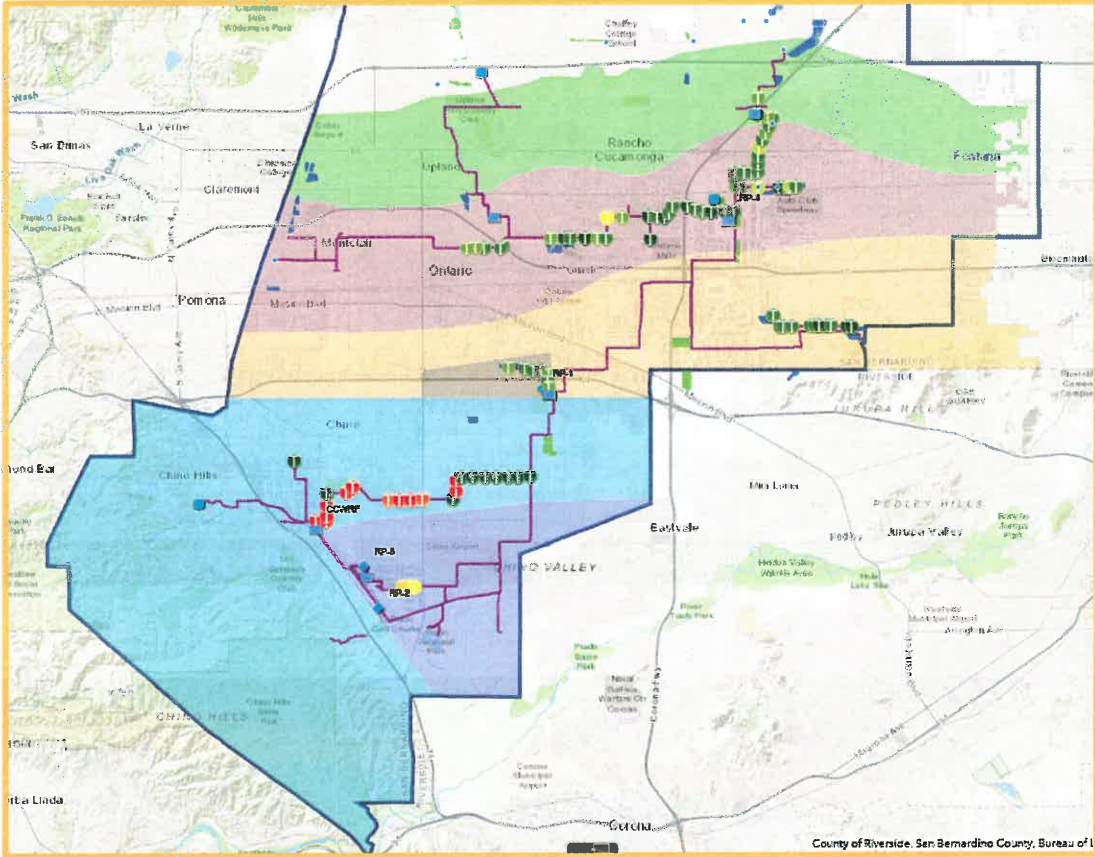


# Project Location



# The Project

2014 RW Pipeline Cathodic Protection Station Survey



# Project Budget and Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$270,428</b>
Project Evaluation Contract	\$198,900
IEUA Design Services	\$71,528
<b>Rehabilitation Services</b>	<b>\$686,821</b>
Consultant Contract Amendment (this action)	\$560,670
Contingency (10%)	\$56,067
Engineering Services (8%)	\$44,854
IEUA Inspection Services (4.5%)	\$25,230
<b>Total Project Cost</b>	<b>\$957,249</b>
<b>Total Project Budget</b>	<b>\$3,540,851</b>

Project Milestone	Date
<b>Design</b>	
Consultant Contract Award	January 2018
Tech Memo Completion	June 2018
<b>Rehabilitation</b>	
Contract Amendment	November 2018
Rehabilitation Completion	April 2019



# Recommendation

- Approve a consultant services contract amendment for the RW System Cathodic Protection Improvements, Project No. EN17080, to Corrpro Companies Inc., for the not-to-exceed amount of \$560,670;
- Approve an increase in budget allocation for FY 2018/19 from the FY 2019/20 budget in the amount of \$195,000; and
- Authorize the General Manager to execute the contract amendment subject to non-substantive changes.

The RW System Cathodic Improvements Project is consistent with **IEUA's Business Goal of Water Reliability** specifically the Water Supplies objective that IEUA will support the region with the development of reliable, resilient, and sustainable water supplies from diverse sources.

# **Attachment 2**



**CONTRACT AMENDMENT NUMBER: 4600002464-001**  
**FOR**  
**CORROSION ASSESSMENT SERVICES**  
**OF**  
**RECYCLED WATER CATHODIC PROTECTION IMPROVEMENTS**  
**SOIL ANALYSIS SURVEY PROJECT NO. EN17080**

THIS CONTRACT AMENDMENT ONE is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2018, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "IEUA" and "Agency") and Corpro Companies, Inc., an Aegion Company, with offices located in Santa Fe Springs, California (hereinafter referred to as "Consultant"), for professional soil analysis and pip-to-soil potential survey on the recycled water distribution pipelines in support of Project EN17080.

**SECTION FOUR, SCOPE OF WORK AND SERVICES, ADDS THE FOLLOWING PARAGRAPH:** Consultant's additional services and responsibilities shall be in accordance with Consultant's proposal dated September 26, 2018, which is attached hereto, referenced herein, and made a part hereof as **Exhibit A**.

**SECTION SIX, COMPENSATION, ADDS THE FOLLOWING PARAGRAPH:** In compensation for the additional work represented by this Contract Amendment, Agency shall pay Consultant a **NOT-TO-EXCEED MAXIMUM of \$759,570.00** for all services provided. This represents an increase of **\$560,670.00** in accordance with **Exhibit A** and as approved by SAP Purchase Requisition 10046636.

**ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED**

The parties hereto have mutually covenanted and agreed as per the above amendment item, and in doing so have caused this document to become incorporated into the Contract Documents.

**INLAND EMPIRE UTILITIES AGENCY:**  
*\*A MUNICIPAL WATER DISTRICT*

**CORPRO COMPANIES, INC.:**

\_\_\_\_\_  
Halla H. Razak  
General Manager

(Date)

  
\_\_\_\_\_  
Edward Bonar  
Area Operations Manager

  
\_\_\_\_\_  
10/18/2018  
(Date)

# **Exhibit A**

September 26<sup>th</sup>, 2018

Inland Empire Utilities Agency  
 6075 Kimball Avenue  
 Chino, CA 91708

Attn.: Mr. Travis Sprague

**Subject: Cathodic Protection (CP) Proposal – Cost Estimates for Proposed Recommendations  
 Recycled Water Pipeline Cathodic Protection Improvements Project (Rev 3)**

A soil corrosivity analysis and assessment of the existing cathodic protection and corrosion monitoring systems were conducted for select recycled water pipelines. Based on the findings of the field surveys, it was determined that additional testing, CP equipment upgrades, and new CP installations are required throughout the project area. This cost proposal is based on the recommendations provided in the most recent “*Cathodic Protection Assessment and Soil Corrosivity Analysis Report*” dated July 12, 2018.

The more detailed scope of work and associated fees included under this proposal are as follows:

**TASK SUMMARY AND COST:**

**Task 1: Excavate and Perform ECDA on 930 Zone Reservoir Pipeline Near the IJ at Sta. 220+64**

Based on the cathodic protection survey, the corrosion potential readings at this location on the 930 Zone Reservoir Pipeline were found to be more electronegative than anticipated. It is suspected that the pipeline is in the anodic voltage gradient of the adjacent cathodically protected pipeline on the other side of the insulating flange. Recommendation was made to excavate the pipe at this location and perform an external corrosion direct assessment (ECDA) to verify no significant corrosion is occurring.

Excavation and ECDA Fee..... \$19,000.00

**Task 2: New Panel Boards and Hardware for 6 Test Stations**

It has been discovered that some of the anode test station panel boards have corroding hardware and therefore some of the anodes were disconnected from the circuit and are not providing protective current. During the site visits, they were temporarily repaired but will corrode again. Installation of new anode panel boards at six (6) locations is recommended. Configuration shall be as shown on drawings no. D5153-049 (CP-3) detail 4. Specific locations where the panel boards shall be replaced are noted in the report. Cost for one (1) mobilization for panel board installation is included.

Cost Estimate for Six (6) Anode Panel Boards..... \$1,800.00

Labor and Equipment for Installation Fee..... \$3,200.00



**Task 3: Pipeline Continuity Testing of Wineville Segment B**

Wineville Pipeline Segment B was found to be lacking the required cathodic protection at test stations without anodes. It is suspected that discontinuities exist at multiple locations of the pipeline alignment. According to the drawings D5153-047 (CP-1), the pipe joints are made electrically continuous with bond cables. It is not known how many discontinuities may exist, so it is recommended to conduct circulating current testing between all test stations to determine which pipeline segments are not electrically continuous.

Circulating Current Continuity Testing of Wineville Pipeline Segment B ..... **\$25,800.00**

**Task 4: Conduct ECDA, Provide Design and Installation for New Test Stations on RP-4 Pipeline**

During the 2018 cathodic protection survey, a large number of test stations could not be located for the RP-4 Pipeline. It is very likely they were paved over/lost during development of the area. As a result, the cathodic protection levels on the east/north end of the pipeline past Sta. 235+00 could not be assessed. It was recommended to design and install a new cathodic protection system for this end of the pipeline. This will include locating of pipeline, installation of four (4) test stations and field testing to determine current requirement, cathodic protection design and calculations, and estimate to install the cathodic protection system. An external corrosion direct assessment (ECDA) will be conducted during the excavation of the pipeline to install new test stations.

Installation of Four (4) Test Stations, Field Testing and Design Services ..... **\$170,520.00**

**Task 5: Perform ECDA and Install corrosion monitoring Probes where Soil Resistivity was found to be low**

Based on the soil corrosivity analysis and locations provided to be the highest corrosion risk to the pipeline in the case coating holidays exist, it was recommended to excavate the pipeline and perform an external corrosion direct assessment (ECDA). It was also recommended to install corrosion probes at these locations to perform future monitoring of the corrosive soils. Cost estimate is on a “per location” basis. The locations proposed for this work have varying conditions. Some locations require traffic control (to be provided by Corrpro), shoring, potholing, asphalt removal, etc. Depending on the pipe alignment at each location, the cost to perform the work is given as follows:

Excavation and ECDA for locations that do not require traffic control, asphalt removal and repaving .....  $\$18,000.00 \times 9 =$  **\$162,000.00**

Excavation and ECDA for locations that will require traffic control, asphalt removal and repaving .....  $\$30,000.00 \times 3 =$  **\$90,000.00**

Excavation and ECDA for locations where pipe depth is greater than 6 ft and do not require traffic control, asphalt removal and repaving .....  $\$24,000.00 \times 1 =$  **\$24,000.00**

Monitoring Probe (Materials and Installation) .....  $\$4,500.00 \times 13 =$  **\$58,500.00**

**Total Cost Estimate for Task 5: ..... \$334,500.00**

**Task 6: Corrosion Assessment and Evaluation for CCWRF RAS Spool**

The purpose of this task is to perform a corrosion assessment and evaluation for the header pipe and RAS spools located at the CCWRF facility. The RAS spools have been experiencing internal corrosion near the flanged area of the spools. This will include reviewing pertinent information (previous failure study reports, as-built drawings, pipe and lining material specifications, water quality data etc.), inspecting the removed components of the failed structure, identify any possible causes for internal corrosion (presence of foreign CP systems, etc.) and repair that includes all results gathered from the corrosion assessment.

CCWRF RAS Spool Corrosion Assessment and Evaluation..... **\$5,850.00**

**Total Cost Estimate for All Tasks Included in this Cost Proposal: \$560,670**

**ADDITIONAL SCOPE OF WORK FOR ENGINEERING DESIGN/TESTING SERVICES:**

1. Review available drawings and specifications.
2. A 20% contingency fee will be applicable to the estimated cost to complete the individual sub-tasks listed under Task 5 to compensate for unforeseen conditions.
3. Testing shall be accomplished by NACE certified CP professionals.
4. IEUA will provide access to privately owned properties.
5. Corrpro to obtain the required permits per city requirements based on scope of work.
6. Corrpro to provide traffic control as per city requirements. Costs recommendations in this proposal include traffic control where required.
7. Schedule of work to be mutually agreed.
8. Cost associated with ECDA and test station installation may change if unusual site conditions are encountered.

We appreciate the opportunity to submit this proposal and look forward to working with you on this project. If you have any questions or require additional information, please feel free to call us any time.

Sincerely submitted,



Sarvjit Singh  
Engineering Manager  
(564) 843-2877  
[Sisingh@aegion.com](mailto:Sisingh@aegion.com)

## CORRPRO COMPANIES, INC. STANDARD TERMS AND CONDITIONS

The following terms and conditions ("T&Cs") apply to the proposed sale of equipment, supplies, products or materials ("Goods") or the proposed furnishing of labor, with or without the supply of Goods ("Services"), by Corpro Companies, Inc. ("Corpro"), all as further described in the Proposal or Invoice attached hereto ("Sales Document"), to the buyer named in the Sales Document ("Buyer").

- 1. Scope of Agreement; Acceptance.** Unless expressly provided otherwise in a writing signed by Buyer and Corpro (including a master or other written agreement between Corpro and Buyer signed by an authorized representative of Corpro prior to the date of the Sales Document), these T&Cs and any other documents expressly identified in the Sales Document as a contract document shall be considered contract documents (collectively, the "Agreement"). Any terms that add to or contradict the terms of this Agreement are not valid. A definite expression of acceptance of this Sales Document by Buyer that contains terms that are additional to or different from the terms of the Agreement will form a contract solely on the Agreement, and the additional or different terms shall not become a part of the Agreement, whether or not they would materially alter the Agreement. Neither course of prior dealings nor usage of trade shall be relevant to supplement or explain any provision of the Agreement. This Agreement becomes a valid and binding obligation of Corpro and Buyer on the earlier of: (a) Corpro's receipt of this Sales Document signed by Buyer; (b) Buyer delivering a purchase order or a purchase order number to Corpro for the Goods or Services described in the Proposal; (c) Buyer's receipt and acceptance of the Goods or Services, (d) Buyer's payment for the Goods or Services described in the Sales Document, or (e) any other written indication by Buyer of its acceptance of this Sales Document.
- 2. Delivery; Risk of Loss.** All shipping dates of Goods and performance dates of Services stated in the Proposal are approximate and not a guarantee of a particular date of shipment or performance. Unless stated otherwise in the Agreement, delivery of Goods shall be EXW (Incoterms 2010) at Corpro's facility stated in the Sales Document. At Buyer's option, Corpro will ship Goods to Buyer at the shipping address stated in the Agreement by any commercially reasonable means, provided that Corpro has the option of selecting the particular route and carrier for shipment of the Goods to Buyer, unless specified by Buyer. Buyer shall bear all risk of loss or damage in transit. All freight, insurance, tariffs, freight forwarding, customs, cartage and other transportation or incidental charges shall be borne by Buyer. Corpro reserves the right to deliver Goods or perform Services in installments, all such installments to be separately invoiced and paid for when due, without regard to subsequent deliveries. Delay in delivery of any installment shall not relieve Buyer's obligations to accept remaining deliveries.
- 3. Inspection and Acceptance.** Immediately on Buyer's receipt of any Goods shipped or Services performed, Buyer shall inspect the same and shall notify Corpro in writing of any claims for shortages or non-conformance (including defective and damaged Goods or Services). Buyer shall hold any non-conforming Goods for Corpro's written instructions concerning disposition. Failure to give written notice of any non-conforming Goods or Services within 10 days after the earlier to occur of receipt of Goods or performance of Services, express oral or written acceptance of the Goods or Services, or payment for the Goods or Services, shall conclusively (a) establish Buyer's acceptance of the Goods or Services, (b) release Corpro from any and all liability therefor, and (c) waive Buyer's right to seek damages or other remedies for any non-conforming Goods or Services subject to Section 8 below. Buyer shall bear the expenses of inspection under all circumstances.
- 4. Payment Terms.** Terms of sale are net 30 days from date of invoice, unless otherwise stated in the Agreement. Time is of the essence with respect to all payments. Any amount not received by Corpro when due shall bear interest at the rate of 1½% per month (12% annually), or the maximum rate of interest that applicable law allows, whichever is less, until fully paid, including any interest due. Buyer agrees to pay all costs of collection resulting from any default by Buyer of this Agreement. Amounts due to Corpro under this Agreement are not subject to offset, deduction or back charges by Buyer. Unless stated otherwise in the Agreement, the prices stated in the Agreement and all payments due to Corpro from Buyer shall be in the lawful currency of the U.S. If, at any time prior to shipment or performance (either complete or partial), Buyer does not meet Corpro's credit approval or Corpro, in its sole discretion, deems Buyer's financial condition to be unsatisfactory, Corpro may either (a) delay or postpone delivery of Goods or performance of Services, (b) cancel the Agreement, or (c) request payment in full or other security satisfactory to Corpro from Buyer prior to shipment of the Goods or performance of the Services.
- 5. Taxes; Permits and Fees; Laws.** Unless expressly stated otherwise in the Agreement the purchase price for the Goods furnished or Services performed by Corpro excludes all governmental or brokerage taxes, duties, customs, fees, charges or assessments (collectively, "Taxes"). If applicable, Buyer must provide Corpro with documentation acceptable to Corpro of any exemptions claimed from Taxes prior to invoicing. In the event Corpro is required to pay any Taxes not previously paid to Corpro, Buyer shall reimburse Corpro. Except to the extent assumed by Corpro in writing, Buyer shall secure and pay for all permits and fees necessary for delivery and installation of the Goods or performance of the Services. It is Buyer's duty to ascertain that the Goods or Services proposed by Corpro are and their subsequent installation and use is in accordance with applicable laws, ordinances and building codes. Corpro shall not be responsible for compliance of the Goods or Services to such laws, ordinances and building codes, but shall, to the extent reasonably possible, promptly notify Buyer of any discrepancies brought to Corpro's attention.
- 6. Specifications.** Buyer warrants that any documents, drawings, designs or specifications furnished to Corpro by Buyer or any party acting on behalf of, or under direction from, Buyer (collectively, "Specifications") are complete, accurate and may be reasonably relied on by Corpro. Corpro shall have no liability for errors, omissions or inconsistencies in any Specifications. In the event the Agreement contains submittal requirements pertaining to the Goods or Services, Corpro agrees to submit in a timely fashion to Buyer for review and approval any shop drawings, samples, product data, manufacturers' literature or similar submittals as Buyer may reasonably request. Buyer shall be responsible for review and approval of submittals with reasonable promptness to avoid causing delay.
- 7. Change Orders.** Changes to the quantity, Specifications, scope of supply or performance, delivery schedule, period of performance, shipping instructions or any other material term of the Agreement, may only be made by Buyer and Corpro executing a written change order ("Change Order"). Any Change Order shall state the parties' agreement on (a) change in the material term of the Agreement, and (b) an adjustment to the purchase price or the date of shipment or period of performance, as applicable. Both parties agree that, unless a Change Order is agreed in writing and signed by authorized representatives of both parties, the Agreement shall not be changed or modified in any manner. In addition, Corpro has the right to suspend performance during the period while the change is being evaluated and negotiated. In the event Buyer has communicated proposed changes to Corpro, Corpro, at its sole discretion, shall either (i) accept the Change Order, (ii) reject the Change Order and continue performance under the existing Agreement, or (iii) cancel the Agreement. In the event that Corpro elects (ii) above, Buyer shall have the option to cancel the Agreement.
- 8. Warranties.** "Warranty Period" means (a) for Services and Goods installed as part of the Services, the one (1) year period beginning the date the applicable Services are substantially completed; and (b) for Goods not installed as part of any Services, the 90 day period beginning with the date of shipment from Corpro. The providing of warranty service does not extend or restart a new Warranty Period. Corpro warrants that, for the duration of the Warranty Period and subject to the other limitations in this Agreement, each Service has been performed in accordance with applicable specifications and procedures for such Service, and, if applicable, Goods will be free from defect in materials and workmanship. Corpro's obligation to honor its warranty on defective Goods

is in all cases limited to, at Corrpro's sole option, repair or replacement of the defective Good or component thereof, or providing a cash refund or credit equivalent to the decreased value of the defective Good. Corrpro's obligation to honor its warranty on defective Services is in all cases limited to, at Corrpro's sole option, re-performing such Service(s), performing additional Service(s), or providing a refund or credit equivalent to the decreased value of the Service(s). Notwithstanding anything in this Agreement to the contrary, Corrpro's warranty liability shall in no event exceed the amount paid for the original defective Service or Good. Any claim not received by Corrpro within the applicable Warranty Period shall be conclusively deemed waived by claimant. Corrpro has the option to verify, with its own representatives, the nature and extent of the alleged defect. Corrpro shall have no obligation to provide warranty service and shall have no liability with respect to defective Services or Goods if the Goods, materials, systems of which they are a part, or structures they are intended to protect from corrosion have: (a) been modified, altered, relocated (in the case of cathodic protection systems), used for other than intended purposes, or otherwise changed without Corrpro's written consent; (b) been damaged or abused; (c) not been operated or maintained in accordance with design specifications, instructions, operations and maintenance documents, or reasonable business practices; or (d) in the case of Goods or Services, not been paid for in full.

**9. Warranty Limitations.** The Goods warranty applies only to (a) Goods manufactured solely by Corrpro, and (b) components of cathodic protection systems installed as part of the Services. Except as stated in the preceding sentence, Corrpro does not warrant products manufactured or supplied by other parties, and Buyer shall be entitled to rely on the warranties, if any, only to the extent extended to Buyer by such other parties. Corrpro shall not be liable for any expense incurred by Buyer in order to remedy any warranted defect. Corrpro's obligation to honor its warranty on defective Corrpro Services is in all cases limited to, at Corrpro's sole option: 1) re-performing such Corrpro Service, 2) performing additional Corrpro Service, or 3) providing a refund or credit equivalent to the decreased value of the Corrpro Service. Corrpro's obligation to honor its warranty on defective Corrpro Products is in all cases limited to, at Corrpro's sole option: 1) repair or replacement of the defective Corrpro Product or component thereof, or 2) providing a cash refund or credit equivalent to the decreased value of the Corrpro Products. Replaced Corrpro Products shall become the property of Corrpro, if Corrpro so elects. Corrpro shall not be liable for any expense incurred by Buyer in order to remedy any warranted defect. ALL WARRANTIES ARE IN LIEU OF AND CORRPRO DISCLAIMS ANY AND ALL OTHER WARRANTIES, CONDITIONS, AND LIABILITIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. BUYER EXPRESSLY AGREES THAT THIS WARRANTY SHALL SERVE AS BUYER'S SOLE AND EXCLUSIVE REMEDY WITH RESPECT TO THE GOODS AND SERVICES. IN NO EVENT WILL CORRPRO BE LIABLE TO BUYER, ITS AFFILIATES, SUCCESSORS, ASSIGNS OR TRANSFEREES OR TO ANY THIRD PARTY (BY VIRTUE OF CONTRACT, TORT (INCLUDING NEGLIGENCE), WARRANTY, STRICT LIABILITY OR OTHERWISE) FOR ANY LOST USE, REVENUES OR PROFITS, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE OR SPECIAL DAMAGES ARISING OUT OF OR IN ANY WAY RELATED TO THE GOODS OR SERVICES, ACTS OR OMISSIONS IN CONNECTION WITH ANY AGREEMENT RELATED TO THESE WARRANTIES, OR GOODS, MATERIALS, OR SERVICES PROVIDED BY CORRPRO UNLESS EXPRESSLY AND EXPLICITLY PROVIDED FOR IN WRITING SIGNED BY AN AUTHORIZED REPRESENTATIVE OF CORRPRO OR AS OTHERWISE REQUIRED BY LAW. THESE WARRANTIES SHALL EXTEND ONLY TO THE FIRST PURCHASER OF GOODS OR SERVICES FROM CORRPRO AND SHALL NOT BE ASSIGNED OR TRANSFERRED.

**10. Reliance on Buyer's Representations.** Corrpro shall be entitled to rely on representations made by or on behalf of Buyer that all conditions necessary for the proper installation or performance of Corrpro Products, systems, materials, components and Corrpro Services have been satisfied, except to the extent Corrpro is specifically contracted to make such determination. Corrpro shall have no liability for any and all claims, losses, and causes of action arising out of, resulting from, or in any way attributable to failure of Buyer to satisfy such conditions, Buyer's failure to advise of existing site conditions affecting the work (including, but not limited to, the location of subsurface or concealed structures, systems or components thereof), or the use or operations of products, materials, or systems subsequent to any transfer to any third party. Corrpro makes no representations or warranties with respect to, and disclaims liability arising out of, products or services sold by Buyer.

**11. Technical Assistance.** At Buyer's request, Corrpro may, in its discretion, furnish technical assistance and information with respect to Corrpro's products. CORRPRO MAKES NO WARRANTIES OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, WITH RESPECT TO TECHNICAL ASSISTANCE OR INFORMATION PROVIDED BY CORRPRO OR ITS PERSONNEL. ANY SUGGESTIONS BY CORRPRO REGARDING USE, SELECTION, APPLICATION OR SUITABILITY OF PRODUCTS SHALL NOT BE CONSTRUED AS AN EXPRESS WARRANTY UNLESS SPECIFICALLY DESIGNATED AS SUCH IN A WRITING SIGNED BY AN AUTHORIZED REPRESENTATIVE OF CORRPRO.

**12. Confidentiality.** All information, including quotations, specifications, drawings, prints, schematics, and any other engineering, technical or pricing data or information submitted by Corrpro to Buyer related to any order for Goods or Services are the confidential and proprietary information of Corrpro. Buyer and its employees, agents or other parties for whom Buyer is responsible may not disclose Corrpro's confidential and proprietary information to any third parties, or use Corrpro's confidential and proprietary information for its own account or that of any third party, except in the performance of this Agreement.

**13. Force Majeure.** If Corrpro is delayed at any time by the acts or omissions of Buyer, Change Orders, or any Force Majeure, then the period of performance of Services shall be extended, the delivery of Goods rescheduled and the price equitably adjusted to reflect the effects of delay on Corrpro's costs. "Force Majeure" means circumstances beyond Corrpro's reasonable control, including acts of God, acts of public enemies, wars, other hostilities, blockades, insurrections, riots, epidemics, quarantine restrictions, floods, unavailability of components or supplies, lightning, fire, storms, earthquakes, arrests, civil disturbances, acts of any governmental or local authority, and any other acts and causes, not within Corrpro's control, which by the exercise of due diligence and reasonable commercial effort, Corrpro shall not have been able to foresee, avoid or overcome. If Corrpro is unable for any reason to supply the total demands for Goods specified in the Agreement, Corrpro may allocate its viable supply among any or all purchasers on such basis as Corrpro may deem fair and practical, without liability for any failure of performance which may result therefrom.

**14. Default; Cancellation.** If Buyer fails to perform any of its obligations under this Agreement, including failure to make payments as provided in this Agreement or otherwise, or if Buyer fails to give prompt assurances of future performance when requested by Corrpro, then Corrpro may, on 5 days' written notice to Buyer, declare Buyer to be in default and Corrpro may suspend or terminate performance of its obligations under this Agreement without liability and retain all rights and remedies Corrpro may possess at law, in equity or as provided in these T&Cs. In addition to the remedies above, to the extent that (a) Corrpro declares a default under this Section 14, or (b) if the order is cancelled for any reason other than default by Corrpro, Buyer agrees to pay Corrpro for any (i) Services performed and Goods installed or delivered to date of termination, (ii) Goods ordered which cannot be cancelled, and (iii) all costs associated with demobilizing equipment and personnel. All costs recovered shall include overhead and/or profit on costs.

**15. Hazardous Material.** Corrpro is not responsible for the discovery of any hazardous material at the site where Services are to be performed. In the event Corrpro discovers hazardous material, Corrpro will promptly notify Buyer. Corrpro is not obligated to commence or continue work until all hazardous material discovered at the place of performance has been removed, remediated, or determined to be harmless. If Corrpro incurs additional costs or is delayed due to the presence or remediation of hazardous material, Corrpro is entitled to an equitable adjustment in both the Agreement's price and the time for performance.



In no event shall Corpro be liable to Buyer or any third party for any hazardous material existing at the place of performance, or brought onto said premises by any third party. Hazardous material includes any substance or material identified currently or in the future as hazardous under applicable laws, or any other substance or material that may be considered hazardous or otherwise subject to statutory or regulatory requirement governing handling, disposal, or cleanup.

**16. Release of Liability for Buried Pipelines.** If necessary for the performance of Services, Corpro will contact the appropriate jurisdictional authority to identify and locate any buried public utilities at least 72 hours prior to commencing work on site. Corpro will also attempt to locate any buried metallic piping prior to commencing work on the site. Buyer will provide Corpro with accurate, dimensioned, reliable site piping and utility plans ("as-built site drawings") which depict, at a minimum, the precise location of all underground storage tanks and all below ground fuel, vent, air, water, or natural gas piping and electrical/instrumentation conduits (collectively "below-ground hazards") at least 3 days in advance of the date Corpro is to commence work at the site. If Buyer fails to provide as-built site drawings, or if any as-built site drawings provided by Buyer are inaccurate or fail to identify the location of all below-ground hazards, Buyer agrees that Corpro will not be liable to Buyer for any damages, liabilities or claims arising from damage to any below-ground hazard or a release of petroleum products or other hazardous material, in the course of Corpro's performance of the Services, including any such damages caused by the negligence of Corpro or its employees. In addition, Buyer will indemnify and hold Corpro harmless from any such damages, liabilities or claims made by third parties, including governmental agencies.

**17. Indemnification.** TO THE FULLEST EXTENT PERMITTED BY LAW, BUYER AGREES TO DEFEND, INDEMNIFY, AND HOLD HARMLESS CORPRO AND ITS DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS FROM AND AGAINST ANY AND ALL LIABILITY, LOSSES, COSTS (INCLUDING COSTS OF LITIGATION OR OTHER DISPUTE RESOLUTION AND ATTORNEYS' FEES), CLAIMS AND CAUSES OF ACTION IN FAVOR OF ANY AND ALL PERSONS ARISING OUT OF, RESULTING FROM, OR IN ANY WAY ATTRIBUTABLE TO THE NEGLIGENT ACT OR ACTION, OMISSION OR FAILURE TO ACT ON THE PART OF BUYER OR ITS DIRECTORS, OFFICERS, EMPLOYEES, SUBCONTRACTORS, AGENTS OR ANY OTHER PARTY FOR WHOSE ACTS OR OMISSIONS ANY OF THEM MAY BE LIABLE. TO THE FULLEST EXTENT PERMITTED BY LAW, BUYER FURTHER AGREES THAT WHERE OTHER CONSULTANTS OR CONTRACTORS ARE EMPLOYED IN THE WORK, BUYER WILL NOT HOLD CORPRO RESPONSIBLE FOR ANY LOSS, DAMAGE OR INJURY CAUSED BY ANY FAULT OR NEGLIGENCE OF SUCH OTHER CONSULTANTS OR CONTRACTORS FOR RECOVERY FROM THEM, OR ANY OF THEM, FOR ANY SUCH DAMAGE OR INJURY.

**18. Insurance.** Corpro shall maintain the following insurance policies and limits: commercial general liability insurance with limits of \$2,000,000 per occurrence/\$4,000,000 per-project aggregate, automobile liability with combined single limits of \$2,000,000 per occurrence, workers' compensation/employer's liability with limits of \$1,000,000/\$1,000,000/\$1,000,000, contractor's pollution liability with \$5,000,000 per pollution event and professional liability with \$5,000,000 limits. Such insurance shall be subject to the coverage provisions, limitations of liability, and other terms and conditions contained in the applicable policies. Customer Group shall be named as additional insured under all policies except for worker's compensation and professional liability. Customer shall be granted waiver of subrogation rights under all policies. Upon written request Corpro will provide to Customer a certificate evidencing such insurance.

**19. Limitation of Liability.** NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, CONTRACTOR AGREES THAT ANY RECOURSE AGAINST SUBCONTRACTOR UNDER THIS AGREEMENT OR RELATED TO SUBCONTRACTOR'S WORK HEREUNDER, INCLUDING BUT NOT LIMITED ANY INDEMNITY OR WARRANTY OBLIGATIONS, SHALL BE STRICTLY LIMITED TO THE AMOUNT PAID TO SUBCONTRACTOR UNDER THIS AGREEMENT. IN NO EVENT SHALL CORPRO OR ITS AFFILIATES BE LIABLE TO BUYER, ITS AFFILIATES, SUCCESSORS, ASSIGNS, VENDEES OR TRANSFEREES, OR TO ANY THIRD PARTY, FOR ANY ECONOMIC LOSS, LOST PROFITS OR BUSINESS OPPORTUNITIES, PHYSICAL HARM, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES, EVEN IF CORPRO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING OUT OF, RESULTING FROM OR RELATING IN ANY WAY TO THIS AGREEMENT OR ACTS OR OMISSIONS OF CORPRO IN CONNECTION THEREWITH.

**20. Governing Law; Dispute Resolution.** The validity, construction and interpretation of this Agreement shall be governed by the laws of the State of Texas (USA), excluding any conflicts of laws principles which would direct application of the substantive law of another jurisdiction. Any and all disputes, claims or controversies arising out of or relating to this Agreement, or the breach thereof, shall be finally settled in the district court for the Southern District of Texas or the Harris County District Court, both located in Houston, Texas. Each party agrees to personal jurisdiction in these courts. In any litigation proceeding pursuant to this Agreement, the prevailing party shall recover from the other party all reasonable attorneys' fees, and other expenses in connection with such proceeding. Neither the UNCITRAL Convention on Agreements for the International Sale of Goods nor UNIDROIT Principals of International Commercial Contracts (last version published as of the date of this Agreement) shall apply to the validity, construction and performance of this Agreement.

**21. Export Compliance.** Corpro's products, programs, and services are subject to U.S. export laws, rules, treaties, regulations, and international agreements (collectively, "Export Laws"). Buyer assumes the responsibility of abiding by the Export Laws along with applicable foreign laws when transferring, selling, importing, exporting, re-exporting, deemed exporting, diverting, or otherwise disposing of Goods or Services. By purchasing the Goods and/or Services, Buyer represents it is not in a sanctioned country nor is Buyer an individual or an entity whose purchase of the Goods or Services is restricted by the Export Laws.

**22. Order of Precedence; Notice.** If there is a conflict between the contract documents included in this Agreement, unless specified otherwise, the terms of the documents will control in the following order: (a) master or other written agreement between Corpro and Buyer signed by an authorized representative of Corpro prior to the date of the Sales Document; (b) terms stated on the face of the Sales Document; (c) these T&Cs; and (e) any other contract documents. All notices and communications required by this Agreement shall be delivered, in writing, to the Corpro address stated on the Sales Document.

**23. Interpretation.** Corpro and Buyer acknowledge this Agreement, including the Sales Document, these T&Cs, and the other contract documents, represents the entire agreement and understanding between the parties, incorporating all prior negotiations and understandings relating to the subject matter of this Agreement, whether written or oral. This Agreement shall be construed neither against nor in favor of either party, but shall be construed in a neutral manner. The failure of Corpro to insist on strict performance of this Agreement shall not constitute a waiver of, or estoppel against, asserting the right to require such performance in the future, nor shall a waiver or estoppel in any one instance constitute a waiver or estoppel with respect to a later breach of a similar nature or otherwise. All rights and remedies under this Agreement are cumulative and are in addition to any other rights and remedies Corpro may have at law or in equity. Unless the context of this Agreement clearly requires otherwise, "including" is not limiting and "or" has the inclusive meaning represented by the phrase "and/or." If any provision of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be affected or impaired thereby. The section headings are for convenience only; they form no part of the terms and conditions and shall not affect their interpretation. This Agreement shall be binding on and inure to the benefit of the parties and their respective successors and assigns; however, Buyer may not assign this Agreement without the prior written consent of Corpro.

**ACTION  
ITEM  
1E**

**Date:** November 21, 2018

H#R

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

11/14/18

Finance & Administration

11/14/18

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** RP-5 Liquids Treatment Expansion Pre-Selection of the Membrane Bio-Reactor System

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**Executive Summary:**

On April 3, 2018, IEUA released the Request for Proposals (RFP) for the pre-selection of the Membrane Bio-Reactor (MBR) System for the RP-5 Liquids Treatment Expansion. On May 29, 2018, IEUA received Equipment Supplier proposals from Evoqua Water Technologies LLC and Suez Water Technologies & Solutions (Suez). To better evaluate the proposals a Request for Best and Final Proposals was issued on August 14, 2018. An evaluation team reviewed the received proposals and evaluated/scored them based upon total capital cost, total life cycle cost, operations and maintainability, experience, qualifications, and product support.

The evaluation team selected Suez. The major reasons for this selection included Suez's proven experience, detailed project approach, performance guarantees, long term support capabilities, and capital, operational, and maintenance costs compared to other benchmarked systems.

The guaranteed MBR system price is \$9,720,000 and will be assigned as part of the contract with the successful General Contractor scheduled to be selected in December 2019. An initial contract with Suez, for \$300,000, will be required for engineering services during design to ensure that the equipment is properly incorporated into the final project documents.

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**Staff's Recommendation:**

1. Award a pre-selection agreement for the Membrane Bio-Reactor System for the RP-5 Liquids Treatment Expansion, Project No. EN19001, to Suez with a \$300,000 stipend for engineering services through design and a guaranteed price to be included in a future successful General Contractor's bid; and
2. Authorize the General Manager to execute the pre-selection agreement, subject to non-substantive changes.

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**Budget Impact** *Budgeted (Y/N): Y* *Amendment (Y/N): N* *Amount for Requested Approval:*

*Account/Project Name:*

EN19001/RP-5 Liquids Treatment Expansion

*Fiscal Impact (explain if not budgeted):*

None.

**Prior Board Action:**

On May 16, 2018, the Board of Directors received an informational item describing this RFP.  
On May 17, 2017, the Board of Directors approved a contract amendment for the project to the design Engineer.  
On March 15, 2017, the Board of Directors adopted the RP-1 & RP-5 Expansion Preliminary Design Report.

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**Environmental Determination:**

Program Environmental Impact Report (Finding of Consistency)

Staff is currently completing a Finding of Consistency with IEUA's Program Environmental Impact Report and has completed CEQA Plus evaluation for potential SRF Loan Funding.

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**Business Goal:**

The RP-5 Liquids Treatment Expansion Project is consistent with the Agency's Business Goal of Wastewater Management specifically the Water Quality objective that IEUA will ensure that Agency systems are planned, constructed, and managed to protect public health, the environment, and meet anticipated regulatory requirements.

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**Attachments:**

Attachment 1 - Background

Attachment 2 - PowerPoint

Attachment 3 - Pre-selection Agreement for the Membrane Bio-Reactor System for the RP-5 Liquids Treatment Expansion Project ([Click to Download](#))



# **Attachment 1**

## Background

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Subject: RP-5 Expansion Pre-Selection of the Membrane Bio-Reactor System

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In March 2017, the IEUA Board of Directors approved the findings of the RP-1/RP-5 Expansion Preliminary Design Report (PDR). The PDR outlined a process of pre-selecting major pieces of equipment to ensure these met specific qualifications required by IEUA. The equipment described in the pre-selection process included:

- Aeration Diffusers
- Aeration Process Blowers
- Dewatering Centrifuges
- Fine Screens
- **Membrane Bio-Reactor (MBR) System (This Action)**
- Rotary Drum Thickeners

In May 2017, the IEUA Board of Directors approved the consulting engineering services contract amendment for the RP-5 Expansion final design to Parsons Water & Infrastructure Inc. (Parsons). In June 2017, the project design team began work on the project and completed the 30% design submittal in January 2018. With the completion of the 30% design, the project team had an appropriate level of information to begin assembling the Request for Proposals (RFP's) for the pre-selection of the major pieces of equipment.

Pre-selection of equipment includes the following responsibilities from the involved parties:

Equipment Supplier – The pre-selected Equipment Supplier will provide the materials and services, as described in the RFP, at a guaranteed price through June 30, 2020. The contract for the purchase of the MBR System will be between the General Contractor and Equipment Supplier. After June 30, 2020, the guaranteed price may escalate at a defined rate if the purchase contract is not executed by the Equipment Supplier and General Contractor and the delay is caused by IEUA. The Equipment Supplier will also provide engineering support services throughout design of the project.

General Contractor – The General Contractor will purchase the MBR Equipment from the pre-selected Equipment Supplier, at the proposed/pre-negotiated price, and install the MBR System. In addition to installation and overall testing, the General Contractor will be responsible for purchasing, arranging delivery of, unloading, storing, protecting the MBR Equipment, coordination among involved parties during construction including commissioning and startup, safety, and making submittals to IEUA for review and approval. After completion of design, IEUA will be contracting with a General Contractor through a formal bidding process with award scheduled for December 2019.

IEUA – IEUA will execute a pre-selection agreement with the Equipment Supplier and utilize the Equipment Supplier's MBR system as the basis of design. All relevant information of the Equipment Supplier's MBR system, including the Equipment Supplier's proposal, will be included in the plans and specifications for the General Contractors bid. IEUA will pay the Equipment Supplier a stipend of \$300,000 for engineering services during design.

The scope of supply of the Equipment Supplier's MBR system includes:

- Engineering support during design
- MBR membranes
- Filtrate System including all pumps, piping, and valves
- Air Scour System including blowers, piping, and valves
- Backpulse and Cleaning Systems including all pumps, piping, and valves
- Control Systems
- Optional maintenance service contract ranging from 5 to 20 years

In addition, the RFP has requirements for the minimum Equipment Supplier qualifications, required warranties, and performance guarantees.

On April 3, 2018, IEUA released the RFP for the pre-selection of the MBR System for the RP-5 Liquids Treatment Expansion. On May 29, 2018, IEUA received Equipment Supplier proposals from Evoqua Water Technologies LLC and Suez Water Technologies & Solutions. During the review of the received proposals it was determined that additional information was required to properly compare and evaluate the two systems. On August 14, 2018, IEUA released the Request for Best and Final Proposals for the Preselection of the MBR System to obtain more detailed and consistent information for evaluation. The evaluation team conducted interviews with both Suez and Evoqua on August 28, 2018 and August 29, 2018, respectively. Following receipt of the Best and Final proposals IEUA had discussions with both suppliers to clarify and rectify proposal items. An evaluation team reviewed the proposals and interviews and evaluated/scored them based upon the following criteria:

- Total Capital Cost
- 20-Year Life Cycle Cost
- System Configuration and Operations
- Experience and References
- Product Support
- Exceptions to the RFP

The evaluation team determined that Suez provided the apparent best value MBR system to IEUA based upon the system configuration and operations, experience and references, and product support. The major reasons for this selection included:

1. Proven experience at similar capacities and sizes as the RP-5 Expansion. This includes multiple wastewater treatment plant MBR systems in California: Riverside (26 MGD), Visalia (18 MGD), Irvine Ranch Water District (10.9 MGD), Redlands (7.2 MGD), and Fresno (5 MGD).
2. The project approach, operational procedures, warranties, performance guarantees, and service contracts are fully developed and documented including procedures in how to implement them. This was also further supported during the interview as Suez technical leads discussed how these have been utilized in past projects.
3. The reinforced design of the membrane strand and the ability to back pulse provides a durable system that has proven long membrane life. The City of Redlands is operating on membranes originally installed in 2004.

4. Owners of Suez' MBR Systems were very satisfied with the operational support provided after construction and described the relationship as a partnership aimed at maintaining optimum performance of the system.

After the determination, Staff entered negotiations with Suez to finalize terms of the preselection agreement and consider value engineering alternatives which improved the project costs and long term operational and maintenance cost.

A more detailed project schedule for the MBR system is provided below:

<b>MBR System Milestone</b>	<b>Date</b>
IEUA Board of Directors Pre-Selection Award	November 2018
RP-5 Expansion Design Completion	June 2019
RP-5 Expansion General Contractor Bid Award	December 2019
Phase I MBR System Startup	July 2022
Solids System Startup	December 2022
RP-5 Expansion Construction Completion	December 2024

**Fiscal Impact:**

The guaranteed MBR system price is \$9,720,000 and will be part of the contract with the successful General Contractor scheduled to be selected in December 2019. This price is well below the Engineer's estimate for the MBR system material cost of \$12,200,000 and is due to an extremely competitive bidding environment. An initial contract with the Equipment Supplier, for \$300,000, will be required for engineering services during design to ensure that the equipment is properly incorporated into the project documents. The guaranteed MBR system cost and the engineering services during design are within and part of the budget for the RP-5 Liquids Treatment Expansion, Project No. EN19001, of \$160,000,000.

# **Attachment 2**

# RP-5 Liquids Treatment Expansion Project Pre-selection of the Membrane Bio-Reactor System

Project No. EN19001



Shaun J. Stone, P.E.  
November 2018

# Membrane Bio-Reactor Request for Proposal Background

## Preliminary Design Report (PDR) Outlined Process for Pre-Selection of Major Equipment

### Pre-Selection of Membrane Bio-Reactor System includes:

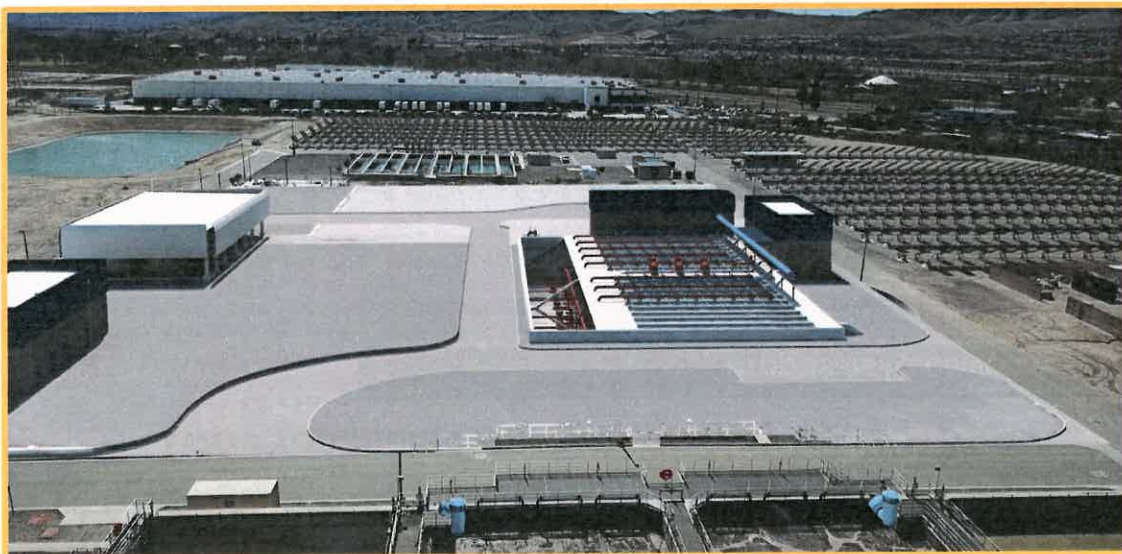
- Engineering Services During Design
- Price Guarantee to General Contractor for Materials and Services During Construction
- Warranties and Future Price Guarantees for Membranes
- Optional Maintenance Service Contracts



*City of Modesto MBR System*



# Membrane Bio-Reactor Location



RP-5 Membrane Bio-Reactor





# Equipment Supplier Selection

- Original Request for Proposals issued on April 3, 2018
- Two Proposals Received on May 29, 2018

Proposals Received
Suez
Evoqua

- Site Visits of City of Modesto (Evoqua) and City of Riverside (Suez) conducted in June 2018
- Request for Best and Final Proposals was issued on August 14, 2018
- Interviews were Conducted with Both Manufacturers
- Best and Final Proposals received on September 17, 2018
- Staff initiated negotiations with Suez

# Equipment Supplier Selection Continued

- Selection Criteria
  - Capital Cost and Life Cycle Cost
  - Experience and Qualifications
  - Operations, Maintenance, and Support Services
- Evaluation and Selection Committee
  - Nearly all IEUA Departments
  - Cities of Chino, Chino Hills, and Ontario were invited to participate in the evaluation
- Suez selected for the RP-5 Liquids Treatment Project:
  - Demonstrated experience at similar capacities and sizes
  - Extensive experience was demonstrated in their project approach and performance guarantees
  - Improved local support capabilities



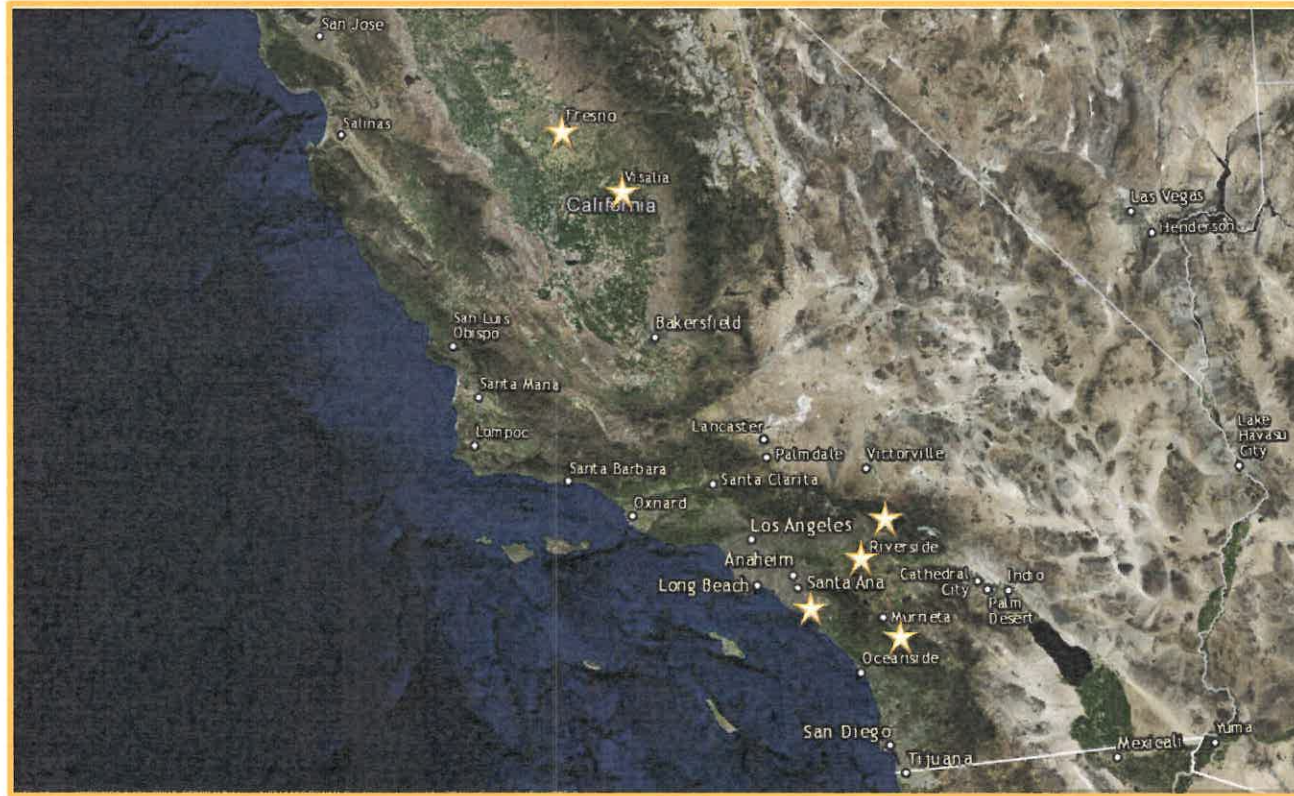
*Visalia Water Recycling Facility  
Suez Membrane Bio-Reactor System*

# Suez Southern California Experience (Wastewater Treatment MBR > 5 MGD)

**Fresno**  
(5 MGD, 2016)

**Redlands**  
(7.2 MGD, 2004)

**Irvine**  
(10.9 MGD, 2013)



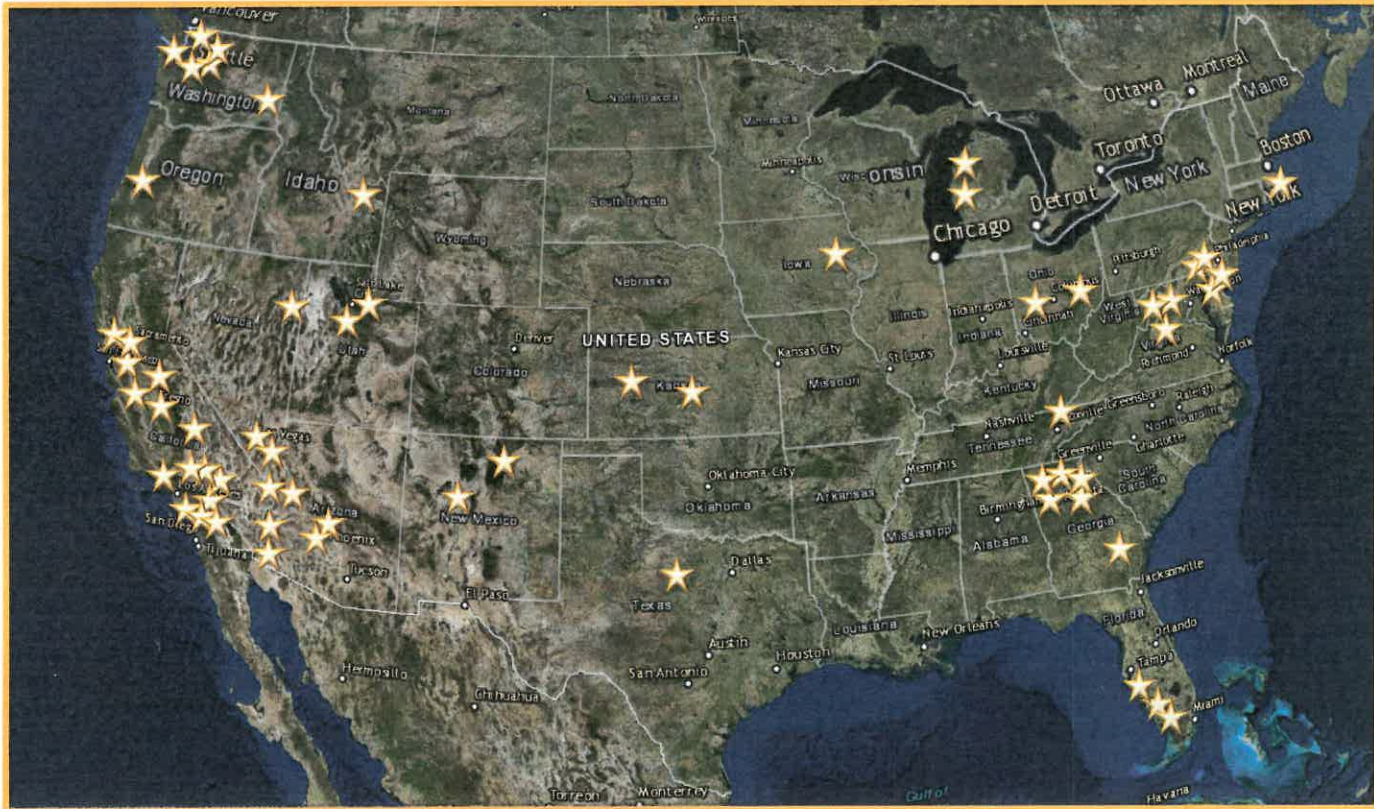
**Visalia**  
(18 MGD, 2016)

**Riverside**  
(26 MGD, 2016)

**Temecula**  
(5 MGD, 2019)



# Suez Experience (Wastewater Treatment MBR > 1 MGD)



**64 Municipal MBR  
WWTP Installs in US  
1 MGD to 31 MGD  
230+ Installs Total**

**430+ Municipal MBR  
WWTP Installs  
Worldwide  
0.1 MGD to 141 MGD**

# Historic MBR System Costs



# RP-5 Expansion Project Budget & Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$26,063,680</b>
Consultant Design Contract	\$17,993,680
Other Design Services (3%)	\$8,070,000
MBR Support During Design	\$300,000 ↑
<b>Construction Services</b>	<b>\$24,210,000</b>
Engineering Services During Construction (3%)	\$8,070,000
Other Construction Services (6%)	\$16,140,000
<b>Construction</b>	<b>\$269,000,000</b>
Construction (estimate)	\$245,000,000
MBR Materials Cost	\$9,720,000 ↑
Contingency (~10%)	\$24,000,000
<b>Total Project Cost:</b>	<b>\$319,273,680</b>
<b>Total Project Budget:</b>	<b>\$325,000,000</b>
<b>Remaining Budget:</b>	<b>\$5,726,320</b>

Project Milestone	Date
<b>Design</b>	
✓ Consultant Design Contract Award	May 2017
✓ 30% Design Completion	December 2017
✓ 50% Design Completion	July 2018
90% Design Completion	December 2018
Final Design Completion	June 2019
<b>Construction</b>	
Construction Bid Phase	July 2019
Construction Contract Award	December 2019
Phase I MBR System Startup	July 2022
Solids System Startup	December 2022
Construction Completion	December 2024



# Recommendation

- Award a pre-selection agreement for the Membrane Bio-Reactor System for the RP-5 Liquids Treatment Expansion, Project No. EN19001, to Suez with a \$300,000 stipend for engineering services through design and a guaranteed price to be included in a future successful General Contractor's bid; and
- Authorize the General Manager to execute the pre-selection agreement, subject to non-substantive changes.

The RP-5 Liquids Treatment Expansion Project is consistent with **IEUA's Business Goal of Wastewater Management** specifically the Water Quality objective that IEUA will ensure that systems are planned, constructed, and managed to protect public health, the environment, and meet anticipated regulatory requirements.

**ACTION  
ITEM  
1F**





**Date:** November 21, 2018

HR

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

11/14/18

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** RP-1 Mechanical Restoration and Improvements Consultant Contract Amendment

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**Executive Summary:**

The goal of the project is to replace major mechanical equipment and appurtenances, which are at the end of their useful life located within Regional Water Recycling Plant No.1 (RP-1). During the preliminary design of this project, it was determined that the electrical equipment, i.e. motor control centers (MCC), were also at the end of their useful life.

Under the original consulting contract, Stantec Consulting Services, Inc., was requested to develop a technical memorandum to evaluate the entire replacement of the MCC equipment in both RAS buildings. This contract amendment includes the additional design services necessary to replace the existing MCC equipment in their entirety, including: removal of the existing MCCs and all circuit conductors, and installation of new MCC equipment, control panels, and variable frequency drives. Due to Stantec's preliminary design efforts and extensive knowledge of RP-1's activated sludge pumping system, staff firmly believes that Stantec is qualified to effectively complete the design of the subject project while maintaining IEUA's project goals. A contract amendment is requested for an amount of \$113,400 for additional engineering design services, increasing Stantec's contract from \$469,887 to \$583,287.

---

**Staff's Recommendation:**

1. Approve a contract amendment for the RP-1 Mechanical Restoration and Improvements, Project No. EN17082, to Stantec Consulting Services, Inc., for the not-to-exceed amount of \$113,400; and
2. Authorize the General Manager to execute the contract amendment, subject to non-substantive changes.

---

**Budget Impact** *Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval:*

*Account/Project Name:*

EN17082.00/RP-1 Mechanical Restoration and Improvements Project

*Fiscal Impact (explain if not budgeted):*

None.

**Prior Board Action:**

On October 18, 2017, the Board of Directors awarded a consultant engineering services contract for the RP-1 Mechanical Restoration and Improvements, Project No. EN17082, to Stantec for the not-to-exceed amount of \$469,887.

---

**Environmental Determination:**

Categorical Exemption

CEQA identifies certain categories of projects as exempt from more detailed environmental review because these categories have been deemed to have no potential for significant impact on the environment. This project qualifies for a Categorical Exemption Class 1 as defined in Section 15301(b) of the State CEQA Guidelines.

---

**Business Goal:**

The RP-1 Mechanical Restoration and Improvements Project is consistent with IEUA's Business Goal of Wastewater Management specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use.

---

**Attachments:**

Attachment 1 - PowerPoint

Attachment 2 - Contract Amendment

# **Attachment 1**

# Regional Water Recycling Plant No. 1 (RP-1) Mechanical Restoration & Improvements Consultant Contract Amendment Project No. EN17082



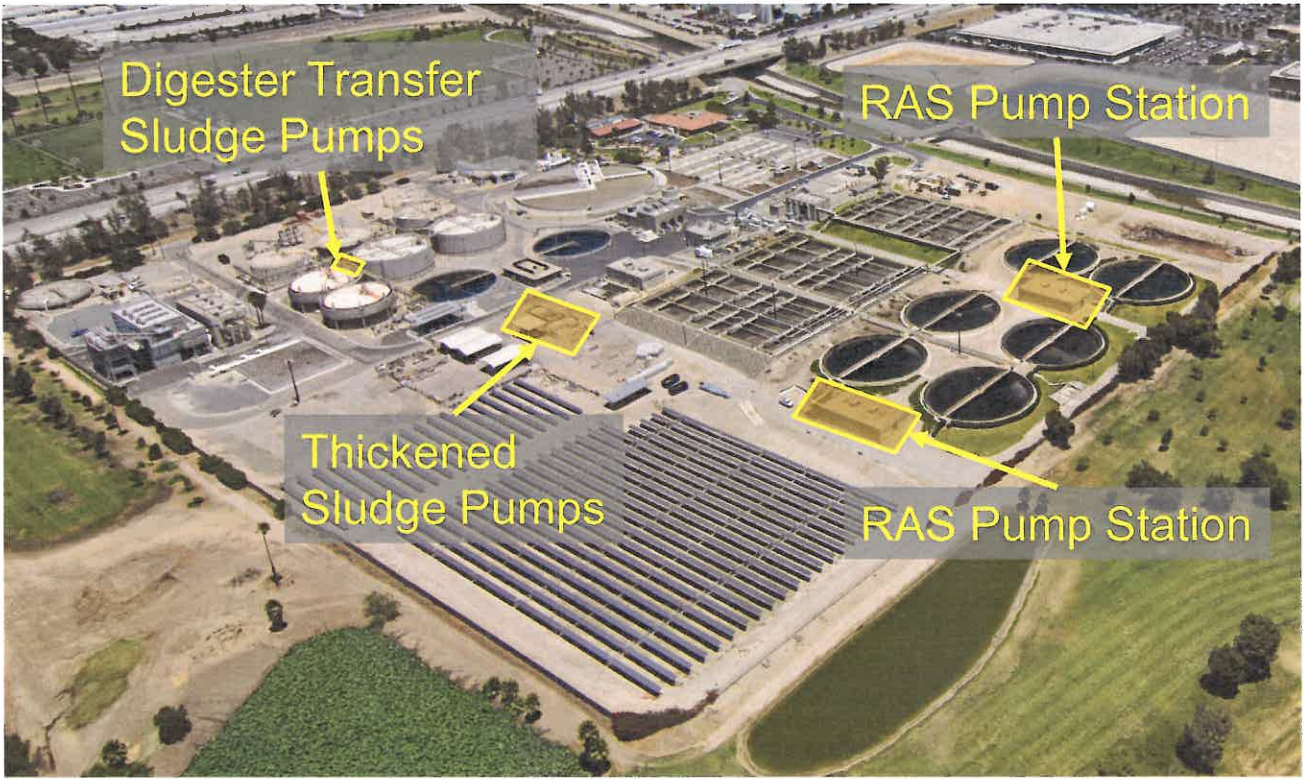
Apr 11, 2017, 8:33



Apr 11, 2017



# Project Location



# The Project

- Stantec evaluated replacing motor control center equipment at the end of its useful life in both Pump Station Buildings
- The Motor Control Centers (MCCs) are essential to plant operation and need to be replaced prior to catastrophic failure
- Additional design services needed to replace old MCCs



3

Building E - Old Motor Control Center Equipment



# Project Budget and Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$812,789</b>
Design Contract	\$469,877
Design Contract Amendment (this action)	\$113,400
IEUA Design Services	\$229,512
<b>Construction Services</b>	<b>\$912,500</b>
Engineering Services During Construction (8%)	\$584,000
IEUA Construction Services (4.5%)	\$328,500
<b>Construction</b>	<b>\$5,830,000</b>
Construction Contract (engineer's estimate)	\$5,300,000
Contingency (10%)	\$530,000
<b>Total Project Cost</b>	<b>\$7,555,289</b>
<b>Total Project Budget</b>	<b>\$7,945,844</b>

Project Milestone	Date
<b>Design</b>	
Design Contract Award	November 2017
Design Completion	February 2019
<b>Construction</b>	
Construction Contract Award	May 2019
Construction Completion	February 2020



# Recommendations

- Approve a contract amendment for the RP-1 Mechanical Restoration and Improvements, Project No. EN17082, to Stantec Consulting Services, Inc., for the not-to-exceed amount of \$113,400; and
- Authorize the General Manager to execute the contract amendment, subject to non-substantive changes.

The RP-1 Mechanical Restoration and Improvements Project is consistent with **IEUA's Business Goal of Wastewater Management** specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use.

# **Attachment 2**



*Inland Empire Utilities Agency*  
A MUNICIPAL WATER DISTRICT

**CONTRACT AMENDMENT NUMBER: 4600002418-002  
FOR  
RP-1 MECHANICAL RESTORATION  
AND IMPROVEMENTS, PROJECT NO. EN17082**

THIS CONTRACT AMENDMENT TWO is made and entered into this \_\_\_ day of \_\_\_\_\_, 2018, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "IEUA" and "Agency") and Stantec Consulting Services, Inc., with offices located in Irvine, California and Denver, Colorado (hereinafter referred to as "Consultant"), for professional design services in support of the RP-1 Mechanical Restoration and Improvements Project No. EN17082, and shall herein revise the Contract as amended:

**SECTION FOUR, SCOPE OF WORK AND SERVICES, ADDS THE FOLLOWING PARAGRAPH:** Consultant's additional services and responsibilities shall be in accordance with Consultant's proposal dated September 10, 2018, which is attached hereto, referenced herein, and made a part hereof as **Exhibit A**.

**SECTION SIX, COMPENSATION, ADDS THE FOLLOWING PARAGRAPH:** In compensation for the additional work represented by this Contract Amendment, Agency shall pay Consultant a **NOT-TO-EXCEED MAXIMUM of \$583,287.00** for all services provided. This represents an increase of **\$113,400.00** in accordance with **Exhibit A** and as approved by SAP Purchase Requisition 10046584

**ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED**

The parties hereto have mutually covenanted and agreed as per the above amendment item, and in doing so have caused this document to become incorporated into the Contract Documents.

**INLAND EMPIRE UTILITIES AGENCY:**  
*\*A MUNICIPAL WATER DISTRICT*

**STANTEC CONSULTING SERVICES INC.:**

\_\_\_\_\_  
Halla H. Razak  
General Manager

(Date)

*Robert S. Reid* 10/16/18  
\_\_\_\_\_  
Robert S. Reid  
Principal-in-charge

(Date)

# **Exhibit A**



Stantec Consulting Services Inc.  
38 Technology Drive, Irvine CA 92618-5312

10 September 2018

File: 224501142

**Attention: John Scherck, PE**

Inland Empire Utilities Agency  
6075 Kimball Avenue  
Chino, CA 91708

Dear John,

**Reference: EN17082 RP-1 Mechanical Restorations Project - Proposal for Contract Amendment #2 for Replacement of MCC 5M and MCC 14M**

As requested, Stantec is providing you with this proposal for additional required engineering services for the subject project for the replacement of the entire MCC 5M and MCC 14M as directed by the Agency. The basis for the scope of services proposed herein is the Tech Memo #1 prepared on July 18, 2018 and subsequent site visits, coordination meetings and direction received from the Agency that was provided with the revised 85% Design and TM Review Comments received on August 18, 2018. As was directed, the scope of this contract amendment request assumes that the existing MCC 5M and 14M will be replaced in their current locations.

The following is a brief description of the proposed additional scope of services.

## Scope of Services

### 1. Prepare Revised Technical Memorandum

We assume additional coordination, including potentially another site visit, will be required with the Agency staff to update and revise the methodologies proposed in our previous Tech Memo. The Tech Memo will address the following as it was received from the Agency's Maintenance Electrical Staff:

- All the RAS breakers do not need buckets; circuit breakers should go to a distribution panel. (600amp panel may be sufficient.)
- Remove DP 5A RAS 1.
- A number of conductors and control wires for the collectors may need to be connect from its current location.
- Old conduit are good condition and new conductors can be pulled to all equipment during the replacement.
- Remove Dynamitic Panels.
- Existing MCC line-ups on the south walls are 11'1.5" wide and 20" deep; may need to extend pad for new VFDs, if they can fit in the existing line-up.

Design with community in mind

10 September 2018

John Scherck, PE

Page 2 of 4

**Reference:** EN17082 RP-1 Mechanical Restorations Project - Proposal for Contract Amendment #2 for Replacement of MCC 5M and MCC 14M

- One of the goals is to save on Ocal and conductor, but the RFB should have unit price to install/furnish new run of conduit and conductor.
- Install door in the MCC room and install central AC for room.
- Conduits already feed to RAS No. 2, 5, and 8, and the WAS No. 4 and 5
- Pull all new wire to indoor equipment
- Start Sequence Control Panels remove and allow SCADA to start equipment back up
- Need a single breaker for MCC 5m LP
- Once item 1 above is complete, it possible that there will be room for a new MCC in the current location.

We will analyse the feasibility of each of the above items and provide recommendations for a comprehensive replacement methodology sufficient for providing the basis to finalize the design and prepare the final construction plans and specifications.

## 2. Prepare Additional Plans

We anticipate that approximately a total of 30 plan sheets will either be revised with the additional detail and revisions or new sheets will be provided to incorporate the changes proposed. The following provides a preliminary list of the potential plan sheets that will require additional effort to complete.

1. Revised Building K Plan
2. Revised Building E Plan
3. Concrete Pad Structural Details
4. HVAC Symbols Notes Abbreviation
5. HVAC Equipment Schedules and Controls
6. HVAC Standard Details
7. HVAC Floor Plan
8. HVAC Sections and Details
9. Site Plan - Demo
10. Site Plan - New
11. Building K Plan - Demo - Revise
12. Building E Plan - Demo- Revise
13. Building K Plan - New - Revise
14. Building E Plan - New - Revise
15. One Line Diagram Bldg K MCC - Demo - Revise
16. One Line Diagram Bldg E MCC - Demo - Revise
17. One Line Diagram Bldg K MCC- New - Revise
18. One Line Diagram Bldg E MCC - New - Revise
19. Exhaust Fan - Bldg K - Motor Control Schematic
20. Area Lighting - Bldg K - Lighting Control Schematic
21. Collector - Bldg K - Motor Control Schematic

Design with community in mind

10 September 2018

John Scherck, PE

Page 3 of 4

Reference: EN17082 RP-1 Mechanical Restorations Project - Proposal for Contract Amendment #2 for Replacement of MCC 5M and MCC 14M

22. Scum Pump - Bldg K - Motor Control Schematic
23. Clarifier Torque Switch - Relay Control Schematic
24. Scum Pump - Bldg E - Motor Control Schematic
25. Secondary Clarifier - Bldg E - Motor Control Schematic
26. Exhaust Fan - Bldg E - Motor Control Schematic
27. Area Lights - Bldg E - Lighting Control Schematic
28. Conduit & Conductor Schedule Bldg K - Revise
29. Conduit & Conductor Schedule Bldg E - Revise
30. Panel Schedules - CPT Panel

### **3. Prepare Revised Specifications, Construction Sequencing, and Estimates**

We will prepare updated specifications and estimates to reflect the MCC replacements. Additional construction sequencing related to the MCC replacements will also be prepared to reflect the temporary equipment and bypassing facilities required during construction.

### **4. Prepare 90% Design Submittal**

As a significant amount of information and number of plan sheets will be added to the set, we propose to submit an interim 90% Design submittal for the Agency's review prior to the 100% Design submittal. We will prepare this 90% design once the revised Tech Memo is finalized and recommendations are agreed upon before moving forward. This 90% submittal will include the additional plans, specs, draft sequencing, and estimates as shown in the above tasks.

### **5. Project Management, Coordination, and Meetings**

In addition to the necessary project management and coordination, we anticipate that up to three (3) additional project coordination meetings (either in person or via conference call) will be required.

### **6. Bid Administration and Assistance**

We will respond to bidders' RFIs related to the MCC replacements and additional scope as described herein. We will prepare up to two (2) addenda as may be required in response to the bidders' questions for clarifications of the contract documents.



10 September 2018

John Scherck, PE

Page 4 of 4

**Reference:** EN17082 RP-1 Mechanical Restorations Project - Proposal for Contract Amendment #2 for Replacement of MCC 5M and MCC 14M

## Budget

To perform the additional engineering design services required to replace the existing MCC 5M and 14M per the scope of services as described above, we respectfully request a budget amendment to our contract in the amount of \$ 113,400. Our proposed labor hours and fees by task is attached.

## Schedule

The proposed additional services will impact our proposed design schedule. Due to a significant amount of new information and design to be performed, we are proposing an additional 90% Design submittal before our 100% Design submittal. The 90% Design submittal is proposed to be submitted December 6, 2018. Our proposed schedule is attached.

Thank you for your consideration of this contract amendment request. Should you have any questions please feel free to contact me.

Regards,

**Stantec Consulting Services Inc.**



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**Jeff Dunn, PE**  
Senior Project Manager  
Phone: (949) 923-6974  
Fax: (949) 923-6121  
jeff.dunn@stantec.com



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**Robert Reid, PE**  
Senior Associate  
Phone: (949) 923-6037  
Fax: (949) 923-6121  
robert.reid@stantec.com

**Attachment:** Contract Amendment 2 – Proposed Labor Hours and Budget  
Contract Amendment 2 – Proposed Project Schedule

dj:\projects\2245011420\_framework\6\_change\_orders\amendment#2\_mcc\_replacement\st\_proposal\_en17082\_amendment2\_mcc\_replacements.docx

Inland Empire Utilities Agency



**EN17082 - RP-1 Mechanical Restorations - Contract Amendment 2 - MCC Replacements for 5M and 14M  
Proposed Labor Hours and Fees**

	LABOR HOURS							TOTAL STANTEC LABOR HOURS	TOTAL STANTEC LABOR FEES	Oris2	Other Direct Costs	TOTAL FEES
	QA/QC Technical Advisor	Jeff Dunn, PE Project Manager	Civil / Mechanical Project Engineer	HVAC/Mechanical Senior Engineer	Civil / Mechanical Designer / CAD	Senior Electrical Engineer	Electrical Designer					
1 Prepare Revised Tech Memo		6	8	8		32	16	70	\$ 13,118		\$234	\$ 13,352
2 Prepare Additional Plans	2	4	46	34	28	122	160	396	\$ 67,534	\$2,500		\$ 70,034
3 Revised Specifications, Sequencing, and Estimates	2	8	24	24		24		82	\$ 15,882		\$200	\$ 16,082
4 Prepare 90% Design Submittal	6	6	8		4			24	\$ 4,632		\$1,500	\$ 6,132
5 Project Management, Coordination, and Meetings		6	6			6		18	\$ 3,516		\$98	\$ 3,614
6 Bid Administration and Assistance		2	6			8	8	24	\$ 4,186			\$ 4,186
<b>Total Hours</b>	<b>10</b>	<b>32</b>	<b>98</b>	<b>66</b>	<b>32</b>	<b>192</b>	<b>184</b>	<b>614</b>				
<b>Total Fees</b>	<b>\$2,490</b>	<b>\$7,200</b>	<b>\$15,288</b>	<b>\$13,630</b>	<b>\$4,320</b>	<b>\$39,360</b>	<b>\$26,680</b>		<b>\$ 108,868</b>	<b>\$2,500</b>	<b>\$2,032</b>	<b>\$ 113,400</b>



**ACTION  
ITEM  
1G**



**Date:** November 21, 2018

HR

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

11/14/18

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** On Call Architectural Master Services Contract Amendment

---

**Executive Summary:**

IEUA entered into a two-year master service contract with Gillis+Panichapan Architects, Inc. (GPa), in November of 2016, for a not-to-exceed amount of \$85,000. This contract allowed for two, one-year extensions beyond the November 30, 2018 end date. A review of the contract by staff, has determined the contracted Task-Order work has exceeded GPa's contracted amount by approximately \$84,000, necessitating an adjustment. A revised process for verifying contractual limitations has been established to prevent future instances.

Staff is requesting a one-year contract extension through November 2019 for an additional not-to-exceed amount of \$84,000, which will increase the contract from \$85,000 to \$169,000. GPa has successfully provided architectural services on several IEUA projects.

A new request for proposal will be issued to solicit future on-call architectural services work prior to the requested term extension of November 2019.

---

**Staff's Recommendation:**

1. Approve a master service contract amendment for Gillis+Panichapan Architects, Inc., for a not-to-exceed amount of \$84,000 with a one-year term extension through November 2019; and
2. Authorize the General Manager to execute the contract, subject to non-substantive changes.

---

**Budget Impact** *Budgeted (Y/N): Y* *Amendment (Y/N): N* *Amount for Requested Approval:*

*Account/Project Name:*

None.

*Fiscal Impact (explain if not budgeted):*

No fiscal impact. Funding is provided through project capital budgets.

Full account coding (internal AP purposes only):     -     -     -     Project No.:

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**Prior Board Action:**

None.

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**Environmental Determination:**

Statutory Exemption

CEQA exempts a variety of projects from compliance with the statute. This amendment qualifies for a Statutory Exemption as defined in Section 15262 of the State CEQA Guidelines. When the project is implemented, it will be subject to environmental evaluation.

---

**Business Goal:**

The On-Call Architectural Consulting Services Contract award is consistent with the IEUA's Business Goal of Business Practices specifically the Efficiency and Effectiveness objective that IEUA will apply best industry practices in all processes to maintain or improve the quality and value of their services we provide to our member agencies and the public.

---

**Attachments:**

Attachment 1 - Contract Amendment

# **Attachment 1**





*Inland Empire Utilities Agency*

A MUNICIPAL WATER DISTRICT

**CONTRACT AMENDMENT NUMBER: 4600002245-001  
FOR PROVISION OF  
ON-CALL ARCHITECTURAL CONSULTING SERVICES**

AMENDMENT NUMBER ONE is made and entered into this \_\_\_ day of \_\_\_\_\_, 2018, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "IEUA" and "Agency") and Gillis + Panichapan Architects, Inc., with offices located in Costa Mesa, California (hereinafter referred to as "Consultant"), to provide On Call and Task Order work related to Architectural Services.

**REVISE SECTION 3, TERM, ADDING A PARAGRAPH, TO READ:** With the execution of Contract Amendment Number 4600002245-001, the termination date of this Contract shall be extended to November 30, 2019; unless agreed to by both parties, reduced to writing, and amended in this Contract.

**SECTION SIX, COMPENSATION AND CHANGES, IS HEREBY AMENDED TO ADD THE FOLLOWING:** In compensation for the work represented by this Contract Amendment, Agency shall pay Consultant a **NOT-TO-EXCEED MAXIMUM of \$169,000.00** for all services provided. This represents an increase of **\$84,000.00** in accordance with **Exhibit A** which is attached hereto, referenced herein, and made a part hereof.

**ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED**

The parties hereto have mutually covenanted and agreed as per the above amendment item, and in doing so have caused this document to become incorporated into the Contract Documents.

**INLAND EMPIRE UTILITIES AGENCY:**  
*\*A MUNICIPAL WATER DISTRICT*

**GILLIS + PANICHAPAN ARCHITECTS ,INC.:**

\_\_\_\_\_  
Halla H. Razak  
General Manager

(Date)

  
\_\_\_\_\_  
Mr. Jack Panichapan  
Principal / CEO

10/26/18  
(Date)

# **Exhibit A**



architecture • Interior • planning

Gillis + Panichapan Architects, Incorporated

3780 Bristol Street, Suite G-205, Costa Mesa, CA 92626 | P. 714.668.4260 | F. 714.668.4265 | www.gparchitects.org

October 25, 2016

Rachel Solis  
Inland Empire Utilities Agency  
6075 Kimball Ave  
Chino, California 91708

Re: On-Call Space Planning, Architectural, and Engineering Consulting Services

Rachel,

We are pleased to submit our schedule of hourly billing rates for On-Call architectural consulting services for Inland Empire Utilities Agency.

Gillis + Panichapan Architects Inc. (GPa) is a full-service Architectural, Planning, and Interior Design firm with over twenty five years of experience serving Water Districts, Municipal, and Public Agencies throughout California. We have had extensive experience and expertise in space planning and A/E services for a large breadth of public sector building types from administration, utility, and healthcare facilities. Our successful experiences leave us with a great depth of specific knowledge that we can bring forward to each of your projects.

We will work closely and interactively with the District to assess the existing conditions of the assign project in order to ensure that the design aligns the District's budget, needs and goals.

We look forward to the opportunity to have the opportunity to further demonstrate our enthusiasm, our experience, and our expertise in more detail with the next project with the District.

Respectfully,

A handwritten signature in black ink, appearing to read 'JP', is written over a white background.

Jack Panichapan, AIA, LEED AP  
President, CEO  
Gillis + Panichapan Architects, Inc.  
[jack@gparchitects.org](mailto:jack@gparchitects.org)



We propose to furnish the services based on the hourly billing rates listed below for the services associated with this project. Often we propose an "hourly not to exceed" contract at the beginning of our process. Below is a schedule of hourly billing rates.

We tailor our scope and subsequent fee proposals to accommodate the scope of work realizing that there is latitude in both parameters to be discussed during the contract negotiation. These rates we propose will be valid for the contract duration.

**SCHEDULE OF HOURLY BILLING RATES**

Principal.....	175
Project Director.....	145
Project Architect.....	120
Job Captain.....	90
CAD Tech.....	75
Clerical.....	60

**CONSULTANTS**

When additional consultants are needed, we will be the primary point of contact and the team leader. Our contract will include and convey all consultant fees and contracts as a subcategory of our fee and services. Consultant fees will be charged with an additional 15% management and coordination fee.

**REIMBURSABLES**

In our contract we often have a reimbursable allowance. This reimbursable allowance covers fees beyond general B&W printing fees on standard ledger or tabloid size paper. Government fees, delivery costs (such as United Parcel Service charges), and the costs of special sized prints/reproductions are not included in our fee. These items are "reimbursable" items and will be shown separately on our invoice with a 10% coordination fee.

**MILEAGE**

GPa bases our standard mileage rates for the use of a vehicle such as a car, van SUV or pickup will be: 56 cents per mile for business miles based on State of California Employers Association 2015 Mileage Reimbursement Rates Effective January 1, 2016.

**ACTION  
ITEM  
1H**



**Date:** November 21, 2018

HR

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

11/14/18

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** A.R.I. Combination Air and Vacuum Relief Valve Sole Source

---

**Executive Summary:**

IEUA's recycled water system is a network of over 90 miles of pipelines across our service area. The network includes over 300 air and vacuum relief valves, which develop leaks over time. IEUA's recycled operations and maintenance staff researched alternative valves and in 2010 installed the first A.R.I. Combination Air Valves. These have performed well and require minimal maintenance. The success of these valves can be attributed to their unique design and a proprietary rolling seal. In addition to the seal design, this seal is resistant to the high chlorine residual found in recycled water further minimizing maintenance. Over the past eight years, IEUA has replaced the vast majority of the standard air and vacuum relief valves with the A.R.I. combination valves.

As such, staff is requesting a finding per Public Contract Code 3400(c; 2 & 3), which allows public agencies to specify a specific product for use if the awarding authority makes a finding that one or more conditions exist, specifically matching existing components and availability from only one source.

---

**Staff's Recommendation:**

1. Adopt a finding pursuant to Public Contract Code 3400(b) that the use of A.R.I. combination air valves: 1) match existing valves on the recycled water lines use; 2) the valves are only available from A.R.I. and
2. Authorize their procurement as a sole source for future O&M and capital projects for a duration of five years.

---

**Budget Impact** Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval:

Account/Project Name:

None.

**Fiscal Impact** (explain if not budgeted):

None.



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**Prior Board Action:**

None.

---

**Environmental Determination:**

Not Applicable

---

**Business Goal:**

The use of the A.R.I. valves is consistent with IEUA's business goal of Business Practices, specifically the efficiency and effectiveness objective that IEUA will apply best industry practices in all processes to maintain or improve the quality and value of the services we provide to our member agencies and the public.

---

**Attachments:**

Attachment 1 - Background  
Attachment 2 - PowerPoint

# **Attachment 1**

## Background

---

Subject: A.R.I. Combination Air and Vacuum Relief Valve Sole Source

---

IEUA's recycled water system is a network of over 90 miles of pipes across our service area. A critical component of this and all pressurized pipe systems is the ability to admit and release air. This is accomplished in IEUA's system with over 300 air and vacuum relief valves placed at critical points along the alignments. Historically, these types of valves have been known to commonly develop leaks due to poor seal designs and corrosion related issues, resulting in a significant amount of maintenance to sustain their proper operation. IEUA's recycled water operations and maintenance staff researched alternatives and in 2009, discovered the A.R.I. Combination Air Valves. In July of 2010, staff obtained board approval for a sole source purchase of 138 A.R.I. valves which were immediately installed by IEUA staff. These valves have performed well and have required minimal maintenance since their installation over eight years ago. The success of these valves can be attributed to their unique design as noted below:

1. The valve can discharge large volumes of air during filling, admit large volumes of air during drainage and releases small amounts of entrapped air in pressurized systems which combines typically three separate valves into one.
2. A proprietary ethylene propylene diene monomer (EPDM) rolling seal design and a combination EPDM and polycarbonate float are resistant to the high chlorine residual found in recycled water minimizing maintenance.
3. The internal components of the ARI valves are made of corrosion-proof materials like polypropylene, rubber, and reinforced nylon. The only metal in an ARI valve is 316 stainless steel.
4. The proprietary rolling seal assembly is designed to allow high volume of air to pass by which prevents premature closing of the valve.
5. The reinforced nylon body is also extremely corrosion resistant compared to cast iron, epoxy coated valve bodies.
6. ARI valves require minimal maintenance. Maintenance or operations personnel can assemble or disassemble a valve in minutes, and they do not contain hinges or pins that make traditional air valves so difficult to maintain.
7. The ARI valves weigh significantly less than a standard air and vacuum relief valves as they are constructed with a nylon body.

Given the success of the A.R.I. valves, over the past eight years IEUA has replaced the vast majority of the standard air and vacuum relief valves with the A.R.I. combination valves.

Pursuant to the Public Contract Code 3400(b) below, Public Agencies are allowed to make a finding to sole source a product if any one of the findings below are valid. This board action is a

request for the Board to make such a finding on two accounts and authorize the sole source of the A.R.I. combination air valve for future O&M and capital projects for a duration of five years.

*PUBLIC CONTRACT CODE - PCC*

*DIVISION 2. GENERAL PROVISIONS [1100 - 22355]*

*( Division 2 enacted by Stats. 1981, Ch. 306. )*

*PART 1. ADMINISTRATIVE PROVISIONS [1100 - 9203]*

*( Heading of Part 1 added by Stats. 1982, Ch. 1120, Sec. 2. )*

*CHAPTER 3. Formation [3000 - 3505]*

*( Chapter 3 added by Stats. 1983, Ch. 256, Sec. 81. )*

**ARTICLE 4. Preference for Materials [3400 - 3410]**

*( Heading of Article 4 renumbered from Article 5 by Stats. 2017, Ch. 816, Sec. 2. )*

3400.

(a) The Legislature finds and declares that it is the intent of this section to encourage contractors and manufacturers to develop and implement new and ingenious materials, products, and services that function as well, in all essential respects, as materials, products, and services that are required by a contract, but at a lower cost to taxpayers.

(b) No agency of the state, nor any political subdivision, municipal corporation, or district, nor any public officer or person charged with the letting of contracts for the construction, alteration, or repair of public works, shall draft or cause to be drafted specifications for bids, in connection with the construction, alteration, or repair of public works, (1) in a manner that limits the bidding, directly or indirectly, to any one specific concern, or (2) calling for a designated material, product, thing, or service by specific brand or trade name unless the specification is followed by the words "or equal" so that bidders may furnish any equal material, product, thing, or service. In applying this section, the specifying agency shall, if aware of an equal product manufactured in this state, name that product in the specification. Specifications shall provide a period of time prior to or after, or prior to and after, the award of the contract for submission of data substantiating a request for a substitution of "an equal" item. If no time period is specified, data may be submitted any time within 35 days after the award of the contract.

(c) Subdivision (b) is not applicable if the awarding authority, or its designee, makes a finding that is described in the invitation for bids or request for proposals that a particular material, product, thing, or service is designated by specific brand or trade name for any of the following purposes:

(1) In order that a field test or experiment may be made to determine the product's suitability for future use.

***(2) In order to match other products in use on a particular public improvement either completed or in the course of completion.***

***(3) In order to obtain a necessary item that is only available from one source.***

(4) (A) In order to respond to an emergency declared by a local agency, but only if the declaration is approved by a four-fifths vote of the governing board of the local agency issuing the invitation for bid or request for proposals.

(B) In order to respond to an emergency declared by the state, a state agency, or political subdivision of the state, but only if the facts setting forth the reasons for the finding of the emergency are contained in the public records of the authority issuing the invitation for bid or request for proposals.

# **Attachment 2**

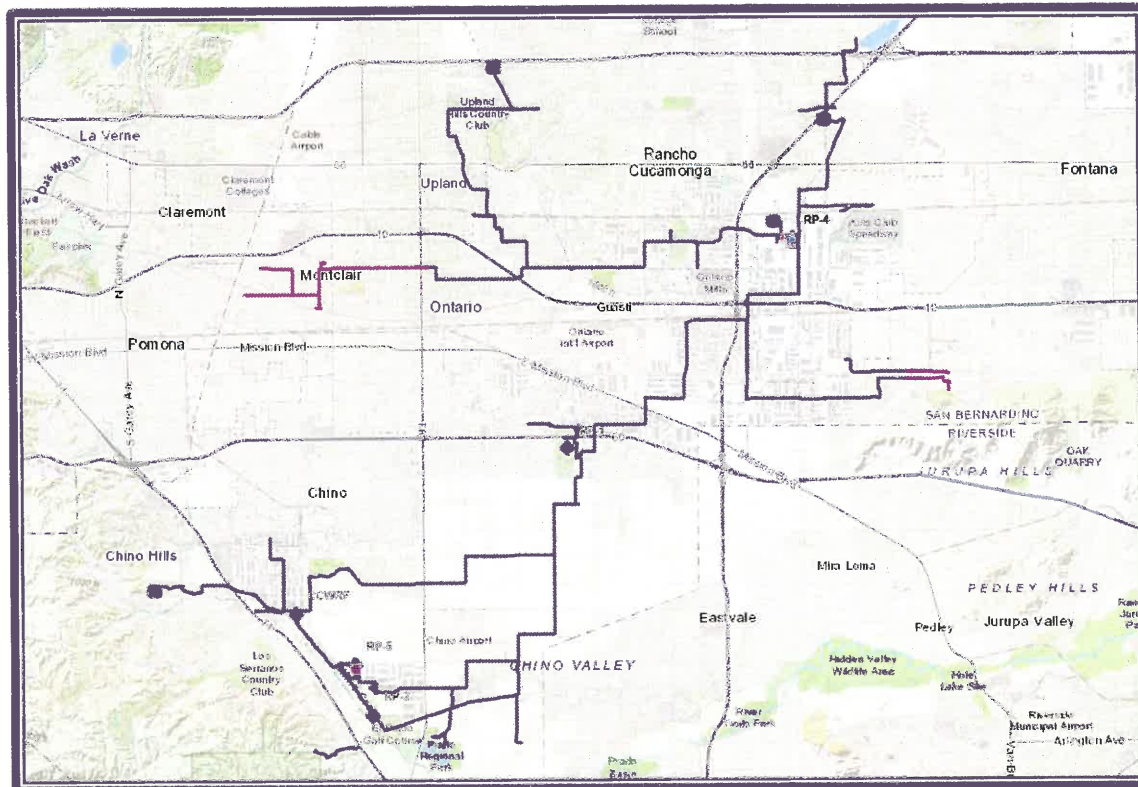


# A.R.I. Combination Air and Vacuum Relief Valve Sole Source



James Spears  
November 2018

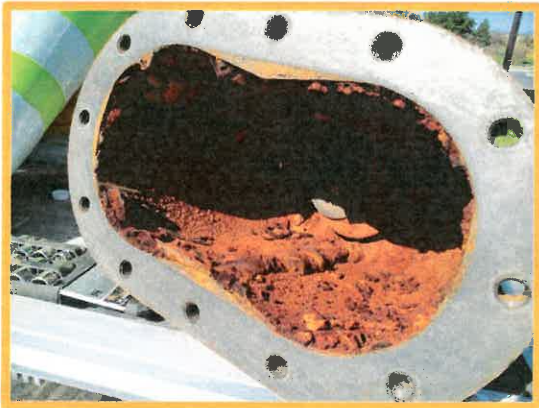
# Air Valve Location



IEUA Recycled Water Network

# Purpose & History

- Over 90 miles of recycled water lines in place
- Air relief valves needed to release air during draining or filling
- Historically valves required significant maintenance
- Board approved sole source purchase of A.R.I. valves in 2010



Corrosion inside standard Air Relief Valve



Existing Combination Air Relief Valve

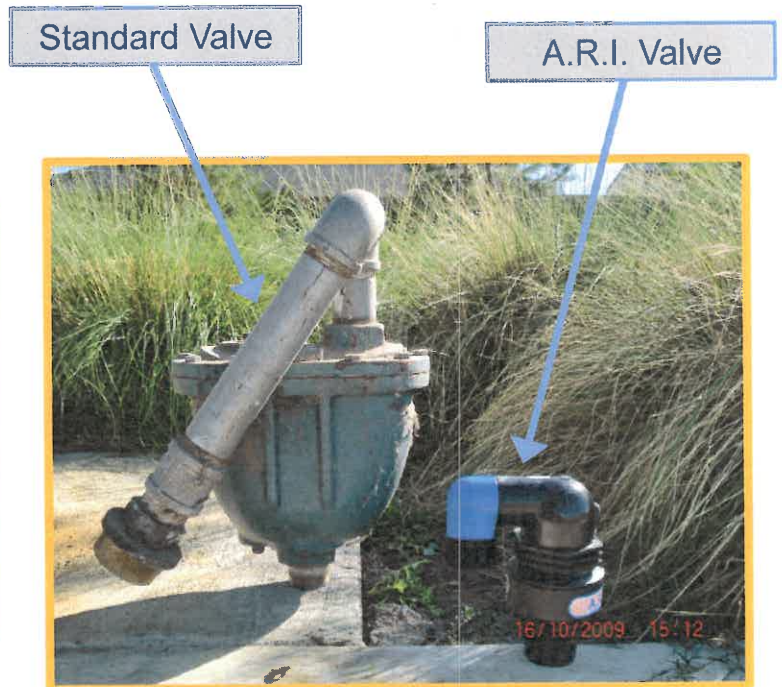


# A.R.I. Combination Air/Vacuum Valves

- Superior design
- Over 8-years of success at IEUA
- Majority of valves at IEUA are currently A.R.I.



Inside existing A.R.I. Valve



Standard versus A.R.I. Air/Vacuum Valves

# Recommendation

## Staff Recommendation:

Adopt a finding pursuant to Public Contract Code 3400(b) that the use of A.R.I. Combination air valves: 1) match existing valves on the recycled water lines uses; 2) the valves are only available from A.R.I. and

Authorize their procurement as sole source for future O&M and capital projects for a duration of five years.



The use of the A.R.I. valves is consistent with IEUA's business goal of Business Practices, specifically the efficiency and effectiveness objective that IEUA will apply best industry practices in all processes to maintain or improve the quality and value of the services we provide to our member agencies and the public.

**INFORMATION**  
**ITEM**  
**2A**



**Date:** November 21, 2018

HHR

**To:** The Honorable Board of Directors

**From:** Halla Razak, General Manager

**Committee:** Engineering, Operations & Water Resources

11/14/18

**Executive Contact:** Chris Berch, Executive Manager of Engineering/AGM

**Subject:** Regional Water Use Efficiency Programs Annual Report - FY 2017/18

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**Executive Summary:**

Annually, the Inland Empire Utilities Agency (IEUA) prepares a comprehensive regional water use efficiency (WUE) programs report that captures all activities that occurred over the previous fiscal year. The report tracks the progress that has been made toward goals and objectives outlined in IEUA's Regional WUE Business Plan. Member agencies receive a regional WUE summary perspective as well as service area specific data and activity that provides the foundation for regulatory compliance with State WUE statutes. Moreover, the report serves as a benchmark for assessing and evaluating overall program performances for planning existing and future programs.

The Agency currently offers a suite of regional WUE programs that are designed to positively impact individual long-term behavior regarding efficient use of water. Over the last fiscal year, there were approximately 49,793 water saving technologies/services deployed throughout the service area year representing an estimated annual water savings of 383 acre-feet and a lifetime savings of 3,135 acre-feet.

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**Staff's Recommendation:**

This is an informational item for the Board of Directors to receive and file.

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**Budget Impact** *Budgeted (Y/N):* N *Amendment (Y/N):* N *Amount for Requested Approval:*

*Account/Project Name:*

**Fiscal Impact** *(explain if not budgeted):*

N/A

Full account coding (internal AP purposes only):

- - -  
- - -

Project No.:



**Prior Board Action:**

None.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The project is consistent with IEUA's Business Goal of increasing Water Reliability by promoting water use efficiency and education to enhance water supplies within the region; and meeting the region's need to develop reliable and diverse local water resources in order to reduce dependence on imported water supplies.

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**Attachments:**

Attachment 1 - IEUA Regional Water Use Efficiency Programs Annual Report - FY 2017/18  
<https://ieua.hostedftp.com/Cz87f4Co53a3WUL0oaUW4oI34>

# Regional Water Use Efficiency Programs Annual Report FY 2017/18



# FY 2017 – 2018 Regional WUE Priorities

- Surpassing SBX 7-7 (2009) – 20% reduction in water use by 2020
- The Model Water Efficient Landscape Ordinance (AB 1881 – MWELO)
- Making Water Conservation a California Way of Life (AB 1668/SB 606)
  - ✓ Compliance = Actual water use must be  $\leq$  Efficient Water Use Objective
  - ✓ Use water wisely
  - ✓ Eliminate Water Waste
  - ✓ Strengthen local drought resilience
  - ✓ Drought planning
- Regional WUE Business Plan (2015 – 2020)
- Compliance with WUE legislation and regulations



# FY 2017-2018 WUE Programs - Education

- IEUA Residential Landscape Training Workshops
  - 11 residential courses conducted throughout IEUA's service area
- National Theater for Children
  - 83 Theater Performances – 21,278 K-6 students, teachers and parents reached
- Shows that Teach
  - 13 Theater Performances – 10,616 K-6 students, teachers and parents reached
- Garden-In-Every School Program
  - 12 Mini-grants awarded (\$1,000 each) to existing IEUA sponsored gardens - (Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga, and Upland)





# FY 2017-2018

## WUE Programs - Programmatic

IEUA Locally Implemented WUE Programs	Activity	Savings (AFY)
Residential Landscape Retrofit Program	108 sites (159 controllers; 2,421 Nozzles)	17
Residential Controller Upgrade Program	145 Workshop Attendees 145 controllers Installed	7
Freesprinklernozzles.com Voucher Program	157 vouchers (16,576 nozzles – Res/CII)	71
Residential Pressure Regulation Program	397 site visits, 297 PRVs replaced	47
Regional Landscape Evaluation and Audit Program	68 residential / 38 CII	30
SoCalWater\$mart.com: Residential and CII Rebates	32,462 rebates	211
	<b>Total</b>	<b>383</b>

**LIFETIME SAVINGS: 3,135 AF**



# FY 2017-2018 Member Agency Support Programs

- Landscape Design Services
- Member Agency Administered Programs
- WUE Support Tools
- Organizational Dues (\$26,600)
- BMP Support Grants (\$2,000)



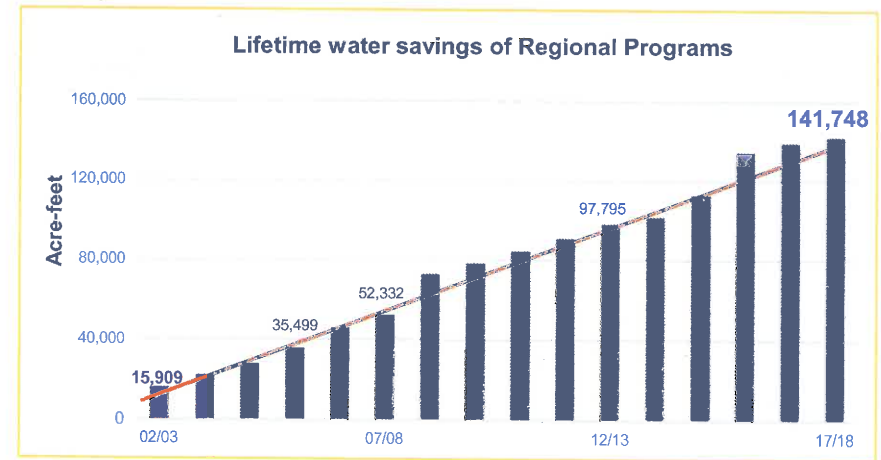
- SAWPA Grant Funded Projects
  - ESRI GIS Web Application
  - Water Meter and NAICS CII Geocoding
  - Conservation Based Rate Structure Implementation Support
  - SmartScape – Prop 84 – Round 3





# FY 2017-2018 Annual WUE Programs Summary

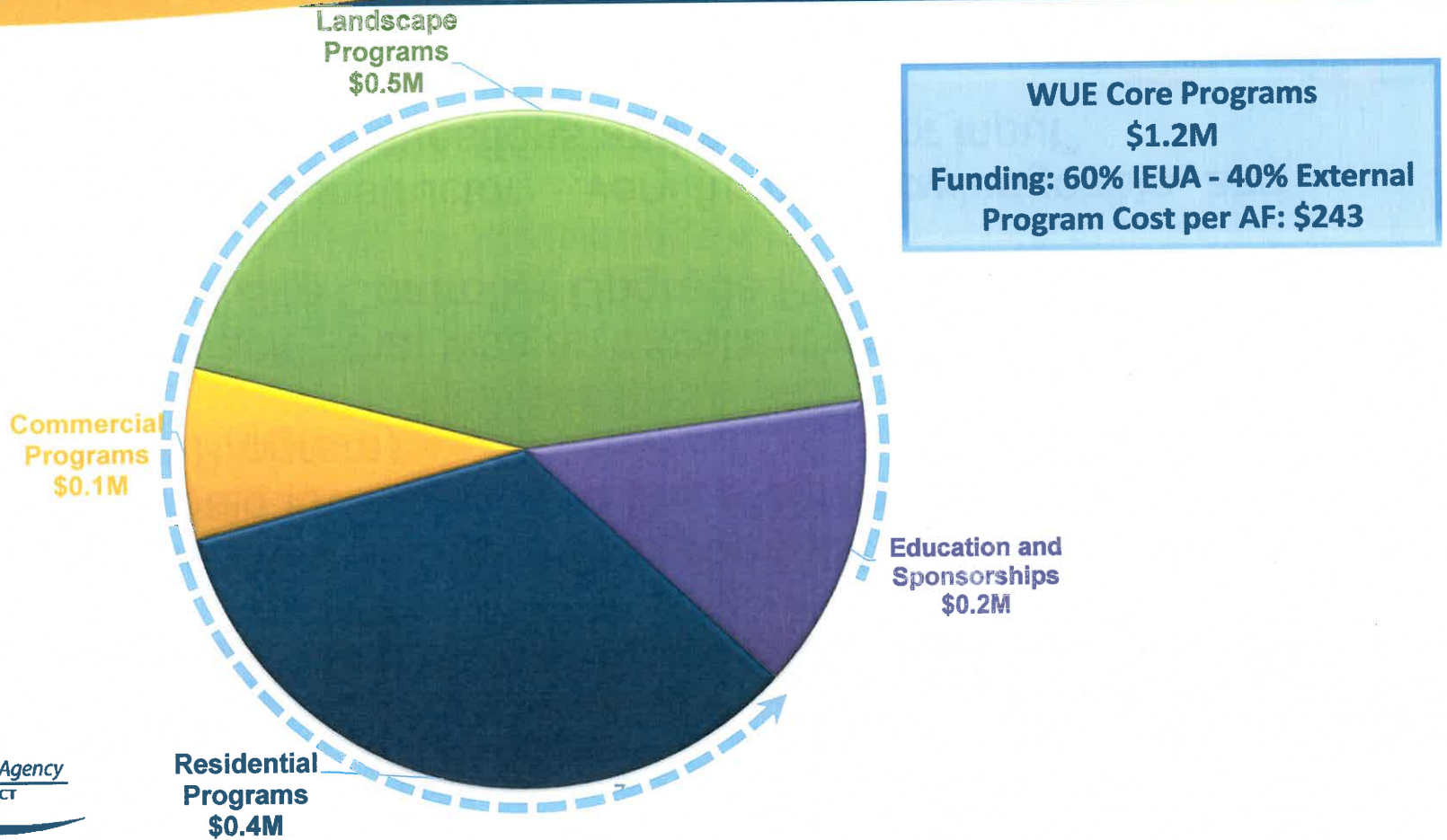
- 49,793 technologies & services
- 383 AF of annual water savings
- Lifetime water savings: 3,135 AF
- FY 2017-2018 Core Programs
  - Education
  - Programmatic
  - Member Agency Support



~141,748 AF of water has been conserved since 1992 through IEUA's water use efficiency programs



# FY 2017-2018 Water Use Efficiency Programs



# What are Customers Saying?

- “Thank you for the great service. I work for another water district and love this program. I would love to expand this program to our District. Have a great day!” (PRV Program)
- “Just a bit of feedback—that was an excellent workshop. Naturally, I’m in! Thank you”. (Small Site Controller Upgrade Program)
- “Excellent class, loved Instructor....very funny, knowledgeable, and informative, answered all questions and allowed for input”. (landscape classes)



**INFORMATION**  
**ITEM**  
**2C**

# Engineering and Construction Management Project Updates





# EN13048 – RP-1 Power System Upgrades

Project Goal: Increase Reliability

**Total Project Budget: \$1.6 M**

**Project Completion: October 2018**

**Overall Percent Complete: 90%**

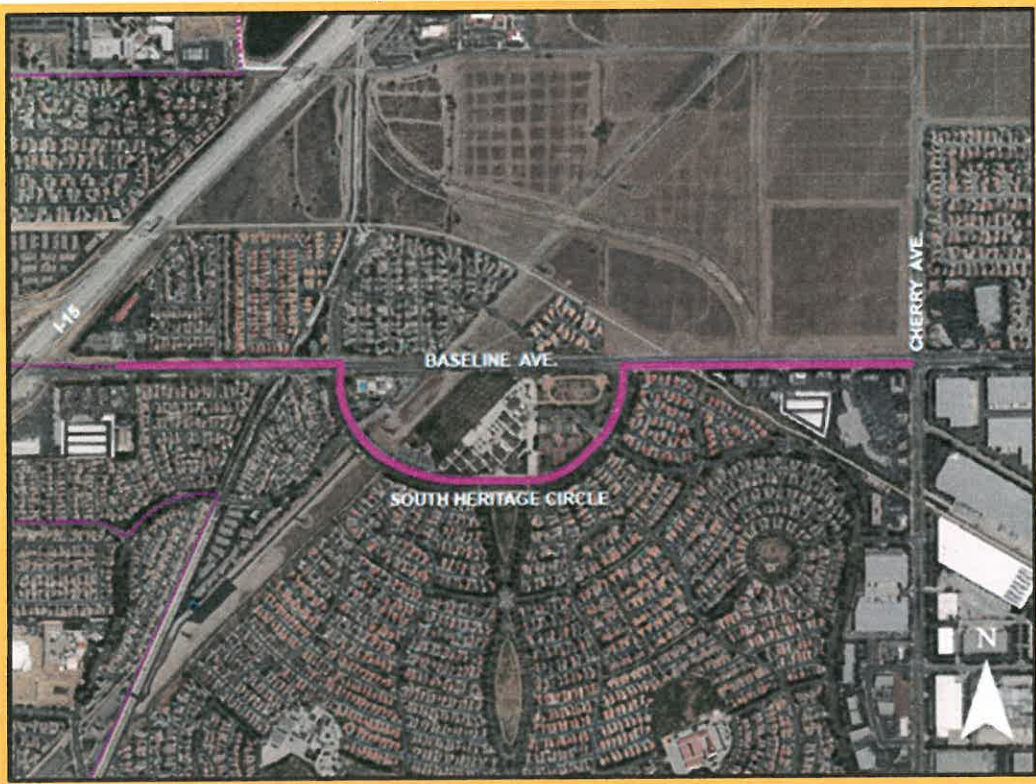
Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design	Tetra Tech	\$269 K	0.0%
Construction (Current)	Henkels & McCoy	\$359 K	0.0%





# EN17049 – Baseline Recycled Water Pipeline Extension

Project Goal: Increase Recycled Water Usage



**Total Project Budget: \$6 M**  
**Project Completion: January 2020**  
**Overall Percent Complete: 50%**

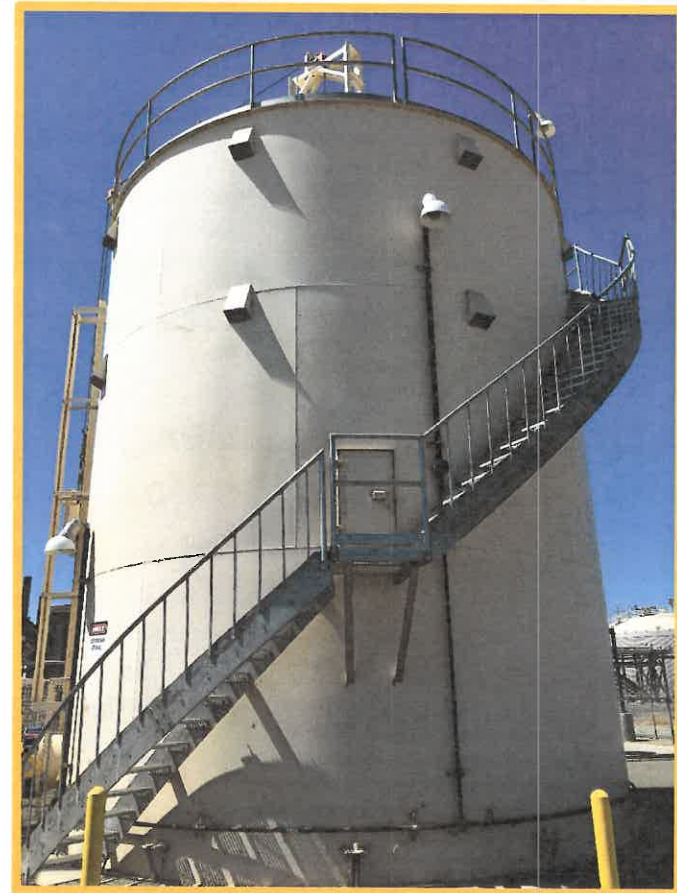
Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
<b>Design (Current)</b>	<b>Carollo Engineers</b>	<b>\$395 K</b>	<b>0.0%</b>
Construction	-	\$0	0.0%

# EN18006 – RP-1 Flare Improvements

Project Goal: Compliance, Safety, Performance, and Reliability

**Total Project Budget: \$5.5 M**  
**Project Completion: March 2020**  
**Overall Percent Complete: 40%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	Lee & Ro	\$417 K	10.35%
Construction	-	\$0	0.0%





# EN15012 – RP-1 Primary Effluent Conveyance Improvements

Project Goal: Improve Process Efficiency



**Total Project Budget: \$6.7 M**  
**Project Completion: April 2019**  
**Overall Percent Complete: 75%**

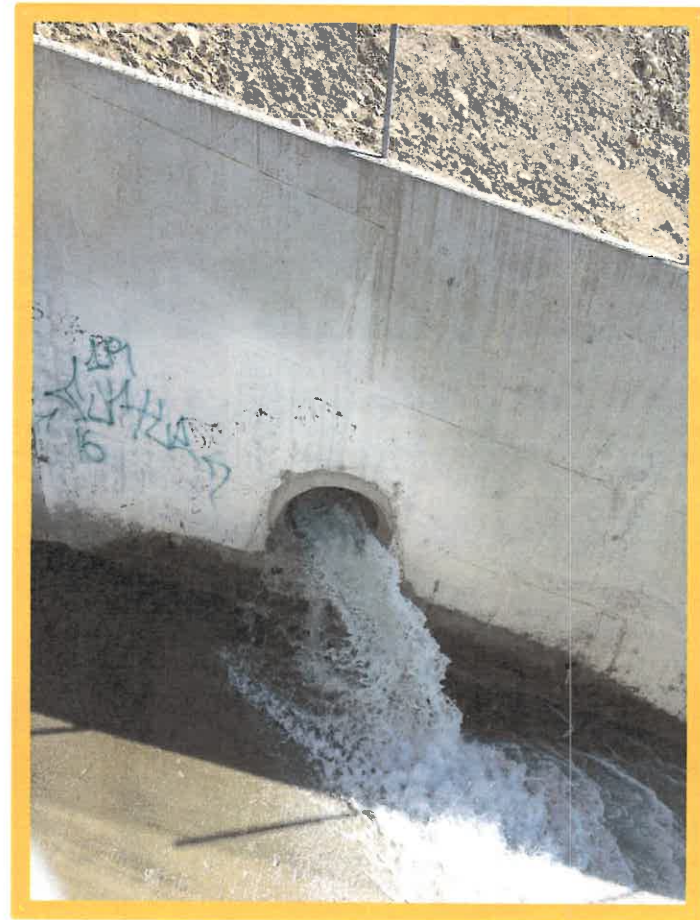
Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design	Stantec Consulting	\$461 K	9.04%
Construction (Current)	Kiewit	\$4.5 M	0.0%

# EN17039 – 8th St. Basin Recycle Water Turnout Discharge Retrofit

Project Goal: Minimize Basin Maintenance

**Total Project Budget: \$563 K**  
**Project Completion: November 2018**  
**Overall Percent Complete: 100%**

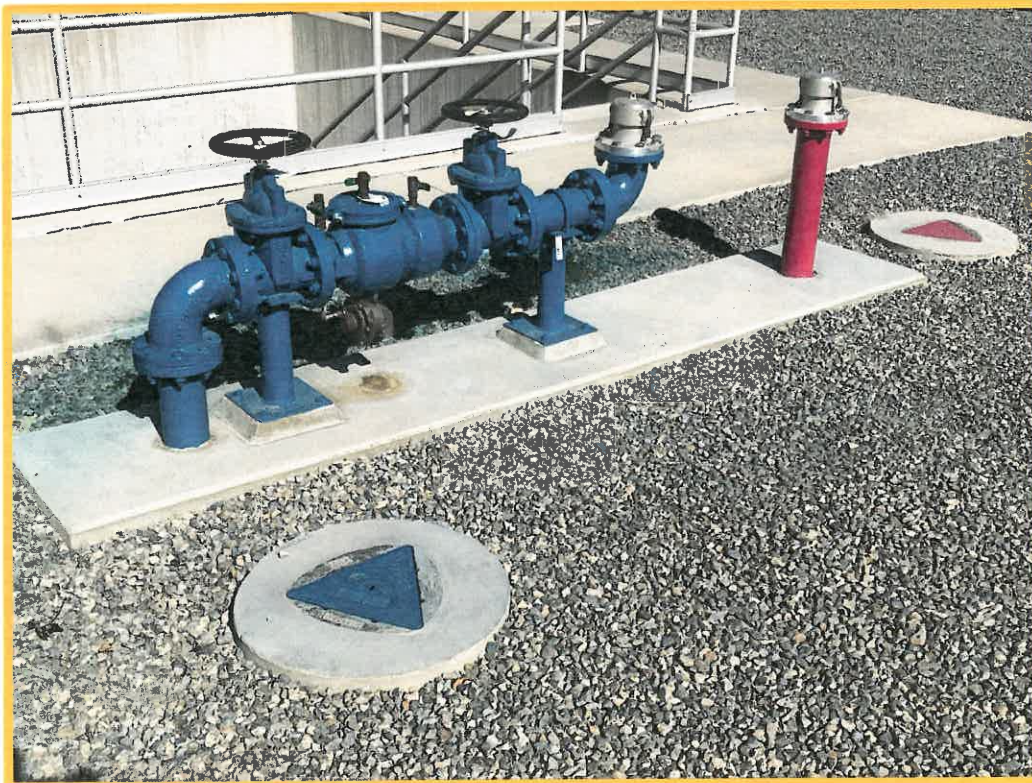
Phase	Consultant /Contractor	Current Contract	Amendments/ Change Orders
Design	Lee & Ro	\$23 K	0.0%
Construction (Current)	Schuler Constructors	\$250 K	- 5.0%





# EN18028 – RP-5 Facilities Improvements

Project Goal: Increase Reliability and Extend Asset Life



**Total Project Budget: \$350 K**  
**Project Completion: August 2018**  
**Overall Percent Complete: 100%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design	In-House	\$0	0.0%
Construction (Current)	GSE	\$138 K	- 4.1%