



**ENGINEERING, OPERATIONS, AND
BIOSOLIDS MANAGEMENT
COMMITTEE MEETING
OF THE BOARD OF DIRECTORS
INLAND EMPIRE UTILITIES AGENCY*
AGENCY HEADQUARTERS, CHINO, CALIFORNIA**

**WEDNESDAY, MARCH 11, 2015
10:00 A.M.**

*Or immediately following the
Public, Legislative Affairs, and Water Resources
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 Biosolids Management Committee meeting minutes from the January 14, 2015 meeting.

B. PROCUREMENT ORDINANCE REVISIONS

It is recommended that the Committee/Board hold a Public Hearing to received comments and, upon conclusion of the Public Hearing, adopt Ordinance No. 101; establishing and setting forth the policies governing Agency authority and dollar limits for procurements and procurement-related activities

C. FISCAL YEAR 2015/16 THROUGH 2024/25 TEN-YEAR CAPITAL IMPROVEMENT PLAN

It is recommended that the Committee/Board approve the proposed Fiscal Year (FY) 2015/16 through 2024/25 Ten-Year Capital Improvement Plan (TYCIP).

D. DESIGN/BUILD CONTRACT AWARD OF THE COMMUNICATION SYSTEM UPGRADES

It is recommended that the Committee/Board:

1. Award the construction contract to Sun Wireless for the construction of the Communication System Upgrades, Project No. EN12019, for a not-to-exceed total amount of \$826,294; and
2. Authorize the General Manager to execute the construction contract.

E. CONSTRUCTION CONTRACT AWARD FOR THE RP-1 DIGESTER GAS SYSTEM EVALUATION AND IMPROVEMENTS

It is recommended that the Committee/Board:

1. Approve the construction contract award to J.R. Filanc Construction Company for the RP-1 Digester Gas System Evaluation and Improvements, Project No. EN15056, in the amount of \$407,835; and
2. Authorize the General Manager to execute the construction contract.

F. ENGINEERING SERVICES CONTRACT AWARD FOR THE CCWRF INSPECTION OF THE 72-INCH MIXED LIQUOR PIPELINE

It is recommended that the Committee/Board:

1. Approve the award of an engineering services contract for the CCWRF "Mixed" Liquor Pipeline Inspection, Project No. EN15048, to V&A Consulting Engineer, Inc., for a not-to-exceed amount of \$158,839; and
2. Authorize the General Manager to execute the consultant contract.

G. ENGINEERING SERVICES CONTRACT AMENDMENT FOR THE RP-4 DISINFECTION FACILITY IMPROVEMENTS

It is recommended that the Committee/Board:

1. Approve the amendment to the engineering services contract with IDS Group for the additional consulting services for the RP-4 Disinfection Facility Improvements, Project No. EN14018, for a not-to-exceed amount of \$105,110; and

2. Authorize the General Manager to execute the consultant contract amendment.

2. **INFORMATION ITEMS**

A. **INLAND BIOENERGY UPDATE (POWERPOINT)**

B. **RECYCLED WATER UPDATE (POWERPOINT)**

RECEIVE AND FILE INFORMATION ITEM

C. **ENGINEERING AND CONSTRUCTION MANAGEMENT FY 2013/14 MONTHLY UPDATE (POWERPOINT)**

3. **GENERAL MANAGER'S COMMENTS**

4. **COMMITTEE MEMBER COMMENTS**

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

6. **ADJOURN**

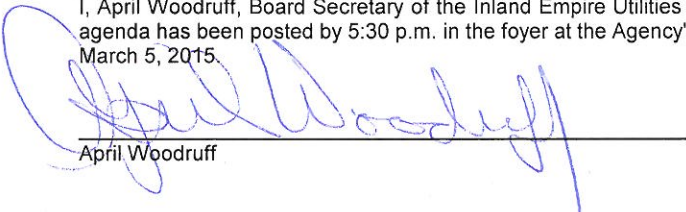
*A Municipal Water District

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: BA

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, March 5, 2015.




April Woodruff


**ACTION
ITEM
1F**


Date: March 18, 2015

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee
(03/11/15)

From:  P. Joseph Grindstaff
General Manager

Submitted by:  Chris Berch
Executive Manager of Engineering/Assistant General Manager

 Majid Karim
Acting Manager of Engineering

Subject: Engineering Services Contract Award for the CCWRF Inspection of the
72-inch Mixed Liquor Pipeline

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the award of an engineering services contract for the CCWRF "Mixed" Liquor Pipeline Inspection, Project No. EN15048, to V&A Consulting Engineer, Inc., for a not-to-exceed amount of \$158,839; and
2. Authorize the General Manager to execute the consultant contract.

BACKGROUND

In 1992, Carbon Canyon Water Recycling Facility (CCWRF) was commissioned as a liquid stream wastewater treatment plant. The treatment facility is a tertiary treatment plant which works in tandem with RP-2's Digestion Facilities. The Aeration Basin utilizes Mixed Liquor Pumps and piping to help with the conversion of Ammonia and Nitrates to Nitrites, as part of the process to treat the wastewater and make it usable for recycled water and/or discharge to the environment. A critical 60 to 72 inch Mixed Liquor Pipe conveys all flow from the Aeration Basin to the Secondary Clarifiers. Inspection of this line requires shutting down the plant.

Settlement has been noted at CCWRF. Minor demolition of a concrete cap over one of the Mixed Liquor Pipelines access manhole structures found, what appears to be minor, weeping from the influent/effluent structure. Settlement creates the possibility of leaks and is a concern for the 72-inch Mixed Liquor Pipeline and its related access manholes. It is possible that settlement could cause joints to pull free from their associated structures. As a result, a request for proposal was prepared to assess and make indicated repairs, to the noted structure(s).

The Consulting Engineer will team with a contractor to perform the noted work. Since the Aeration Basin can only be shut-down for approximately 24-hours before damage to activated sludge occurs, it is critical that work for each of two scheduled shutdowns be completed within a 24-hour period. Because of the unique requirements of this work, the Engineer will be responsible for the assessment and for the construction management of the contractor he will be teaming on the assessment. Agency Construction Management staff will manage the consultant. Work will include:

1. Coordinate up to two-24-hour plant shutdowns;
2. Dewatering and cleaning the noted line and structures to facilitate inspection;
3. Performing a complete assessment of the pipeline including CVTV, Ultrasonic thickness and ovality measurements, to determine pipe condition and remaining facility life;
4. Making minor repairs to the facility including joint repair at the manhole(s);
5. Assessing and mitigating soil, which might be impacted by the noted seepage;
6. Constructing manhole extensions on the two manholes; and,
7. Preparing a report on the findings with recommendations on any needed repairs and how they should be made.

On December 3, 2014, the RFP was sent out via "The Network". A Technical Evaluation Committee composed of staff from Engineering, Construction Management, Operations, and Technical Services reviewed the single proposal, that was received. The Contracts and Procurement Department did the formal solicitation and receipt of said proposal as well as the proposed contract. The Technical Evaluation Committee also conducted a formal interview with the Engineer and Contractor and negotiated a revised scope of work, based on their recommendations and past experience with this type of work. The Technical Evaluation Committee was impressed with their understanding of the work, their recommendations on saving money, and their past experience with similar pipe evaluations. As such, the Technical Evaluation Committee is recommending approval of V&A Consulting Engineer and their construction contractor, Jamison Engineering Contractor, Inc.

Below is the projected project budget:

PROJECT PHASE	PROJECT COST
Design (V&A Consultant Assessment)	\$79,321
Construction Contract (Jamison Engineering)	\$79,518
Construction Management (IEUA Labor and Consultant)	\$21,161
Contingency	\$20,000
Total	\$200,000
Project Budget	\$200,000

The following is the proposed project schedule:

PROJECT PHASE	DATE
Shut-down #1	April 2015
Shut-Down # 2	May 2015
Project Completion	June 2015

The CCWRF Inspection and Repair of the Mixed Liquor Pipeline is part of the Agency's Wastewater Management Business Goal to ensure that when expansion planning is triggered, design and construction can be completed to meet regulatory and growth needs in an expeditious, environmentally responsible, and cost effective manner. It is also consistent with the Agency's Asset Management Plan to carefully evaluate and manage assets through their life and to allow them to meet the Agency's business goals at the lowest lifecycle cost.

PRIOR BOARD ACTION

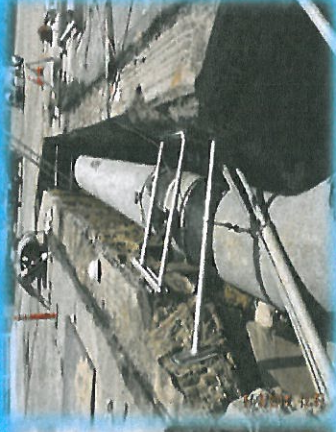
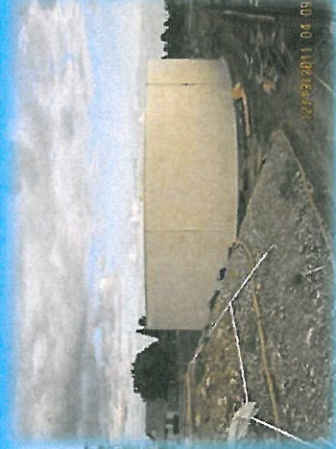
None.

IMPACT ON BUDGET

The design engineering and construction services contract for the CCWRF Inspection of the 72-inch Mixed Liquor Pipeline, Project No. EN15048, for the not-to-exceed proposal of \$158,839, will be within the FY 2014/15 and total project budget of \$200,000 in the Regional Wastewater Capital Improvement (RC) Fund. An estimated amount of \$143,000 will be spent on V&A's contract this fiscal year, which is supported by the current Fiscal Year appropriation of \$200,000. The remaining contract amount of \$15,839 is anticipated to be spent in FY 2015/16.

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CCWRF Inspection and Repair 72-Inch Mixed Liquor Pipeline Projects No. EN15045 March 2015



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

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Majid Karim, P.E.,
Acting Manager of Engineering

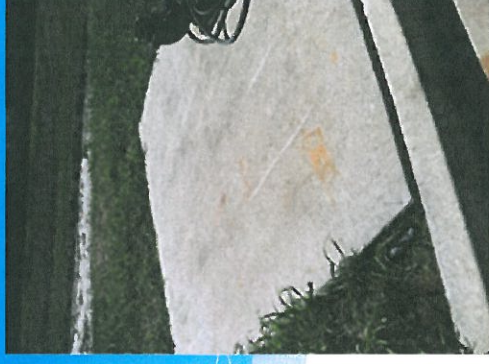
Matthew Poeske, P.E.,
Senior Engineer

Project Request

- Consultant Contract Award for CCWRF 72” Mixed Liquor Pipeline (MLP) Inspection and Repair
- Agency needs to do assessment and repair of the MLP
 - CCWRF Built in 1992
 - Settlement noted throughout the plant
 - Removal of MH cap, found leakage at MLP MH
- Work Consistent with Agency’s Wastewater Management Business and Asset Management goal to maintain capacity at the lowest lifecycle cost

Project Scope

- Dewater and clean MLP
- Perform assessment/
make recommendations
- Repair/Mitigate MH seepage
- Add man-ways



• MH#1 CAP

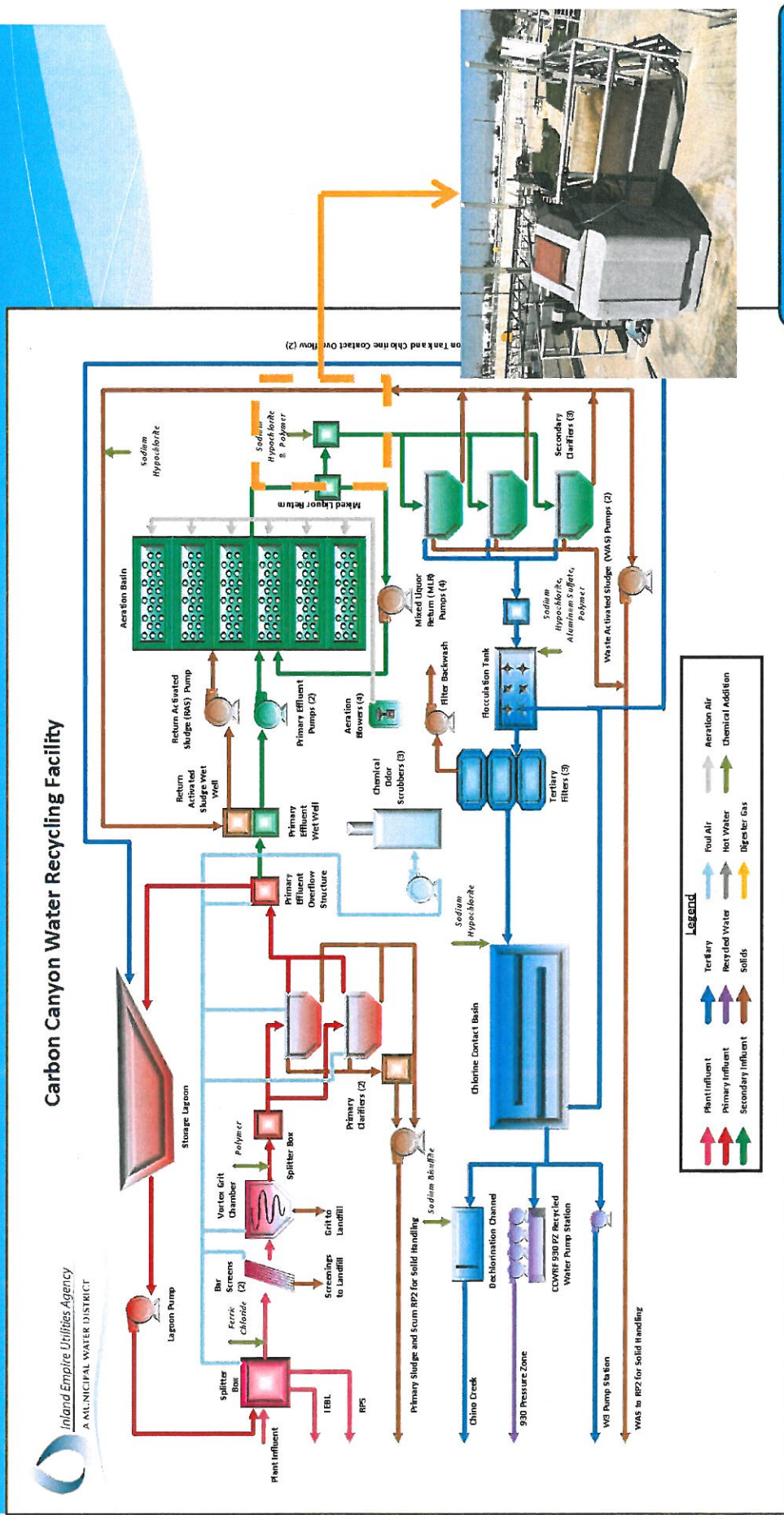


• MH #2 Seepage



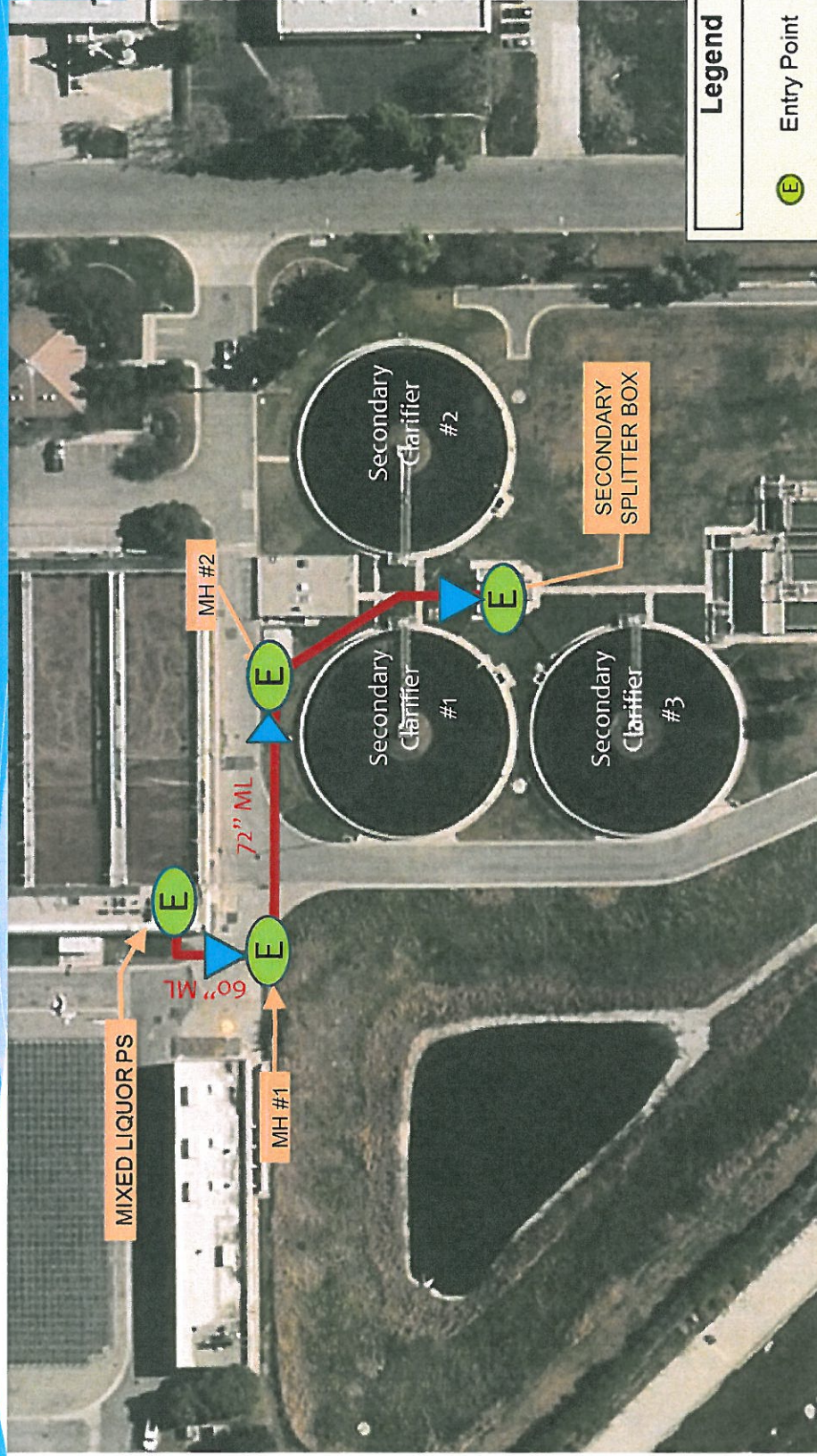
• MH #2 Cap Removal

Process Flow Diagram



- Secondary Clarifier Splitter Box

Carbon Canyon Water Reclamation Facility Mixed Liquor Pipeline



Legend	
	Entry Point
	72" Mixed Liquor Line
	60" Mixed Liquor Line

Consultant Selection

- V&A Consulting with Jamison Engineering Contractors, Inc. is highly qualified
 - V&A has done this type of work for 25 years
 - Jamison has done similar Agency work
- The MLP has not been assessed
 - Critical to compliance
 - Critical to cost effective Treatment

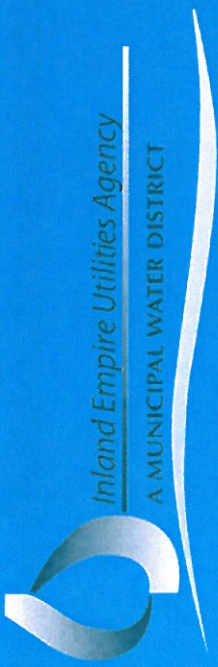
Project Budget and Schedule

Description	Estimated Cost
Consultant (V&A and Jamison)	\$158,839
Agency (Engineering, CM, and Ops)	\$21,161
Contingency	\$20,000
Total	\$200,000

Project Phase	Date
Shutdown # 1	April 2015
Shutdown #2	May 2015
Final Report/Project Completion	June 2015

Recommendation

- Staff recommends the Board approve the award of an engineering services contract with V&A Consulting Engineer, Inc. for the CCWRF Mixed Liquor Pipeline Inspection, Project No. EN15048, for the not-to-exceed amount of \$158,839; and
- Authorize the General Manager to execute the consultant contract



Questions?



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

CONTRACT NUMBER: 4600001830

FOR

CCWRF INSPECTION OF THE 72-INCH LIQUOR PIPELINE

THIS CONTRACT (the "Contract"), is made and entered into this _____ day of _____, 2015 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 "Agency") and V&A Consulting Engineers, Inc., with offices located in Oakland and San Diego, California (hereinafter referred to as "Consultant"), for the inspection, assessment, repair and construction management/monitoring for the Agency's 60-inch to 72-inch Mixed Liquor Pipeline at its Carbon Canyon Wastewater Reclamation Facility (CCWRF), Project Number EN15048.00.

NOW, THEREFORE, in consideration of the mutual promises and obligations set forth herein, the parties agree as follows:

1. **PROJECT MANAGER ASSIGNMENT:** All technical direction related to this Contract shall come from the designated Project Manager. Details of the Agency's assignment are listed below.

Project Manager: Matthew A. Poeske, P.E., Senior Engineer
Address: 6075 Kimball Avenue, Building "B"
Chino, CA 91708
Telephone: (909) 993-1723
Email: mposeske@ieua.org

2. **CONSULTANT ASSIGNMENT:** Special inquiries related to this Contract and the effects of this Contract shall be referred to the following:

Consultant: V&A Consulting Engineers, Inc.,
Mr. Denis Pollak
Address: 11011 Via Frontera, Suite "C"
San Diego, CA 92127
Telephone: (858) 576-0226
Email: dpollak@vaengineerino.com

3. ORDER OF PRECEDENCE: The documents referenced below represent the Contract Documents. Where any conflicts exist between the General Terms and Conditions, or addenda attached, then the governing order of precedence shall be as follows:
1. Amendments to Contract number 4600001830.
 2. Contract number 4600001830 General Terms and Conditions.
 3. Agency's Request for Proposals (RFP) number RFP-RW-14-062 and all germane addenda and correspondence.
 4. Consultant's final and best proposal dated January 30, 2015 (**Exhibit A**).
4. SCOPE OF WORK AND SERVICES: Consultant services and responsibilities shall include and be in accordance with the Agency's Request for Proposals (RFP) RFP-RW-14-062, referenced herein and made a part hereof by this reference.
5. TERM: The term of this Contract shall extend from the date of the Notice to Proceed, and terminate upon acceptance of the design's construction as signed off by the Agency's cognizant Engineering & Construction Management Department personnel and project management, unless agreed to by both parties, reduced to writing, and amended to this Contract.
6. PAYMENT, INVOICING AND COMPENSATION: The Consultant shall submit once-monthly invoicing in accordance with the Project Manager's direction. Payment will be withheld for any service which does not meet the requirements of this Contract, until such service is revised, the invoice resubmitted and accepted by the Project Manager.

All invoices shall be submitted electronically with all required back-up to apgroup@ieua.org.

Consultant shall provide with their invoice certified payroll verifying that Consultant has paid prevailing wage in accordance with the Department of Industrial Relations requirements as stipulated in SB-854 (<http://www.dir.ca.gov/DIRNews/2014/2014-55.pdf>).

Effective January 1, 2015: The call for bids and contract documents must include the following information:

A. No Consultant or subConsultant may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

B. No Consultant or subConsultant may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

C. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

As compensation for the work performed under this Contract, Agency shall pay Consultant, **on a firm-fixed not-to-exceed \$158,839.00** for all work satisfactorily provided hereunder in accordance with **Exhibit A**, referenced herein, attached hereto, and made a part hereof.

Note: All payments made, whether for design or construction build, shall be in accordance with the payment terms outlined in Request for Proposals (RFP) number RFP-RW-14-062.

7. **INSURANCE:** During the term of this Contract, the Consultant shall maintain at Consultant's sole expense, the following insurance.

A. Minimum Scope of Insurance:

1. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. Coverage shall be at least as broad as Insurance Services Office form number GL 0001-87 covering Comprehensive General Liability. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location, or the general aggregate limit shall be twice the required occurrence limit.
 - a. The insurance shall include coverage for each of the following hazards:
 - Premises – Operations
 - Owners and Consultants Damage
 - Broad Form Property Damage
 - Contractual for Specific Contract
 - Severability of Interests or Cross-Liability
 - XCU [Explosion, Collapse and Underground] Hazards
 - Personal Injury – with the "Employee" Exclusion Deleted
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage. Coverage shall be at least as broad as Insurance Services Office form number CA 00 01 87, covering Automobile Liability, including "any auto."
3. Workers' Compensation and Employers Liability: Workers' compensation limits as required by the Labor Code of the State of California and employers Liability limits of \$1,000,000 per accident.
4. Builders Risk completed value (course of construction) fire insurance with extended coverage and a vandalism and malicious endorsement. The

policy shall cover the full value of all completed construction, which includes all material and labor invested in the construction and the full value of all equipment and material at the job site. Said policy shall remain in effect until acceptance of the by the Agency.

5. Professional Liability insurance in the amount of \$1,000,000 per occurrence.
 6. Payment, Labor & Material, and Performance Bonds: Bonding is required, per Public Contract Code Article 121., Section 21565, for public works projects. All construction-related labor for this project is designated as the public works portion of this project and therefore subject to prevailing wage. Consultant shall furnish bonding with the use of forms furnished in the RFP.
- B. Deductibles and Self-Insured Retention: Any deductibles or self-insured retention must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retention (as respects the Agency), its officers, officials, employees, volunteers, property owners and engineers under contract to the Agency; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- C. Other Insurance Provisions: The policies are to contain, or be endorsed to contain, the following provisions:
1. General Liability and Automobile Liability Coverage
 - a. The Agency, its officers, officials, employees, volunteers, property owners and any engineers under contract to the Agency are to be covered as insureds, endorsement CG2010 1185, as respects: liability arising out of activities performed by or on behalf of the Consultant, products and completed operations of the Consultant, premises owned, occupied or used by the Consultant, or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its officers, officials, employees, volunteers, property owners or engineers under contract to the Agency.
 - b. The Consultant's insurance coverage shall be primary insurance as respects the Agency, its officer, officials, employees, volunteers, property owners or engineers under contract to the Agency. Any insurance or self-insurance maintained by the Agency, its officers, officials, employees, volunteers, property owners or engineers under contract to the Agency shall be excess of the Consultant's insurance and shall not contribute with it.

- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Agency, its officers, officials, employees, volunteers, property owners or engineers under contract to the Agency
- d. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e. The Consultant may satisfy the limit requirements in a single policy or multiple policies. Any Such additional policies written as excess insurance shall not provide any less coverage than that provided by the first or primary policy.

2. Workers' Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Agency, its officers, officials, employees, volunteers, property owners or engineers under contract to the Agency for losses arising from work performed by the Consultant for the Agency.

3. Builders Risk Insurance (Course of Construction)

The Agency is to be named as the loss payee.

4. All Coverages

Each insurance policy required by this contract shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the Agency.

- D. Acceptability of Insurers: Insurance is to be placed with insurers with a Best's rating of no less than A minus:VII, and who are admitted insurers in the State of California.
- E. Verification of Coverage: Consultant shall furnish the Agency with certificates of insurance and with original endorsements effecting coverage required by the Agency for themselves and all subConsultants prior to commencing work or allowing any subConsultant to commence work under any subcontract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be approved by the Agency before work commences. The Agency reserves the right to require complete, certified copies of all required insurance policies, at any time.

- F. Submittal of Certificates: Consultant shall submit all required certificates and endorsements to the following:

Inland Empire Utilities Agency
Attn: Ms. Angela Witte, Risk Representative
P.O. Box 9020
Chino Hills, California 91709-0902

8. CONTROL OF THE WORK: Consultant shall perform the Work in compliance with the Work Schedule. If performance of the Work falls behind schedule, the Consultant shall accelerate the performance of the Work to comply with the Work Schedule as directed by the Project Manager. If the nature of the Work is such that Consultant is unable to accelerate the Work, Consultant shall promptly notify the Project Manager of the delay, the causes of the delay, and submit a proposed revised Work Schedule.

9. LEGAL RELATIONS AND RESPONSIBILITIES

- A. Professional Responsibility: The Consultant shall be responsible, to the level of competency presently maintained by other practicing professionals performing the same or similar type of work.
- B. Status of Consultant: The Consultant is retained as an independent Consultant only, for the sole purpose of rendering the services described herein, and is not an employee of the Agency.
- C. Observing Laws and Ordinances: The Consultant shall keep itself fully informed of all existing and future state and federal laws and all county and city ordinances and regulations which in any manner affect the conduct of any services or tasks performed under this Contract, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. The Consultant shall at all times observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees, and shall protect and indemnify, as required herein, the Agency, its officers, employees and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Consultant or its employees.

Effective July 1, 2014, all Consultants must be registered with the California Dept. of Industrial Relations as required by law SB-854 for public works construction projects:

<http://www.dir.ca.gov/DIRNews/2014/2014-55.pdf>

- D. Confined Space Work:

I. Precautions and Programs:

a. The Consultant shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work or the activities of subContractors, subConsultants, suppliers, and others at the work site.

b. The Consultants and subContractors shall comply with the provisions of the Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the "Contract Work Hours and Safety Standards Act," as set forth in Title 29 C.F.R. If the Agency is notified of an alleged violation of the Occupational Safety and Health Standards referred to in this Section and it is established that there is a violation, the Consultant shall be subject to liquidated damages as provided in the Contract.

c. The Consultant and all subContractors shall comply with the provisions of the Occupational Safety and Health Standards, promulgated by the United States Secretary of Labor under the "Occupational Safety and Health Act of 1970," as set forth in Title 29, C.F.R. Where an individual State act on occupational safety and health standards has been approved by federal authority, then the provisions of said state act shall control.

d. The Consultant shall take all necessary precautions for the safety of, and shall provide the necessary supervision, control, and direction to prevent damage, injury, or loss to:

- 1) All employees on the work or work site and other persons and organizations who may be affected thereby;
- 2) All the work and materials and equipment to be incorporated therein, whether in storage or on or off the work site; and
- 3) All other property at the site.

e. Contract work requiring confined space entry must follow Cal-OSHA Regulation 8 CCR, Sections 5157 - 5158. This regulation requires the following to be submitted to IEUA for approval prior to the start of the project:

- 1) *Proof of training on confined space procedures, as defined in Cal-OSHA Regulation 8 CCR, Section 5157. This regulation also requires the following to be submitted to IEUA for approval prior to the entry of a confined space:*
- 2) *A written plan that includes identification of confined spaces within the construction site, alternate procedures where appropriate, Consultant provisions, specific procedures for permit-required and non-permit required spaces, and a rescue plan.*

- f. The Consultant must also submit a copy of their Safety Program or IIPP prior to the start of the project for approval by the Safety & Risk Department.
- E. Subcontract Services: Any subcontracts for the performance of any services under this Contract shall be subject to the written approval of the Project Manager.
- F. Hours of Labor: The Consultant shall comply with all applicable provisions of California Labor Code Sections 1810 to 1817 relating to working hours. The Consultant shall, as a penalty to the Agency, forfeit \$25.00 for each worker employed in the execution of the Contract by the Consultant or by any subConsultant for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of the Labor Code.
- G. Travel and Subsistence Pay: The Consultant shall make payment to each worker for travel and subsistence payments which are needed to execute the work and/or service, as such travel and subsistence payments are defined in the applicable collective bargaining agreements with the worker.
- H. Liens: Consultant shall pay all sums of money that become due from any labor, services, materials or equipment furnished to Consultant on account of said services to be rendered or said materials to be furnished under this Contract and that may be secured by any lien against the Agency. Consultant shall fully discharge each such lien at the time performance of the obligation secured matures and becomes due.
- I. Indemnification: Consultant shall indemnify IEUA, its directors, employees, agents, and assigns, and shall defend and hold them harmless from all liability, demands, actions, claims, losses, and expenses, including reasonable attorney's fees, which arise out of or are related to the negligence, recklessness or willful misconduct of Consultant, its directors, employees, agents and assigns, in the performance of work under this contract.
- J. Conflict of Interest: No official of the Agency who is authorized in such capacity and on behalf of the Agency to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving this Contract, or any subcontract relating to services or tasks to be performed pursuant to this Contract, shall become directly or indirectly personally interested in this Contract.
- K. Equal Opportunity: During the performance of this Contract, the Consultant shall not unlawfully discriminate against any employee or employment applicant because of race, color, religion, sex, age, marital status, ancestry, physical or mental disability, sexual orientation, veteran status or national origin.
- L. Disputes:

1. All disputes arising out of or in relation to this Contract shall be determined in accordance with this section. The Consultant shall pursue the work to completion in accordance with the instruction of the Agency's Project Manager notwithstanding the existence of dispute. By entering into this Contract, both parties are obligated, and hereby agree, to submit all disputes arising under or relating to the Contract which remain unresolved after the exhaustion of the procedures provided herein, to independent arbitration. Except as otherwise provided herein, arbitration shall be conducted under California Code of Civil Procedure Sections 1280, et. seq, or their successor.
2. Any and all disputes during the pendency of the work shall be subject to resolution by the Agency Project Manager and the Consultant shall comply, pursuant to the Agency Project Manager instructions. If the Consultant is not satisfied with any such resolution by the Agency Project Manager, they may file a written protest with the Agency Project Manager within seven (7) calendar days after receiving written notice of the Agency's decision. Failure by Consultant to file a written protest within seven (7) calendar days shall constitute waiver of protest, and acceptance of the Agency Project Manager's resolution. The Agency's Project Manager shall submit the Consultant's written protests to the General Manager, together with a copy of the Agency Project Manager's written decision, for his or her consideration within seven (7) calendar days after receipt of said protest(s). The General Manager shall make his or her determination with respect to each protest filed with the Agency Project Manager within ten (10) calendar days after receipt of said protest(s). If Consultant is not satisfied with any such resolution by the General Manager, they may file a written request for arbitration with the Project Manager within seven (7) calendar days after receiving written notice of the General Manager's decision.
3. In the event of arbitration, the parties hereto agree that there shall be a single neutral Arbitrator who shall be selected in the following manner:
 - a. The Demand for Arbitration shall include a list of five names of persons acceptable to the Consultant to be appointed as Arbitrator. The Agency shall determine if any of the names submitted by Consultant are acceptable and, if so, such person will be designated as Arbitrator.
 - b. In the event that none of the names submitted by Consultant are acceptable to Agency, or if for any reason the Arbitrator selected in Step (a) is unable to serve, the Agency shall submit to Consultant a list of five names of persons acceptable to Agency for appointment as Arbitrator. The Consultant shall, in turn, have seven

(7) calendar days in which to determine if one such person is acceptable.

- c. If after Steps (a) and (b), the parties are unable to mutually agree upon a neutral Arbitrator, the matter of selection of an Arbitrator shall be submitted to the San Bernardino County Superior Court pursuant to Code of Civil Procedure Section 1281.6, or its successor. The costs of arbitration, including but not limited to reasonable attorneys' fees, shall be recoverable by the party prevailing in the arbitration. If this arbitration is appealed to a court pursuant to the procedure under California Code of Civil Procedure Section 1294, et. seq., or their successor, the costs of arbitration shall also include court costs associated with such appeals, including but not limited to reasonable attorneys' fees which shall be recoverable by the prevailing party.

- 4. Joinder in Mediation/Arbitration: The Agency may join the Consultant in mediation or arbitration commenced by a Consultant on the Project pursuant to Public Contracts Code Sections 20104 et seq. Such joinder shall be initiated by written notice from the Agency's representative to the Consultant.

- N. Workers' Legal Status: For performance against this Contract, Supplier shall only utilize employees and/or subContractors/subConsultants that are authorized to work in the United States pursuant to the Immigration Reform and Control Act of 1986.

- O. Prevailing Wage Requirements: Pursuant to Section 1770 and following, of the California Labor Code, the Consultant shall not pay less than the general prevailing wage rates, as determined by the Director of the State of California Department of Industrial Relations for the locality in which the work is to be performed and for each craft or type of worker needed to execute the work contemplated under the Contract. The Consultant or any subConsultant performing part of said work shall strictly adhere to all provisions of the Labor Code, including, but not limited to, minimum wages, work days, nondiscrimination, apprentices, maintenance and availability of accurate payroll records and any other matters required under all Federal, State and local laws related to labor.

10. FITNESS FOR DUTY:

- A. Fitness: Consultant and its SubConsultant personnel on the Jobsite:
 - 1. shall report for work in a manner fit to do their job;
 - 2. shall not be under the influence of or in possession of any alcoholic beverages or of any controlled substance (except a controlled substance

as prescribed by a physician so long as the performance or safety of the Work is not affected thereby); and

3. shall not have been convicted of any serious criminal offense which, by its nature, may have a discernible adverse impact on the business or reputation of Agency.

B. Compliance: Consultant shall advise all Consultant and subContractors /subConsultant personnel and associated third parties of the requirements of this Contract ("Fitness for Duty Requirements") before they enter on the Jobsite and shall immediately remove from the Jobsite any employee determined to be in violation of these requirements. Consultant shall impose these requirements on its SubConsultants. Agency may cancel the Contract if Consultant violates these Fitness for Duty Requirements.

11. OWNERSHIP OF MATERIALS AND DOCUMENTS/CONFIDENTIALITY: The Agency retains ownership of any and all partial or complete reports, drawings, plans, notes, computations, lists, and/or other materials, documents, information, or data prepared by the Consultant and/or the Consultant's subContractors pertaining to this Contract. Said materials and documents are confidential and shall be available to the Agency from the moment of their preparation, and the Consultant shall deliver same to the Agency whenever requested to do so by the Project Manager and/or Agency. The Consultant agrees that same shall not be made available to any individual or organization, private or public, without the prior written consent of the Agency.

12. PUBLIC RECORDS POLICY: Information made available to the Agency may be subject to the California Public Records Act (Government Code Section 6250 et seq.) The Agency's use and disclosure of its records are governed by this Act. The Agency shall use its best efforts to notify Consultant of any requests for disclosure of any documents pertaining to Consultant.

In the event of litigation concerning disclosure of information Consultant considers exempt from disclosure; (e.g., Trade Secret, Confidential, or Proprietary) Agency shall act as a stakeholder only, holding the information until otherwise ordered by a court or other legal process. If Agency is required to defend an action arising out of a Public Records Act request for any of the information Consultant has marked "Confidential," "Proprietary," or "Trade Secret," Consultant shall defend and indemnify Agency from all liability, damages, costs, and expenses, including attorneys' fees, in any action or proceeding arising under the Public Records Act.

13. NON-CONFORMING WORK AND WARRANTY: Consultant represents and warrants that the Work shall be in conformance with the specifications provided herein and shall serve the purposes described. For a period of not less than one (1) year after acceptance of the completed Work, Consultant shall, at no additional cost to Agency, correct any and all errors or shortcomings of the Work, regardless of whether any such errors or shortcomings is brought to the attention of the Consultant by Agency, or any other person or entity.

14. NOTICES: Any notice may be served upon either party by delivering it in person, or by depositing it in a United States Mail deposit box with the postage thereon fully prepaid, and addressed to the party at the address set forth below:

Agency: Inland Empire Utilities Agency
Attn: Mr. Warren T. Green
Manager of Contracts and Facilities Services
P.O. Box 9020
Chino Hills, California 91709-0902

Consultant: V&A Consulting Engineers, Inc.
Attn: Mr. Raymond Yep, P.E.
Chief Executive Officer (CEO)
11011 Via Frontera, Suite "C"
San Diego, CA 92127

Any notice given hereunder shall be deemed effective in the case of personal delivery, upon receipt thereof, or, in the case of mailing, at the moment of deposit in the course of transmission with the United States Postal Service.

15. SUCCESSORS AND ASSIGNS: All of the terms, conditions and provisions of this Contract shall inure to the benefit of and be binding upon the Agency, the Consultant, and their respective successors and assigns. Notwithstanding the foregoing, no assignment of the duties or benefits of the Consultant under this Contract may be assigned, transferred or otherwise disposed of without the prior written consent of the Agency; and any such purported or attempted assignment, transfer or disposal without the prior written consent of the Agency shall be null, void and of no legal effect whatsoever.
16. INTEGRATION: The Contract Documents represent the entire Contract of the Agency and the Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by the Contract Documents. This Contract may not be modified, altered or amended except by written mutual agreement by the Agency and the Consultant.
17. GOVERNING LAW: This Contract is to be governed by and constructed in accordance with the laws of the State of California.
18. TERMINATION FOR CONVENIENCE: The Agency reserves and has the right to immediately suspend, cancel or terminate this Contract at any time upon written notice to the Consultant. In the event of such termination, the Agency shall pay Consultant for all authorized and Consultant-invoiced services up to the date of such termination.
19. RIGHT TO AUDIT: The Agency reserves the right to review and/or audit all Consultant's records related to the Work. The option to review and/or audit may be

exercised during the term of the Contract, upon termination, upon completion of the Contract, or at any time thereafter up to twelve (12) months after final payment has been made to Consultant. The Consultant shall make all records and related documentation available within three (3) working days after said records are requested by the Agency.

20. FORCE MAJEURE: Neither party shall hold the other responsible for the effects of acts occurring beyond their control; e.g., war, riots, strikes, natural disasters, etcetera.
21. LIQUIDATED DAMAGES: Liquidated Damages, in the amount of \$500.00 per day, may be assessed by the Agency for each calendar day that the Consultant fails to complete this project in accordance with its final, contractually-committed delivery schedule. Any and all Liquidated Damages assessed by the Agency will be taken as a direct credit against the Consultant's invoice for this project. The Consultant's acceptance of a contract subsequently issued in conjunction with this solicitation, shall serve to indicate acceptance of this Liquidated Damages clause, and the daily assessment of damages expressed herein.
22. CHANGES: The Agency may, at any time, make changes to this Contract's Scope of Work; including additions, reductions and other alterations to any or all of the work. However, such changes shall only be made via written amendment to this Contract. The Contract Price and Work Schedule shall be equitably adjusted, if required, to account for such changes and shall be set forth within the Contract Amendment.
23. NOTICE TO PROCEED: No services shall be performed or furnished under this Contract unless and until this document has been properly signed by all responsible parties and a Notice to Proceed order has been issued to the Consultant.

AS WITNESS HEREOF, the parties hereto have caused the Contract to be entered as of the day and year written above.

INLAND EMPIRE UTILITIES AGENCY:

V&A CONSULTING ENGINEERS, INC.:

P. Joseph Grindstaff
General Manager

(Date)

Raymond Yep

Mr. Raymond Yep, P.E.
Chief Executive Officer

Feb. 5, 2015

(Date)

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**SIGN
HERE**

Exhibit A

Revised Fee Schedule



RESOURCE ALLOCATION ESTIMATE

PROPOSAL NO: 14-0410

Date: 1/13/2015

JOB TITLE: CCWRF Inspection of the 72 inch Mixed Liquor Pipeline Project No. EN 15048.00

Task	Description	Sr. Principal-in-Charge	Project Manager	Project Manager	Sr. Project Engineer	Project Engineer	Associate Engineer	Assistant Engineer	CADD Designer	Project Admin/Clerical	Labor Hours Total	Labor Cost Total
A Kick Off Meeting												
1	Prepare Work Plan			8						2	10	\$1,932
2	Prepare Project Schedule			4						1	5	\$966
3	Prepare Draft Shut Down Plan			2						2	2	\$442
4	Submit Confined Space Plan and Certificates				2					2	4	\$576
5	List of Proposed Repair Materials			2						2	2	\$442
6	Preliminary environmental information on soil testing, removal and disposal			2						2	4	\$606
B Field Meetings												
1	First Field Meeting (To be held concurrently w/ kick off			1						2	3	\$385
2	Second Field Meeting			6						2	8	\$1,490
C Pipe Evaluation - First 24 Hour Shut Down												
	Pipe Evaluation to include Video Documentation to within a 2 foot location using a location wheel. The thickness of the pipe will be determined, the ovality of the pipe will be measured, pipe cracks, joint displacement, invert erosion, debris and settlement, material buildup, root intrusion, and the condition of the manholes shall be documented. Based on the Shear visit on January 7th, 2015, it			8		24				4	36	\$7,040
D Construction and Repair - Second 24 Hour Shut Down												
1	10% of Pipe Length Crack Repair			2		2					4	\$854
2	15% of Pipe Length Slabbing & Spalling Repair			2		2					4	\$854
3	Demolition of 6 inch Thick Slab and Placement of Manway			2		2					4	\$854
											\$4,964	
											\$1,875	
											\$7,040	
											\$5,536	



4	Placement of Second Manway Extension Assume one leak at the manhole shown on Figure 2 & 3. Provided cost to document what needs to be done in terms of environmental requirements. Leak Repair & Backfill. Assume 20 cubic yards of soil are impacted. Assume one pulled joint to be repaired	2	2	4	\$854					
5		2	2	4	\$854					
6		2	2	4	\$854					
7	Restore site to pre existing conditions.	2	2	2	\$412					
E General Construction Requirements										
1	Dewatering and Cleaning	4	4	8	\$1,708					
2	Shut Down Requirements	4	4	8	\$1,708					
3	Approval of Shut Down	4	4	8	\$1,708					
4	Required Materials	4	4	8	\$1,708					
5	Meeting and Site Visits	4	4	8	\$1,708					
6	Site Requirements	4	4	8	\$1,708					
F Safety Requirements										
1	General	2	2	4	\$854					
2	Confined Space Entry	2	2	4	\$854					
G Report										
1	Draft Report	4	2	12	16	24	6	8	72	\$13,474
2	Final Report	4	2	8	12	14	6	8	54	\$9,916
H Construction Administration Assistance										
1	Construction Management	8	4	4	4	4	4	4	16	\$2,920
2	Approval of Repairs	8	4	4	4	4	4	4	16	\$2,920
3	Kick Off Meeting	8	4	4	4	4	4	4	16	\$2,920
4	Attend two field meetings	16	8	8	8	8	4	4	28	\$5,512
5	Document Preparation	8	4	4	4	4	4	4	16	\$2,920
I Post Construction Assistance										
1	Prepare Record Drawings	4	16	4	4	4	4	4	24	\$4,508
2	Submit information on repair materials and methods	4	8	4	4	4	4	4	16	\$2,860
Total										
					\$10,248					
					\$23,390					
					\$17,192					
					\$7,368					



Subtotal	0	0	33	26	0	0	0	0	0	15	74
Hourly/Unit	\$283	\$247	\$221	\$206	\$185	\$165	\$134	\$134	\$82		
Total Direct Labor/ODC	\$0	\$0	\$7,293	\$5,356	\$0	\$0	\$0	\$0	\$1,230		\$79,321



RESOURCE ALLOCATION ESTIMATE

PROPOSAL NO: 14-0410

Date: 1/13/2015

0

Task	Description	Travel (Airfare) (per Trip)	(Hotel/Per Diem/Rent- A-Car) (per Day)	Depth to Rebar Meter	Truck	Jameson Engineerin g Inc.	Mileage	UT Meter	ODC Total	Total Labor and ODC
A Kick Off Meeting										
1	Prepare Work Plan								\$0	\$4,964
2	Prepare Project Schedule								\$0	\$1,932
3	Prepare Draft Shut Down Plan								\$0	\$966
4	Submit Confined Space Plan and Certificates								\$0	\$442
5	List of Proposed Repair Materials								\$0	\$576
6	Preliminary environmental information on soil testing, removal and disposal								\$0	\$442
B Field Meetings										
1	First Field Meeting (To be held concurrently w/ kick off meeting)				1	\$552	200		\$784	\$1,169
2	Second Field Meeting				1	\$552	200		\$784	\$2,274
C Pipe Evaluation - First 24 Hour Shut Down										
Pipe Evaluation to include Video Documentation to within a 2 foot location using a location wheel. The thickness of the pipe will be determined, the ovality of the pipe will be measured, pipe cracks, joint displacement, invert erosion, debris and settlement, material buildup, root intrusion, and the condition of the manholes shall be documented. Based on the										
1		1	1	1	1	\$15,524	200	1	\$16,617	\$23,657
D Construction and Repair - Second 24 Hour Shut Down										
1	10% of Pipe Length Crack Repair					\$7,762			\$7,762	\$8,616
2	15% of Pipe Length Slabbing & Spalling Repair					\$7,762			\$7,762	\$8,616
3	Demolition of 6 inch Thick Slab and Placement of					\$9,124			\$9,124	\$9,978
									\$61,221	\$66,757



4	Placement of Second Manway Extension Assume 20 cubic yards of soil are impacted. Assume one pulled joint to be repaired.	\$9,125	\$9,979
5	3. Provided cost to document what needs to be done in terms of environmental Leak Repair & Backfill. Assume 20 cubic yards of soil are impacted. Assume one pulled joint to be repaired.	\$12,237	\$13,323
6	Assume 20 cubic yards of soil are impacted. Assume one pulled joint to be repaired.	\$12,237	\$13,091
7	Restore site to pre existing conditions.	\$2,742	\$3,154
E General Construction Requirements		\$0	\$10,248
1	Dewatering and Cleaning	\$0	\$1,708
2	Shut Down Requirements	\$0	\$1,708
3	Approval of Shut Down	\$0	\$1,708
4	Required Materials	\$0	\$1,708
5	Meeting and Site Visits	\$0	\$1,708
6	Site Requirements	\$0	\$1,708
F Safety Requirements		\$0	\$1,708
1	General	\$0	\$854
2	Confined Space Entry	\$0	\$854
G Report		\$112	\$23,502
1	Draft Report	\$112	\$13,586
2	Final Report	\$0	\$9,916
H Construction Administration Assistance		\$0	\$17,192
1	Construction Management	\$0	\$2,920
2	Approval of Repairs	\$0	\$2,920
3	Kick Off Meeting	\$0	\$2,920
4	Attend two field meetings	\$0	\$5,512
5	Document Preparation	\$0	\$2,920
I Post Construction Assistance		\$0	\$7,368
1	Prepare Record Drawings	\$0	\$4,508
2	Submit information on repair materials and methods	\$0	\$2,860



1	1	1	4	77617	1000	1
\$350	\$351	\$65	\$120	\$1	\$0.56	\$75
\$350	\$351	\$65	\$480	\$77,617	\$560	\$75
						\$79,518
						\$158,839
GRAND TOTAL ESTIMATED COST						
						\$158,839

Quote # 02212 (Revised)

DATE: 12, January 2015
TO: V & A Consulting Engineers
ATTENTION: Jose Villalobos, PE
REFERENCE: CCWRF Inspection of the 72 inch Mixed Liquor Pipeline
(Project Number EN15048.00)

Dear Jose,

We propose to do the following for the price total of \$77,617.00 (*Seventy Seven Thousand Six Hundred Seventeen and no/100 Dollars*). This includes all applicable taxes.

Jamison Engineering Contractors will provide all labor, necessary equipment and material to perform and complete the following scope of work for this project:

1. Support confined space entry and confined space rescue for the inspection of approximately 375 feet of concrete reinforced piping that conveys secondary effluent wastewater from the aeration basins to the secondary clarifier diversion structure. Confined Space Entry and Rescue support will be for two (2) 24 hour shutdown periods.
 - The first 24 hour shutdown period will be for purposes of supporting all necessary activities related to obtaining a thorough inspection of the pipeline and associated structures. This will include all necessary dewatering and cleaning of the pipeline.
 - The second 24 hour shutdown period will be for purposes of supporting all necessary activities to complete/finish any needed repairs found in the first shutdown period. Repairs in the second 24 hour shutdown period are based on mechanical repairs (if needed). (*There are no known 'chemical' based repair materials that could be successfully applied and fully cure within a 24 hour shutdown period*).
2. Provide all necessary paperwork related to Confined Space Entry requirements such as writing a Job Hazard Analysis/Confined Space Entry and Rescue Procedures, and obtain Lock and Tag Procedures. Attend all necessary meeting with IEUA project management and Safety personnel and obtain all necessary Safety requirement approvals prior to the start of the project.

3. Provide the necessary soil assessment/removal/remediation that will be excavated at entry point #2. *This will be based on having up to 20 cubic yards of soil that will need to be removed, contained, tested and legally disposed of per RCRA (Resource Conservation Recovery Act Program) standards.* Excavate entry point #2 to expose the circumference of the 72" pipe that meets the existing concrete structure and inspect the joints for any further damage or leaking and repair as needed to prevent further leaks. Provide all necessary shoring that may be needed for this excavation. Repair/remediate leaking joint and any additional leaks detected after inspection of the complete circumference of the 72" pipeline where it meets the existing concrete structure. Back-fill and compact around the concrete structure and install new Manway and new concrete slab on top of existing concrete structure at Entry Point #2.
4. Remove 6" concrete slab to expose the 54" manhole at entry point #1. (As stated in the IEUA RFP). Construct and install new manway extension for entry points #1, and replace 6" slab after installing new manway. The manway will extend at least 8" above grade. *Note: All manways will be constructed with 1/4" thick 316 type stainless steel. The manway will be placed onto the existing concrete structure using 1/2" x 4 1/2" 316 type stainless steel wedge anchors with a 1/4" thick neoprene gasket. The manway covers will be 1/4" thick 316 stainless steel and with a 1/4" neoprene gasket and bolted with 1 1/2" x 1/2" 316 type stainless steel bolts, washers and nuts. All new concrete slabs will have #2 rebar installed to help resist cracking of concrete.*
5. Repair/replace (as needed) any concrete walkways and sprinkler lines, and sprinkler control lines that may be affected by excavation and concrete pad replacement.

Quote breakdown is as follows:

1.) Two 24 hr. plant shutdown periods:

• **First Plant Shutdown Costs:**

Labor:	\$6,868.00
Vehicles/Equipment:	\$5,364.00
Materials:	\$250.00
Outside Contractors (Vactor)	\$1,190.00
Rentals (Pumps)	\$1,852.00

Subtotal = \$15,524.00

Note: Please refer to #1 under Notes/Exclusions

• **Second Plant Shutdown Costs:**

Labor:	\$6,868.00
Vehicles/Equipment:	\$5,364.00
Materials:	\$250.00
Outside Contractors (Vactor & Backhoe):	\$1,190.00
Rentals (Pumps)	\$1,852.00
Subtotal =	\$15,524.00

Note: Please refer to #1 under Notes/Exclusions

2.) Administrative costs as related to Safety paperwork/meetings:

Labor:	\$1,104.00
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3.) Soil removal/remediation, etc. at Entry Point #2:

Geologists & Soil Testing:	\$2,542.00
Soil containment, transport, disposal:	\$5,233.00
Labor:	\$5,349.00
Vehicles and equipment:	\$2,300.00
Materials:	\$6,950.00
Rentals (shoring)	\$450.00
Outside Services (Backhoe)	\$1,650.00
Subtotal=	\$24,474.00

Note: Please refer to #3 under Notes/Exclusions

4. Remove 6" concrete slab at Entry Point #1 and install fabricated Manway and new concrete slab.

Labor:	\$5,349.00
Vehicles and equipment:	\$2,300.00
Materials:	\$8,950.00
Outside Services (Backhoe)	\$1,650.00
Subtotal =	\$18,249.00

6. Repair/replace (as needed) any concrete walkways and sprinkler lines, sprinkler control lines, and that may be affected by excavation and concrete pad replacement.

Labor:	\$1,992.00
Materials:	\$750.00
Subtotal =	\$2,742.00

Grand Total = \$77,617.00

Notes/Exclusions:

#1:

- **Mechanical repair materials (such as WECO seals for joint repairs) are not included. The costs plus 15% and sales taxes will be added.**
- **WECO seals must be individually measured and ordered depending on the intended repair site, intended type of repair and/or joint configuration. The cost for a WECO seal can vary based on the intended repair site and can be from \$1,500.00 to \$7,500.00 (estimate) per seal.**
- **Installation of a WECO seal (labor cost) can also vary depending on the type of repair and repair site configuration – subsequently - estimating the time needed to install any number of WECO seals is difficult and cannot be accurately predicted.**
- **Since the amount of mechanical repairs will be unknown until a complete pipe inspection is completed – additional costs for labor, vehicles & equipment, outside services, and rentals will be added for each subsequent 24 hour shutdown period. Labor rates for additional shutdown periods will be based on a 12 (twelve) hour work period in order to maximize the working time for each plant shut down period.**
- **Labor costs for the two (2) plant shutdown periods are based on 12 hour work shifts (8 hours at regular hourly rates and 4 hours at 1 ½ times regular hourly rates).**

#3:

- A certified soil geologist and project manager for the geologist is required for the soil testing. Testing of soil will be taken at three (3) levels: surface, midpoint, and bottom of excavation. Lab soil testing will consist of: **BTEX** (benzene, toluene, ethylbenzene, and xylenes), and **TPH** (total petroleum hydrocarbons).
- Soil removal, containment and disposal based on having **up to 20 cubic yards of soil. This quote is based on the assumption that the soil will be determined to be CA (California) Non-Hazardous.**
- **If the soil is determined to be CA-Hazardous or RCRA-Hazardous; extra charges for transportation and disposal will be added.** (*CA-Hazardous is as defined in the "California Hazardous Waste Control Law", and RCRA-Hazardous is defined in the federal related "Resource Conservation Recovery Act"*).

We sincerely appreciate the opportunity to present this quotation. It shall remain firm for thirty days. If you have any questions, please call me at (714) 434-9196.

Respectfully,

Andrew Jamison

Andrew Jamison

AJ/kf

Jamison Engineering Inc.
Rates and Cost to be used Outside of the RFP

Jamison Engineering

Contractors, Inc.

2525 S. Yale Street, Santa Ana, CA 92704
 (714) 434-9196 Fax: (714) 434-3762

For Work Identified Outside of the Proposal

- Rates Include Overhead and Profit
- Materials, Rentals and Outside Services Will Have a 15% Markup

RATE SHEETS
rates are effective for
 7/01/2014 – 6/30/2015

	<u>ST</u>	<u>OT</u>	<u>DT</u>	
Craft/Laborer	79.00	99.00	121.50	Admin: 69.00/hr.
Craft/Leadman	85.00	109.00	131.50	Travel 35.00/hr.
Craft/Foreman	95.00	119.00	151.50	
Supervisor	115.00	150.00	192.00	
Crane Operator	95.00	119.00	151.50	
Welder Fabricator	137.00	161.00	203.00	

EQUIPMENT RATES:

	<u>Daily</u>	<u>Hourly</u>
Crane	938.00	117.00
Combo Tool Truck	448.00	56.00
Mechanic's Truck	568.00	71.00
Ford Stake bed Truck	296.00	37.00
Dump Truck	664.00	83.00
Utility Truck	200.00	25.00
Confined Space Entry Equipment/SCBA	624.00	78.00
Trailer Mounted Manhole Blower	432.00	54.00
Water Trailer (Buffalo)	208.00	26.00
Compressor w/Jackhammer	272.00	34.00
Welding Trailer	208.00	26.00
26 KV Generator	280.00	35.00

4" Pump: Submersible	264.00	33.00
6" Pump: Submersible	352.00	44.00
4" Discharge Hose	19.00/50 ft.	Minimum
6" Discharge Hose	37.00/50 ft.	Minimum
2" submersible Pump (electric)	72.00	9.00
1-1/2" x 50' Flood Hose	15.00	Minimum
Garden Hose Pump	16.00	2.00
Diaphragm Pump	80.00	10.00
Welding Machine	120.00	15.00
Air Arc	19.00	2.50
Demo Torch Set-Up	208.00	26.00
Concrete Saw (walk behind)	312.00	39.00
Chain Saw	112.00	14.00
Skill Saw	25.00	Minimum
Gas Power Cut-Off Demo Saw	102.00	15.00
Chop Saw	45.00	Minimum
Grinder	27.00	Minimum
Grinding Wheel	13.00	Minimum
Vibe- Plate	120.00	16.00
Rotor Hammer	80.00	10.00
Wacker	144.00	18.00
Power Puff	120.00	15.00

Manhole Blower	64.00	8.00
Generator-small	67.00	9.00
Elec. 30lb Chipping Gun	80.00	10.00
1" Drive Impact	72.00	9.00
¾" Impact	64.00	8.00
Transit	64.00	87.00
Grade Level Laser	176.00	22.00
Laser Level	70.00	Minimum
Line Unit	152.00	Minimum
Davit Arm	264.00	33.00
A-Frame w/wench	80.00	10.00
Tripod	158.00	20.00
Full Body Harness	40.00	5.00
4 Way Gas detector/GT402	160.00	20.00
2-way Radios	80.00	10.00
Extension Ladder	20.00 (14'-36')	Minimum
Asphalt Torch	20.00	Minimum
Cement Mixer	64.00	8.00
Porta Power	56.00	7.00
Small Air Compressor	96.00	12.00
Pole Hole Auger	120.00	15.00
24'-Self Contained Confined Space/ Office Trailer	125.00	Minimum
Car & Enclosed Utility Trailers	63.00	Minimum
Office Trailer	20.00	Minimum



CONTRACT AMENDMENT NUMBER: 4600001551-002
FOR
RP-4 PROCESS IMPROVEMENTS

THIS AMENDMENT TWO is made and entered into this _____ day of _____, 2015 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 "Agency" and "IEUA"), and IDS Group, Inc. of Irvine, California (hereinafter referred to as "Consultant"), to provide professional engineering services in support of Project EN14018.00, and shall revise the Contract as amended:

REVISE SECTION FOUR, SCOPE OF WORK AND SERVICES, TO ADD:

Consultant shall furnish additional professional services outlined in Consultant's revised proposal dated January 28, 2015, attached hereto, referenced herein, and made a part hereof as **Attachment 1**.

REVISE SECTION 5., TERM, TO READ:

The term of this Contract shall extend from the date of the Notice to Proceed and terminate on August 31, 2016 unless agreed to by both parties, reduced to writing, and amended to this Contract.

REVISE SECTION SIX, COMPENSATION, TO ADD:

Note: Task Orders 1-8 are herein adjusted-up on a line item basis from the original Contract amounts listed.

Additional compensation in the amount totaling **\$105,110.00** is hereby added in accordance with **Attachment 1**, incorporated herein and made a part hereof. In compensation for the work represented by this contract amendment, Agency shall pay Consultant a NOT-TO-EXCEED maximum adjusted Contract total of **\$204,080.00** for all services provided.

SECTION 9.F., SUBMITTAL OF CERTIFICATES, IS CHANGED IN PART TO READ:

Consultant shall submit all required certificates and endorsements to the following:

Attn. Ms. Angela Witte, Risk Specialist
Contracts and Facilities Services
Inland Empire Utilities Agency
P.O. Box 9020
Chino Hills, California 91709-0902

SECTION 16., NOTICES, IS CHANGED IN PART TO READ:

Agency: Warren T. Green
Manager of Contracts and Facilities Services
Inland Empire Utilities Agency
P.O. Box 9020
Chino Hills, California 91709-0902

ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.

WITNESSETH, that the parties hereto have mutually covenanted and agreed as per the above amendment items, and in doing so have caused this document to become incorporated into the Contract documents.

INLAND EMPIRE UTILITIES AGENCY:

IDS GROUP, INC.:

P. Joseph Grindstaff
General Manager

(Date)



Said Hilmy, Ph.D.
Principal-in-Charge

02/11/2015

(Date)

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Pipe Groover	120.00	15.00
Pipe Machine	82.00	Minimum
Pipe Dolly	80.00	10.00
Magnetic Base Drill	80.00	10.00
Core Drill W/ 1 Bit	150.00	18.75
Fire Monitor	96.00	12.00
Shop Vac. Wet/Dry	56.00	7.00
Portable Fan	56.00	7.00
Canopy/EZ-Up	45.00	Minimum
6" GAS FLAP	82.00	-----
10" GAS FLAP	108.00	-----
Coveralls	8.00	Minimum
Gloves	2.00	Minimum

NOTE: Rates DO NOT include delivery charges, fuel charges or environmental charges.

All Materials, Rentals, Outside Services, Fuel, Permits, Licenses and Bonds will be cost + 15%.

Attachment 1

1/28/15

Mr. Adham Almasri
Inland Empire Utilities Agency
6075 Kimball Ave., Building B
Chino, CA 91708

**Subject: Proposal for Engineering Services for a New Chlorine Injection Facility
Regional Recycling Water Plant No. 4 (RP-4) (Revised)**

Mr. Almasri:

The IDS group is pleased to submit a revised proposal to provide engineering services for the above referenced project.

After meeting with IEUA staff, reviewing the technical documents provided by the maintenance group, conducting a site visit, and reviewing existing As Built Plans, we proposes amending the existing agreement to revise the scope of work to better suit the Agency's needs. The revised scope will relocate the bleach containment facilities to a new location, replace the automated overflow gate, and rehab the portion of the original dosing building affected by the removal of the bleach tanks.

Find enclosed a copy of the revised scope which is labeled as Exhibit "A" along with the corresponding fee matrix for your use in preparing contract documents. The total additional fee for this project is \$204,080.00 as shown in the fee matrix.

We have enjoyed working on various IEUA projects and look forward to continuing to serve your agency.

Feel free to contact me should you have any questions at (949) 387-8500.

Sincerely,

A handwritten signature in black ink, appearing to read "Said Hilmy".

Said Hilmy, Ph.D., S.E., LEED AP
Principal

EXHIBIT A

Request for Proposals for Engineering Services for a New Chlorine Injection Facility Regional Recycling Water Plant No. 4 (RP-4)

Located in the City of Rancho Cucamonga, the Regional Water Recycling Plant No. 4 (RP-4) has been in operation and producing recycle water since 1997. RP-4 includes several treatment processes that contribute to providing a quality recycle water pursuant to the State of California Title 22 regulations. The major treatment processes include raw wastewater pumping, preliminary and primary treatment, primary effluent flow equalization and diversion, secondary treatment and tertiary treatment. In addition, each treatment processes is integrated with instrumentation and control systems for controlling and monitoring various aspects of their operations.

Regional Recycling Water Plant No. 4 (RP-4) contains a centralized sodium hypochlorite tank farm which feeds sodium hypochlorite to the chlorine contact basins and filters. The existing piping to the chlorine contact basin from this centralized tank farm consists of approx. 600 linear feet of piping under the paved road. A portion of this pipeline has been damaged recently.

The objective of the project is to design and construct a new relocated chlorination sub-facility to service the existing chlorine contact basins at (RP-4). The new facility shall be designed such to provide for the capacity required currently for (14 MGD) with a potential expansion to a capacity needed in the future of (21 MGD).

The new injection facilities shall consist of a sodium hypochlorite chemical tank with secondary containment enclosed in a proper size building. In addition, the project shall relocate the existing automated metering pump equipment and install new solution delivery pipeline(s) connecting to an existing chemical mixing and injection equipment. The instrumentation & controls for a complete automated system shall have to designed and implemented as part of the scope. Contractor shall cap and abandon in place the existing chlorination pipeline. For details of existing location of sodium hypochlorite pipelines, pumps and tanks please refer to the attached plans.

The project Scope of Services shall include the following:

Task 1 – Design Overall

1. Consultant shall prepare the design including drawings and specifications in two phases (50% and 100%) and shall prepare the bid set as a final set.
2. Consultant shall meet the deliverable dates as per the attached Project Schedule
3. Consultant shall prepare the Preliminary Engineer's Estimate of Probable Construction Cost at the 50% and 100% design submittal milestones.
4. Consultant shall implement design requests by IEUA for the project.

Task 2 – Preliminary Engineering Design Report/ Design Development

1. Consultant shall prepare a Request for Existing Data which shall generally consist of reports, master plans, design plans, specifications, O&M manuals and water quality test data for the existing chlorination facilities at the site.
2. Consultant shall attend a project Kick-off Meeting at the project site for the purpose of discussing the project objectives, obtaining the pre-requested data, touring the site and discussing the project design with IEUA staff.
3. Consultant shall review the existing data and performance and develop a Preliminary Engineering Design Report (PDR) which shall contain:
 - a) Preliminary layout of the facilities including current and future footprint requirements
 - b) A facility site analysis to determine the best location for the new facilities. Consultant shall review the facilities Master Plan layout to ensure the location for this facility shall not conflict with the future expansion of the facility.
 - c) Preliminary sizing of chemical storage
 - d) Preliminary instrumentation and control diagrams for the injection facility

- e) Develop preliminary control strategies, alarming, and process function descriptions
 - f) Preliminary location and supply alignments for auxiliary wet and dry utilities for the facilities.
4. Consultant shall submit the PDR to IEUA for review and shall make necessary corrections as requested by IEUA.
 5. Consultant shall attend as needed (no limit) project meetings at the site for the purpose of reviewing design development progress and assessing additional design alternatives. One of the additional meetings shall be for reviewing and receiving comments from IEUA on the PDR.

Task 3 – Civil Site Design Plans & Specifications

1. Based on approval of the PDR by IEUA, Consultant shall prepare 50% plans for the Civil Site design which shall include grading, paving and access to the new facility, inter-tie field piping and alignments for process connections and improvements to wet and dry utilities to support the new facility building.
2. Consultant shall submit 50% plans to IEUA for review and attend a meeting with IEUA to review and receive comments on the 50% design
3. Upon approval of the 50% design, Consultant shall complete the Civil Design Plans & Specifications to a 100% level for public bid.

Task 4 – Structural Design Plans & Specifications

1. Based on approval of the PDR by IEUA, Consultant shall prepare 50% plans for the Structural Design of the new chlorine injection facilities. The design work shall include a new enclosed control and metering building, concrete secondary containment for the chemical tanks, a steel shade canopy structure over the chemical tanks, seismic restraining of the tanks and chemical field piping and various equipment foundations and supports.
2. Consultant shall submit 50% plans to IEUA for review and shall attend a meeting with IEUA to review and receive comments on the 50% design
3. Upon approval of the 50% design, Consultant shall complete the Structural Design Plans & Specifications to a 100% level for public bid.
4. Consultant shall prepare Final Structural Calculations for all structures as required by the latest adopted CBC.
5. Consultant shall prepare plans for the demolition of the concrete containment walls and rehab concrete surfaces for the affected areas within existing dosing building.
6. Consultant shall provide Architectural Details for the work associated with the rehab of the dosing building.

Task 5 – Mechanical Process Design Plans & Specifications

1. Based on approval of the PDR by IEUA, Consultant shall prepare 50% plans for the Mechanical Process Design of the new chlorine injection facilities. The design work shall include all required tanks, valves, piping and fittings required for a fully functional chlorine injection system. Piping shall be connected to the existing injection mixing system.
2. Existing metering equipment shall be relocated as part of this design and shall include 100% redundancy in capacity and functionality.
3. Mechanical mixing and temperature monitoring / control shall be designed into the new facility for both the tanks and process piping to ensure constant and consistent chemical delivery.
4. Analyze existing ventilation system of existing dosing building for adequacy and design modifications.
5. Replacement of automated pneumatic overflow gate and equipment.
6. Existing chlorination pipeline shall be capped and abandoned in place.
7. Upon approval of the 50% design, Consultant shall complete the Mechanical Process Design Plans & Specifications to a 100% level for public bid.

Task 6 – Electrical Design Plans & Specifications

1. Based on approval of the PDR by IEUA, Consultant shall prepare 50% plans for the Electrical Design of the new chlorine injection facilities. The design work shall include all required modifications to the existing electrical system, extension of electrical and communication services to the new facilities, distribution of electrical to equipment and instruments, and interior and exterior lighting of the building. The electrical supply for the new facilities shall be from a source that is verified to have sufficient back-up capacity from an existing automatic secondary connection or on-site emergency electrical generator.

2. The electrical design shall be in compliance with NEC and NFPA 820.
3. Upon approval of the 50% design, Consultant shall complete the Electrical Design Plans & Specifications to a 100% level for public bid.

Task 7 – Instrumentation & Control Design Plans & Specifications

1. Based on approval of the PDR by IEUA, Consultant shall prepare 50% plans for the Instrumentation & Control Design of the new chlorine injection facilities. The design work shall include Process & Instrumentation Diagrams, PLC Network Diagrams, and typical instrumentation and equipment field wiring diagrams.
2. Consultant shall assist IEUA in selection and implementation of new instrumentation equipment which shall automatically control dosing, concentration and contact time to produce Title 22 compliant recycled water.
3. Control systems shall be selected and specified as to be functional with the existing facilities IT infrastructure as well as provide the highest degree of future utilization with emerging and developing control platforms.
4. Consultant shall develop specifications for all instruments, PLCs, OITs, and programming and configuration software(s) needed to implement the project.
5. Consultant shall develop specifications for programming and screen development required to integrate the new injection facility controls with the plant's existing SCADA and alarming system.
6. Upon approval of the 50% design, Consultant shall complete the Mechanical Process Design Plans & Specifications to a 100% level for public bid.

Task 8 – Services and Support During Construction

1. Consultant shall provide review and responses to all related project RFIs as requested by IEUA
2. Consultant shall provide technical review and approval of project submittals requested by IEUA
3. Consultant shall receive from the contractor and the equipment manufacturer, O&M manuals for process equipment and materials. Consultant shall utilize these documents to develop and document library for the project which shall accompany and be companion to the O&M manual Consultant shall develop for the specific project. The complete O&M manual shall contain process descriptions, normal and emergency procedures and related technical data required for proper operation of the chlorine injection facilities.
4. Consultant shall provide the services of its engineering and process & instrumentation staff for the start-up, testing, verification and training on the new chlorine injection facilities.
5. Consultant shall attend weekly construction progress meetings via conference call and shall provide as needed (no limit) on-site visits during construction to assist IEUA and the Contractor with completion of the project.
6. Consultant to attend both a mechanical and I&C workshops. Consultant shall address any issues or questions generated during both workshops.
7. Provide Text and Drawings for Change Orders -Prepare text and drawings for change order documents as necessary. Engineer shall provide assistance during construction with cost estimates for RFDs and change orders in order to validate the quotes received from the contractor.
8. Consultant shall prepare "As Built" Drawings.

****END OF SECTION****

IDS Group, Inc.
New Building at RP-4 for Chlorine Injection Facility
28-Jan-14

Task 1 - Project Management and Overall Design										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Design and preparation of drawings and project schedule	2	300	0	0	16	2000	0	0	0	2300.00
2. Design Concept and Review meeting with IEUA	2	300	0	0	0	0	0	0	0	300.00
3. Prepare Preliminary Engineer's Estimate of Probable Construction Costs	2	300	0	0	16	2000	18	1440	0	3740.00
4. Implement design requests	2	300	0	0	12	1500	0	0	0	1800.00
Total	8	1200	0	0	44	5500	18	1440	0	8,140.00

Task 2 - Preliminary Engineering Design/Design Development										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Request existing data (reports, ex. Plans, O&Ms, Water Quality Data)	8	1200	0	0	16	2000	0	0	0	3200.00
2. Kick-off mtg; incl. project objectives; obtain requested data, and site tour	8	1200	0	0	8	1000	0	0	0	2200.00
3. Attend Design Workshop	8	1200	0	0	8	1000	0	0	0	2200.00
4. Review ex. Data and prepare Preliminary Engineering Design Report (PER)	8	1200	0	0	40	5000	84	6720	0	12920.00
5. Submit PDR and revise per IEUA Comments	8	1200	0	0	40	5000	40	3200	0	9400.00
6. Site/Project team meeting	8	1200	0	0	0	0	0	0	0	1200.00
Total	48	7200	0	0	112	14000	124	9920	0	31,120.00

Task 3 - Civil Site Design Plans & Specifications										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Design and preparation of 50% Design Drawings	4	600	0	0	20	2500	28	2240	0	5340.00
2. Submit and Review 50% Drawings with IEUA	4	600	0	0	24	3000	40	3200	0	6800.00
3. Design and preparation of 100% Design Drawings & Specifications	2	300	0	0	20	2500	40	3200	0	6000.00
Total	10	1500	0	0	64	8000	108	8640	0	18,140.00

Task 4 - Structural Design Plans & Specifications										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Design and preparation of 50% Design Drawings	4	600	8	1080	24	3000	40	3200		7880.00
2. Submit and Review 50% Drawings with IEUA	4	600	8	1080	24	3000	6	480		5160.00
3. Design and preparation of 100% Design Drawings & Specifications	4	600	8	1080	24	3000	32	2560		7240.00
4. Prepare Final Structural Calculations	4	600	8	1080	16	2000	6	480		4160.00
5. Demolition and Rehab Concrete Floors of Existing Dosing Building	4	600	8	1080	8	1000	24	3000		5680.00
6. Architectural Details for Rehab of Existing Dosing Building	4	600	0	0	10	1250	40	3200		5050.00
Total	20	3000	40	5400	96	12000	108	9720	0	30,120.00

Task 5 - Mechanical Process Design Plans & Specifications										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Design and preparation of 50% Design Drawings	2	300	0	0	40	5000	40	3200		8500.00
2. Submit and Review 50% Drawings with IEUA	4	600	0	0	40	5000	40	3200		8800.00
3. Design Mechanical Mixing Controls, Gate, and Ventilation of Rehab Dosing Building	4	600	0	0	24	3000	40	3200		6800.00
4. Design and preparation of 100% Design Drawings & Specifications	2	300	0	0	24	3000	32	2560		5860.00
Total	12	1800	0	0	128	16000	152	12160	0	29,960.00

Task 6 - Electrical Design Plans & Specifications										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Design and preparation of 50% Design Drawings	4	600	0	0	12	1500	32	2560		4660.00
2. Submit and Review 50% Drawings with IEUA	4	600	0	0	20	2500	40	3200		6300.00
3. Design and preparation of 100% Design Drawings & Specifications	2	300	0	0	16	2000	24	1920		4220.00
Total	10	1500	0	0	48	6000	96	7680	0	15,180.00

Task 7 - Instrumentation & Control Design Plans & Specifications										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Design and preparation of 50% Design Drawings	8	1200	0	0	40	5000	60	4800		11000.00
2. Selection & Implementation of New Instrumentation Equipment	4	600	0	0	20	2500	16	1280		4380.00
3. Select Control Systems to function with ex. Facilities	4	600	0	0	20	2500	8	640		3740.00
4. Develop Specs for all Instruments, PLCs, OITs, Programming/Configuration Software	4	600	0	0	20	2500	8	640		3740.00
5. Develop Specs for Programming, Screen Development for New Injection Controls	6	900	0	0	24	3000	0	0		3900.00
6. Design and preparation of 100% Design Drawings & Specifications	6	900	0	0	24	3000	48	3840		7740.00
Total	32	4800	0	0	148	18500	140	11200	0	34,500.00

Task 8 - Services and Support during Construction										
	Proj. Manager Hrs. at \$150.00	Total PM	Sr. Eng. Hrs. at \$135.00	Total SE	PE Hrs. at \$125.00	Total PE	CAD Hrs. at \$80.00	Total CAD	Misc Costs	Total Cost
1. Response to RFIs	2	300	16	2160	40	5000	0	0		7460.00
2. Review of submittal	2	300	16	2160	40	5000	0	0		7460.00
3. Collect O&M Data for Processing Equipment & Materials to provide O&M Manual to IEUA	0	0	0	0	28	3500	0	0		3500.00
4. Provide Engineering and Process & Instrumentation Staff for Start-Up and Training	2	300	0	0	16	2000	0	0		2300.00
5. Attending Progress meeting (budget 26 meetings)	8	1200	16	2160	52	6500	0	0		9860.00
6. Prepare As-Builts	4	600	4	540	16	2000	40	3200		6340.00
Total	14	2100	48	6480	176	22000	0	0	0	36,920.00

Total Estimated Fee= **204,080.00**


**ACTION
ITEM
1G**





Date: March 18, 2015

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee
(03/11/15)

From:  P. Joseph Grindstaff
General Manager

Submitted by:  Chris Berch
Executive Manager of Engineering/Assistant General Manager

Majid Karim 
Acting Manager of Engineering

Subject: Engineering Services Contract Amendment for the RP-4 Disinfection
Facility Improvements

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the amendment to the engineering services contract with IDS Group for the additional consulting services for the RP-4 Disinfection Facility Improvements, Project No. EN14018, for the not-to-exceed amount of \$105,110; and
2. Authorize the General Manager to execute the consultant contract amendment.

BACKGROUND

The Regional Water Recycling Plant No. 4 (RP-4) began operation in 1997 with an average daily liquid treatment capacity of seven million gallons per day (MGD). In 2009, the plant's treatment capacity was expanded to 14 MGD. Since the expansion, certain areas are in need of process improvements due to a change in the operational strategy, or the general deterioration.

The chemical disinfection facility comprises of six chemical metering pumps and three chemical storage tanks all located inside a building in the southeast corner of the treatment plant. The bleach containment area inside the building is currently not coated, and the concrete tank pads, metal supports, and the containment walls are showing signs of corrosion. In addition, bleach was reported to seep past the containment area causing damage to the entry door and walls

outside of the containment area. Over the years of operation, the corrosion continues to worsen, because bleach constantly leaks from the tanks and various fittings. The leaking bleach wears the ancillary equipment prematurely.

The three bleach storage tanks are 2,200 gallons each with no overflow penetration location on each tank. The total storage capacity of 6,000 gallons leaves limited flexibility to receive full load deliveries of 4,800 gallons. Accordingly, the operators are forced to operate the tanks at an uncomfortable low level of sodium hypochlorite. In addition, the bleach metering pumps are diaphragm technology. These pumps lose suction prime when offline and require manual operation to degas the suction pipeline which tends to be a lengthy and time consuming process.

The two chlorine contact basins (CCB1A and CCB2) are critical compliance dependent processes. CCB1A is currently operating without a backup injection pipeline. In addition, both CCB2 injection pipelines are offline due to leaks and a temporary above ground piping that was installed and is currently in operation. The locations of the leaks are unknown due to the pipeline being buried under asphalt. Also, the Aqua Disk Filters do not have a bleach injection pipeline for pre-filter chlorination causing algae to blind the filters.

In late August 2013, IEUA solicited a cost proposal with a limited scope of providing engineering services towards relocating the chemical injection facility closer to CCB2, install new chemical pumps and two chemical tanks with buried injection pipelines and backup pipelines (total of 4) to the chlorine contact basins only. In October, 2013, IDS Group was awarded the engineering services contract based on their proposal and qualifications.

During the initial development of the design, the leak CCB2 injection pipelines were put offline due to the leaks. The project was put on hold to allow for the preparation of a comprehensive Project Understanding Memorandum by IEUA Technical Services. In October, 2014, the Memorandum was provided and it did provide a comprehensive scope relative to the different processes at RP-4 including the Chlorination Facility. The Memorandum highlighted the need to provide the additional injection to the Trident Filters, Disk Filters and to the Return Activated Sludge (RAS) Pump Station. In addition, the option of completely rehabilitating the existing chemical building and utilize it as a storage was examined and deemed as an economical and viable option. IDS was accordingly requested to submit a cost proposal to provide the following additional engineering services to their base contract:

- 1) Demolish and remove the existing equipment inside the current chemical building. Also, fully rehabilitate the building interior including walls, floors, access doors and ventilation to allow for the usage of the building as a storage facility.
- 2) Install seven (7) new chemical injection pipes inside a vault to service from the new centralized location both chlorine contact basins (with back-up), the Trident Filters, Disk Filters and the (RAS) Pump Station. The vault cover will be traffic-rated.
- 3) Conduct the additional survey and perform the added potholing.
- 4) Prepare the additional instrumentation and control programming.

- 5) Prepare the additional As-Builts and provide the added construction support services based on the augmented scope.

IDS provided a detailed cost proposal for a not to exceed amount of \$105,110. IEUA staff has reviewed the total fees including those for the proposed amendment and concluded that they are acceptable and within industry standards. IDS was involved with the current issues that took place during the initial design and due to their familiarity with the project and its requirements, a new request for proposal was not advertised and the subject amendment is requested.

The RP-4 Chlorination Facility Improvements Project is part of the Agency's Wastewater Management Business Goal to ensure that, when expansion planning is triggered, design and construction can be completed to meet regulatory and growth needs in an expeditious, environmentally responsible, and cost effective manner.

Below is the project budget:

PROJECT PHASE	PROJECTED COSTS
Design	\$230,000
Construction	\$900,000
Construction Management	\$230,000
Contingency	\$150,000
Total	\$1,510,000
Project Budget	\$1,600,000

The following is the project schedule:

PROJECT PHASE	DATE
Design	October 2015
Construction Contract Award	January 2016
Construction Completion	December 2016

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

If approved, IDS's contract will be increased by \$105,110 for a total of \$204,080 and is supported by Project No. EN14018 budget of \$1,600,000 and the 2014/15 Fiscal Year appropriation of \$285,000 in the Regional Wastewater Capital Improvement (RC) Fund.

PJG:CB:MK:aa

RP-4 Chlorination Facility Improvements Engineering Services Contract Amendment

Project No.: EN14018

March 2015



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

Majid Karim, P.E.,
Acting Manager of Engineering

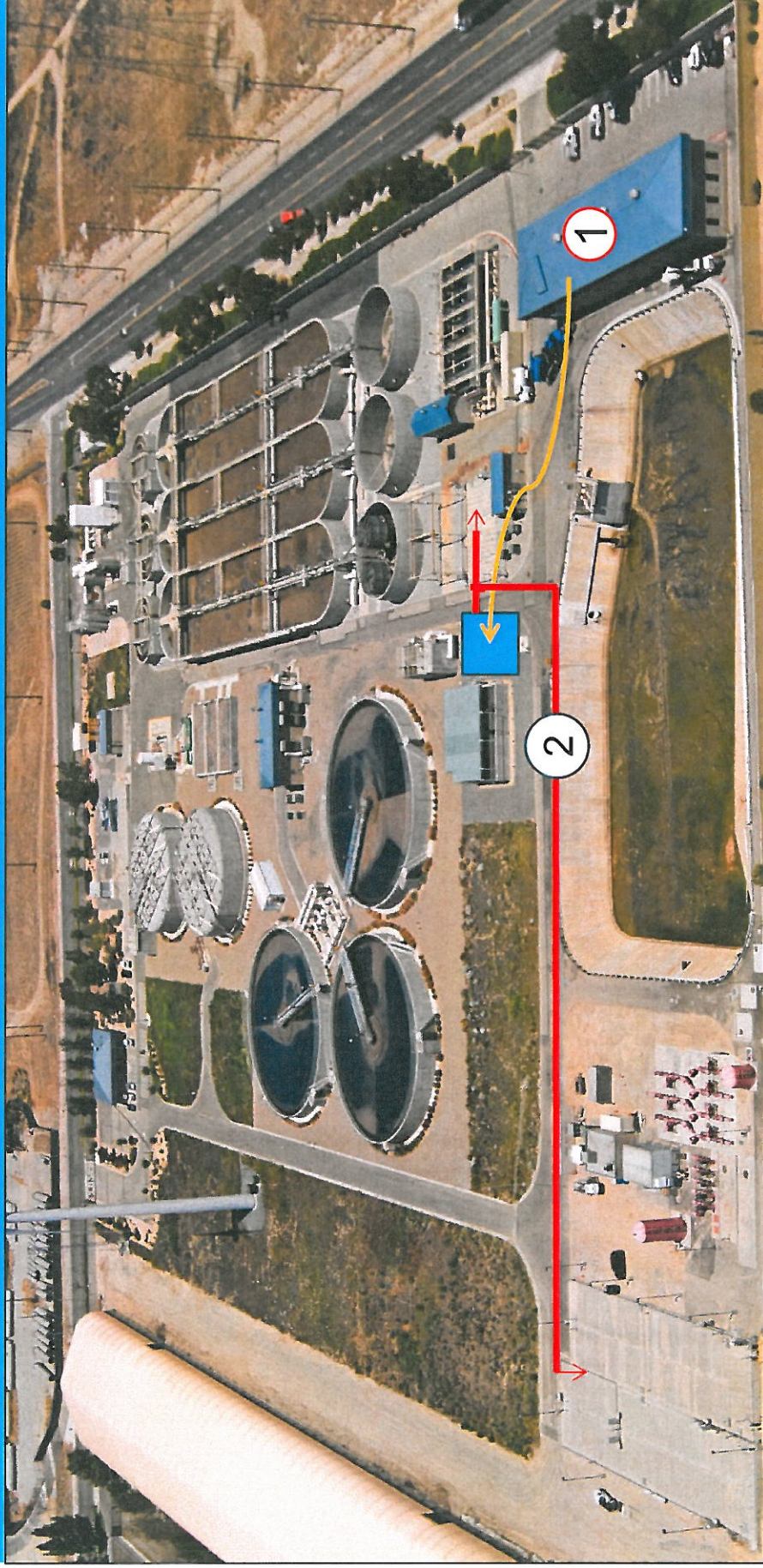
Adham Almasri, P.E.,
Senior Engineer

Project Request

- Consultant Contract Amendment for the RP-4 Disinfection Project
- Consultant Name: IDS Group
- Why are we doing the project/Background
 - Disinfection system is failing due to age
 - Deterioration of disinfection equipment & piping



Original Scope

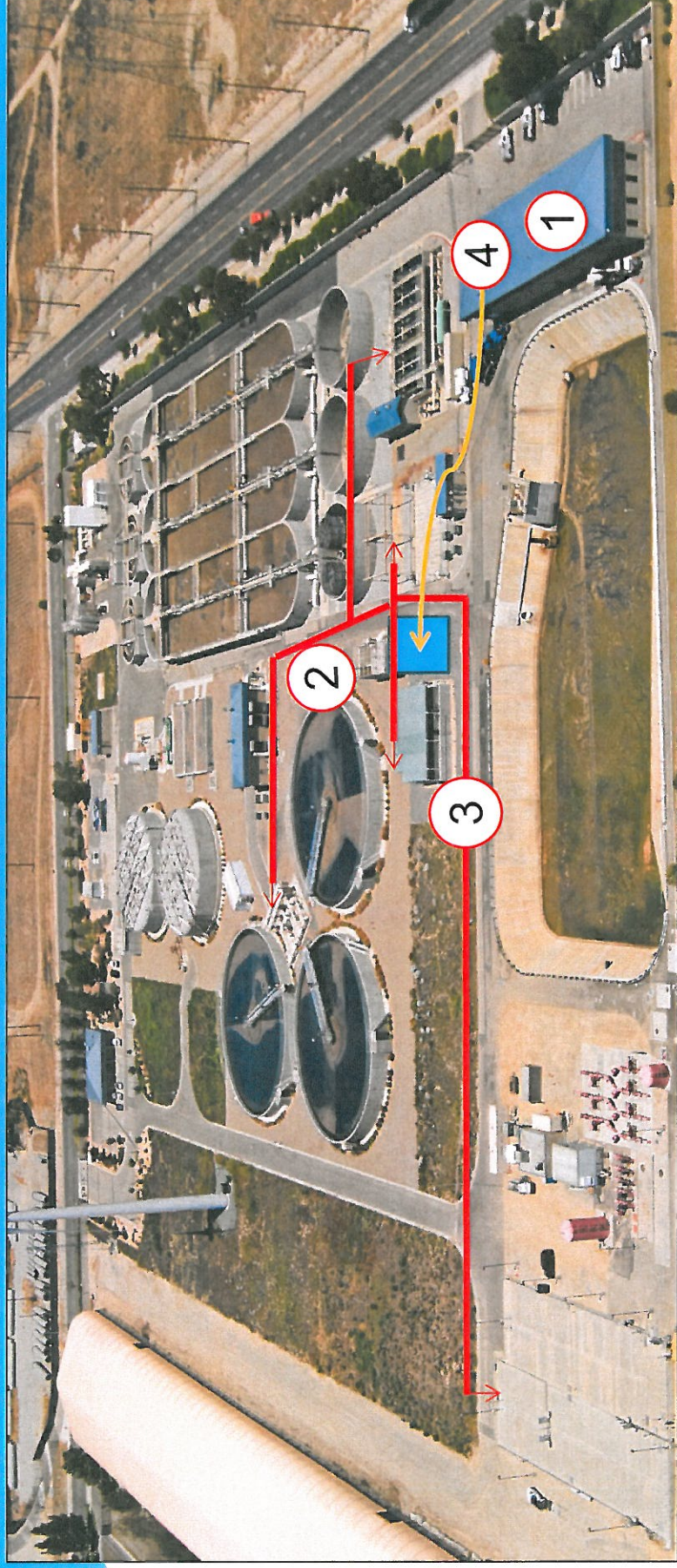


Original Consulting Contract: \$98,970.

1) Relocate Content of Chemical Building

2) New Chlorine Piping to Chlorine Basins

Amended and Full Scope



- | |
|--|
| 1) Rehab. CI2 Building, Re-use as Storage |
| 2) Chlorine Piping: Disk, Trident Filters & RAS P.S. |
| 3) New Chlorine Piping to Chlorine Basins |
| 4) Relocate Content of Chemical Building |

Amended Consulting Contract: \$204,080.

Updated Project Budget and Schedule

DESCRIPTION	Estimated Cost at Completion
Design (Consultant and IEUA Labor)	\$230,000
Construction Contract	\$900,000
Construction Management (IEUA Labor and Consultant)	\$230,000
Contingency	\$150,000
Total	\$1,510,000

PROJECT PHASE	DATE
Design	October 2015
Construction Contract Award	January 2016
Project Completion	December 2016

Agency's Goal Statement

- The RP-4 Chlorination Facility Improvements Project is part of the Agency's Wastewater Management Business Goal to ensure that, when expansion planning is triggered, design and construction can be completed to meet regulatory and growth needs in an expeditious, environmentally responsible, and cost effective manner.

Recommendation

- Staff recommends that the Board approve the amendment to the engineering services contract with IDS Group for additional consulting services for the RP-4 Disinfection Facility Improvements, Project No. EN14018, for the not-to-exceed amount of \$105,110.
- Staff recommends that the Board authorize the General Manager to execute the consultant contract amendment.

Questions?



**INFORMATION
ITEM
2A**



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

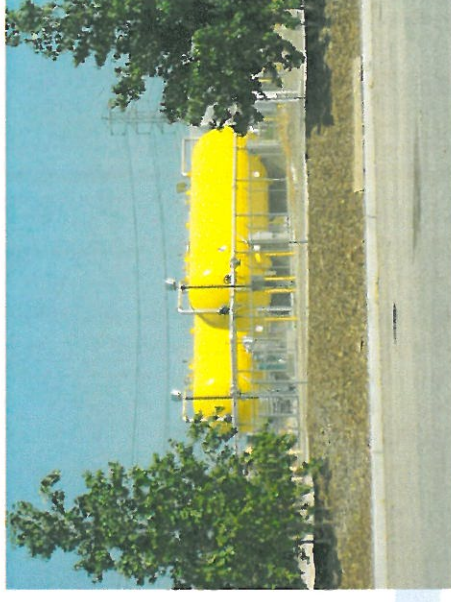
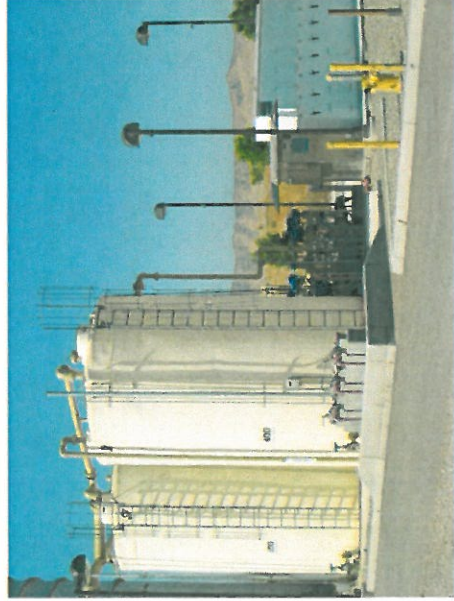
Inland Bioenergy Project Update

March 18, 2015

Sylvie Lee
Manager of Planning &
Environmental Compliance

Lease Overview

- Lessee: Inland Bioenergy, LLC
- Lease Terms = 10/1/2011 – 9/30/2021
- Current Rent = \$51,800/month
- Sale of Electricity
 - Phase 1 = 95% of SCE Rate
 - Phase 2 = 89% of SCE Rate



Facility Upgrades Completed

- Mixing and Digester Upgrades
- Tested DODA food waste processing
- Compressor Repair
- New Centrifuge
- Engine Start-up



Current Operations

- Food Waste = 5 - 7 Loads/Day
- Biogas Production \cong 250,000 cft/day
- Electricity Generation
 - SCE Interconnection Agreement (1/14/2015)



Next Steps

- Screening Upgrades
 - Automation REEP Engines Operations
 - Gas Production Increase
 - Post Combustion System Installation
 - Biogas to CNG Pilot Demonstration
- 



Inland Empire Utilities Agency

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Questions?

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Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

RECYCLED WATER UPDATE

Fiscal Year 14/15 Update

March 2015

REGIONAL RECYCLED WATER SYSTEM

Recycled Water
Capital Projects
February, 2015

Legend Key

Pipeline Status

- Design
- Bid
- Construction
- Operating

Pump Station Status

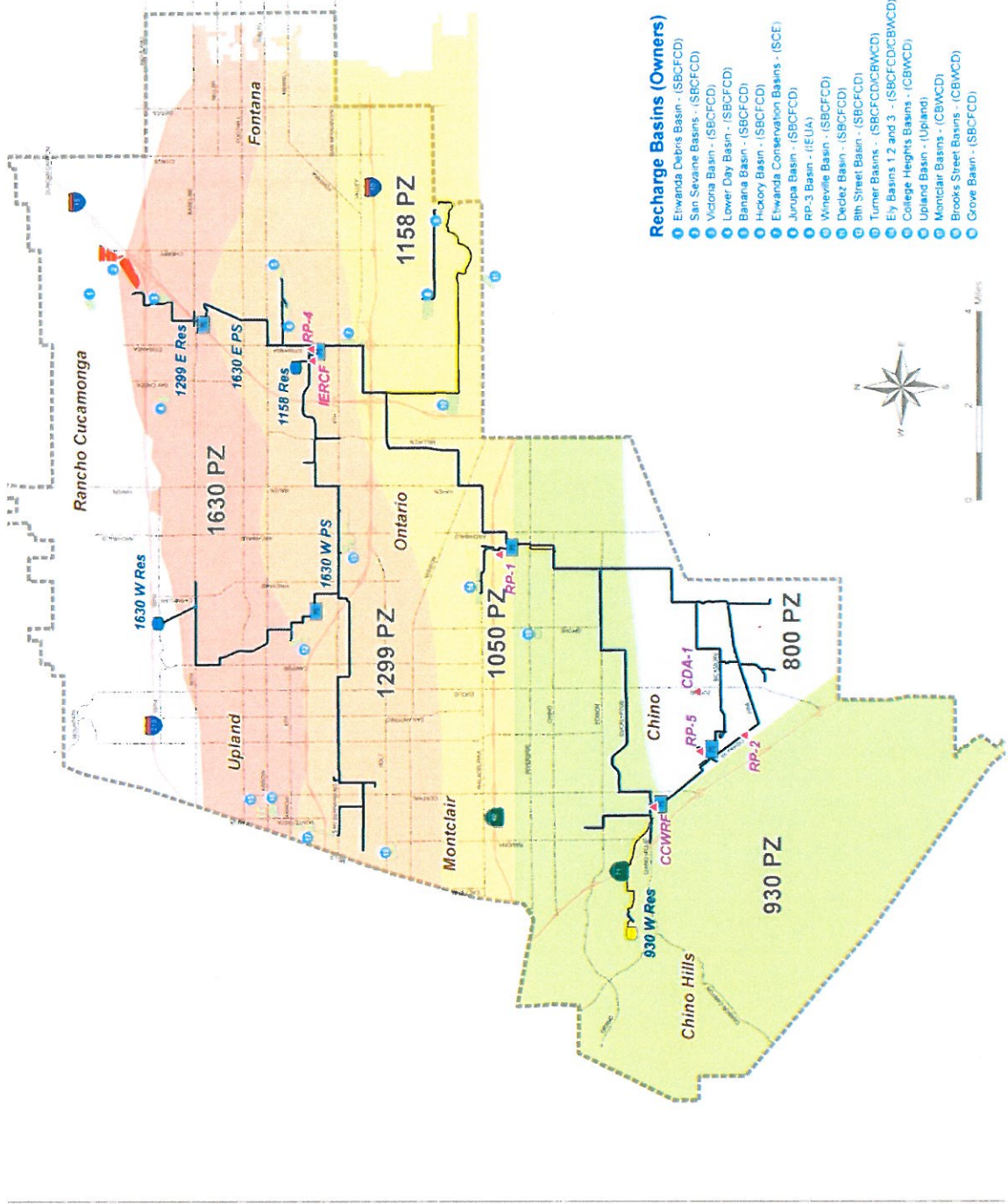
- Design
- Bid
- Construction
- Operating

Reservoirs Status

- Design
- Bid
- Construction
- Operating

Recharge Improvement Status

- Design
- Bid
- Construction
- Operating



Recharge Basins (Owners)

- Elwanda Debris Basin - (SBCFCD)
- San Sevaine Basins - (SBCFCD)
- Victoria Basin - (SBCFCD)
- Lower Day Basin - (SBCFCD)
- Banana Basin - (SBCFCD)
- Hickory Basin - (SBCFCD)
- Elwanda Conservation Basins - (SCE)
- Jurupa Basin - (SBCFCD)
- Wineville Basin - (SBCFCD)
- Dedlez Basin - (SBCFCD)
- 8th Street Basin - (SBCFCD)
- Turner Basins - (SBCFCD/CBWCDC)
- Ely Basins 1, 2 and 3 - (SBCFCD/CBWCDC)
- College Heights Basins - (CBWCDC)
- Upland Basin - (Upland)
- Montclair Basins - (CBWCDC)
- Brooks Street Basins - (CBWCDC)
- Grove Basin - (SBCFCD)

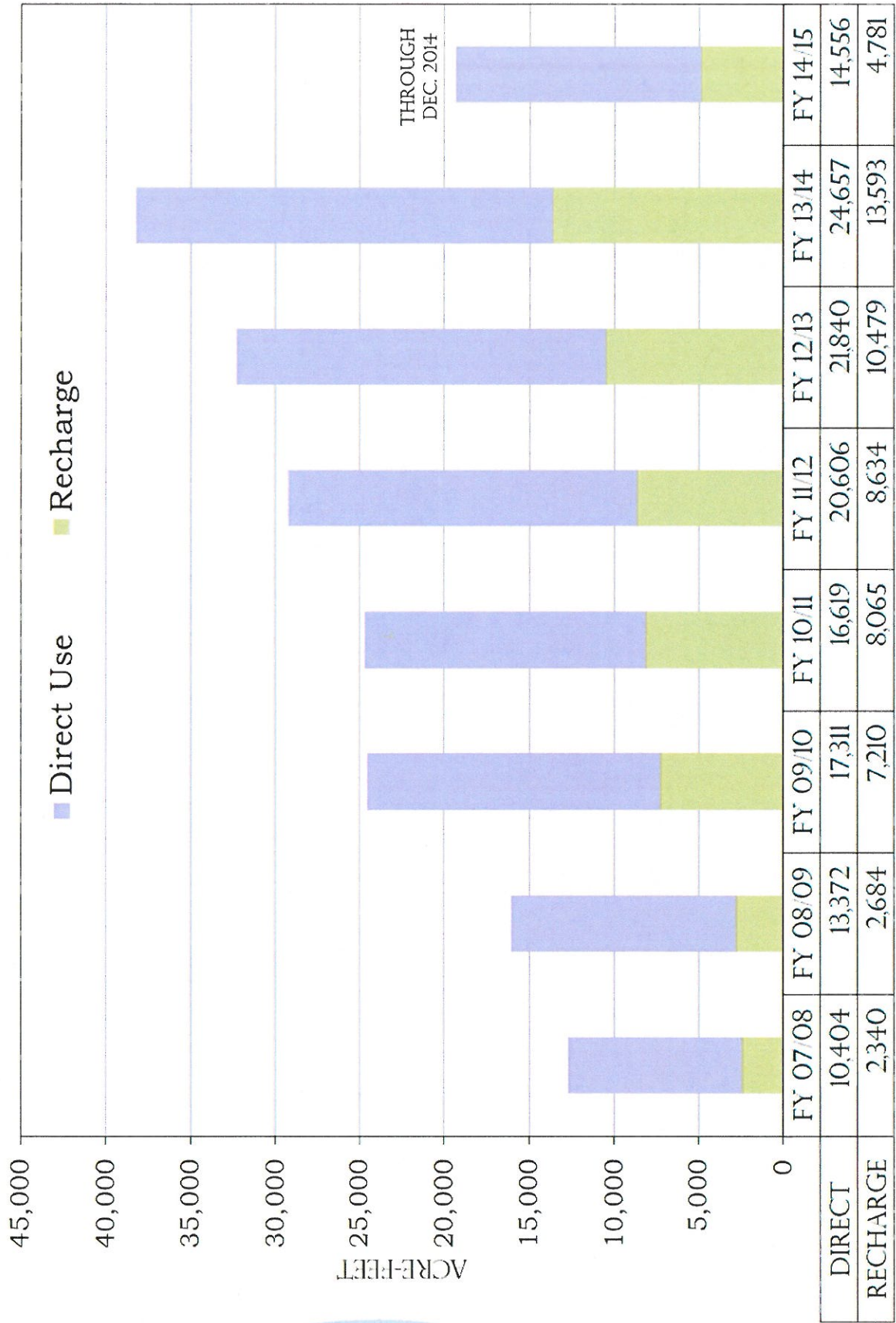


STATUS UPDATE CAPITAL PROJECTS SUMMARY

Project	Design	Construction	Project Cost	Status	Demand AFY
Southern Area Regional Facilities 930 Zone Reservoir and Pipeline	Complete	Complete	\$31,000,000	Start-Up Testing	100—500
Central Area Regional Facilities Wineville Extension Pipeline	Complete	Winter 2015	\$28,000,000	Construction	500—3,000
Recharge Master Plan Update San Sevaive Basin Improvements	November 2015	April 2017	6,500,000	Pre-Design	500—4,500



RECYCLED WATER DELIVERIES



FY 2014/15 RW DELIVERIES

THROUGH DECEMBER 2014

AGENCY	PRO RATA SHARE OF REGIONAL FLOW	FY14/15 RW GWR ALLOCATION <i>Through Dec. 2014</i>
Chino	10.67%	472 AF
Chino Hills	9.19%	406 AF
CVWD	24.37%	1,077 AF
Fontana	19.18%	848 AF
Montclair	4.33%	191 AF
Ontario	22.12%	977 AF
Upland	10.14%	448 AF
Subtotal	100.00%	4,419 AF
JCSD Allocation (20% MZ3 RW GWR)		362 AF
Total RW GWR (through Dec. 2014)		4,781 AF
Total RW DEMANDS (through Dec. 2014 includes GWR)		19,337 AF



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

Questions?

INFORMATION

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Engineering and Construction Management Project Updates

March 2015



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

Majid Karim, P.E.,
Acting Manager of Engineering

David Mendez,
Deputy Manager of Construction Management

EN13023 – 930 Zone Recycled Water Pipeline

- Contractor: MNR Construction, Inc.
- Current Contract: \$12.8 M
- Scope of Work: Construct 2.4 miles of 30-inch RW Pipeline
- Current Activities:
 - Demobilization
- Contract Completion: February 2015
- Percent Complete: 99%
- Focus Points:
 - Pressure Testing
 - Cost Reconciliation

Demobilization Activities

2/3/15, 8:24 AM



930 Zone Recycled Water Testing and Commissioning

- IEUA Project Management Staff
 - Initiated Start up and commissioning of 930 Zone system
 - Includes- CCWRF Pump Station, Pipeline and Reservoir
 - Start-up and operational testing plan has been approved
- Current Activities:
 - Beginning March 2, 2015, Final control testing of the 930 Zone operational testing

EN13054 - Montclair Lift Station Upgrades EN11035 - Philadelphia Pump Station Upgrades

- Contractor: GSE Construction
- Current Contract: \$3.25 M
- Scope of Work: Replacement of pumps, valves and upgrade of electrical and control systems
- Current Activities:
 - Montclair – 30 Day test period
 - Philadelphia – Closeout
- Contract Completion: March 2015
- Percent Complete:
 - EN13054 - Montclair Lift Station Upgrades 85%
 - EN11035 - Philadelphia Pump Station Upgrades 96%
- Focus Points:
 - Montclair – Complete testing and Transfer to Operations

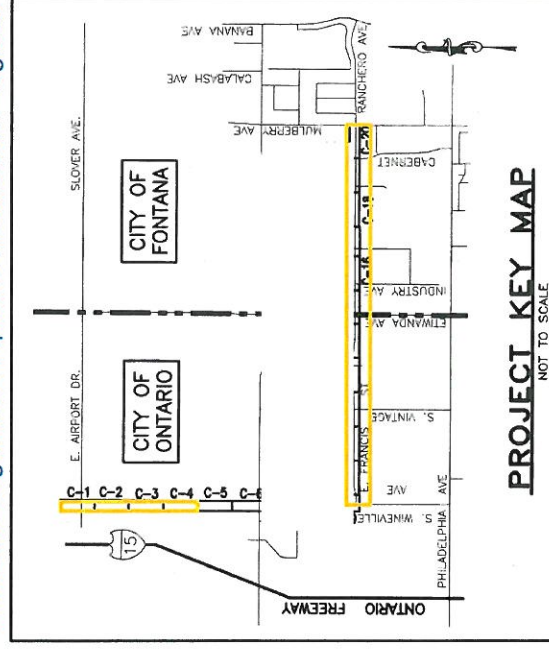
Montclair New Flygt Pumps



EN06025 – Wineville Recycled Water Pipeline Extension Segment A

- Contractor: CCL Contracting, Inc.
- Current Contract: \$10.2 M
- Scope of Work: Construct 2.5 miles of 36-inch RW Pipeline and 1.0 mile of 24-inch RW Pipeline
- Current Activities:
 - Pipe installation on Marlay heading east
 - ~ 2.8 mile of pipe installed (approximately 14,800 feet)
- Contract Completion: July 2015
- Percent Complete: 41%
- Focus Points:
 - Pipeline installation progressing

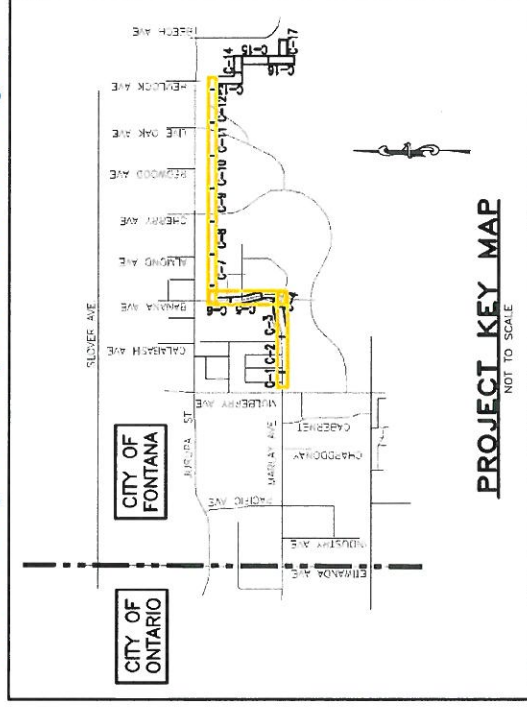
Wineville Segment A Pipeline Installation Progress



EN13045 – Wineville Recycled Water Pipeline Extension Segment B

- Contractor: Mike Bubalo Construction
- Current Contract Value: \$8.9 M
- Scope of Work: Construct 2.8 miles of 36-inch RW Pipeline
- Current Activities:
 - Installation of appurtenances on Marlay Ave
 - Pipe installation within the SCE Easement
 - Approximately 11,600 ~2.2 mile feet pipe installed
- Contract Completion: July 2015
- Percent Complete: 30%
- Focus Points:
 - Coordination with FWC and City of Fontana is ongoing
 - Monitoring Ameron pipe production and deliveries

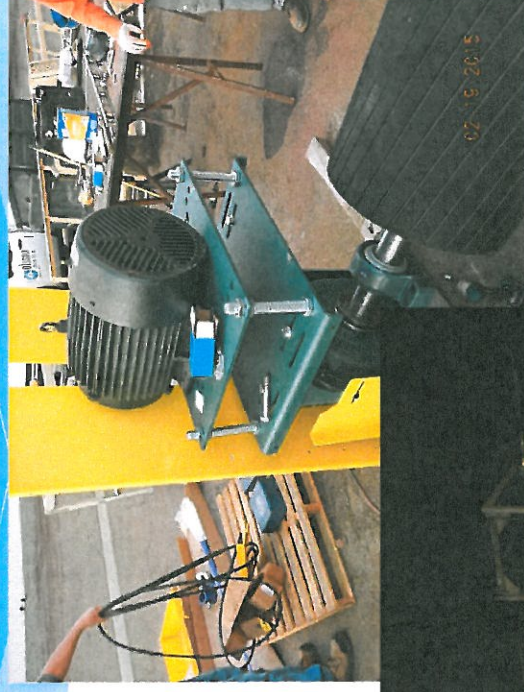
Wineville Segment B Pipeline Installation Progress



RA11004 – IERCF Conveyance Improvements

- Contractor: Olsson Construction
- Current Contract Value: \$3.5 M
- Scope of Work: Belt conveyor modifications
- Current Activities:
 - Functional observation
 - 108 Hour Shutdown prep work
 - Loop checks
- Contract Completion: March 2015
- Percent Complete: 90%
- Focus Points:
 - 108 Hour Shutdown

Head-box Conversion



Feeding Hopper, Electromagnet

RA15001 – IERCF Baghouse and Dust Collection System Enhancements

- Contractor: Baghouse and Industrial Sheet Metal Services
- Current Contract: \$931,000
- Scope of Work: Refurbish dust collection system
- Current activities:
 - Project Punch list
 - Project start up and training
- Contract Completion:
 - April 2015
 - Currently on time
- Percent Complete: 90%
- Focus Points:
 - Project Close-out

Main Dust Collecting Header



EN09021 – RP-4 Headworks Retrofits

- Contractor: J.R. Filanc Construction
- Current Contract: \$1,162,000
- Scope of Work: Install new JWCE Fine Screens, washer/compactor and fiberglass reinforced plastic headworks building
- Current Activities:
 - Testing and Commissioning of the Primary (east) find screen and washer/compactor.
 - Auto sequencing and final loop checks are in process
- Contract Completion: June 2015
- Percent Complete: 63%
- Focus Point:
 - Existing conveyor integration and SCADA

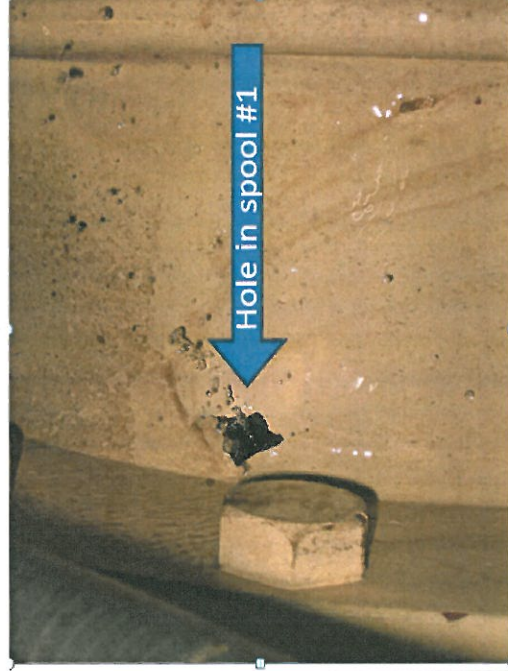
Bar Screen Installation



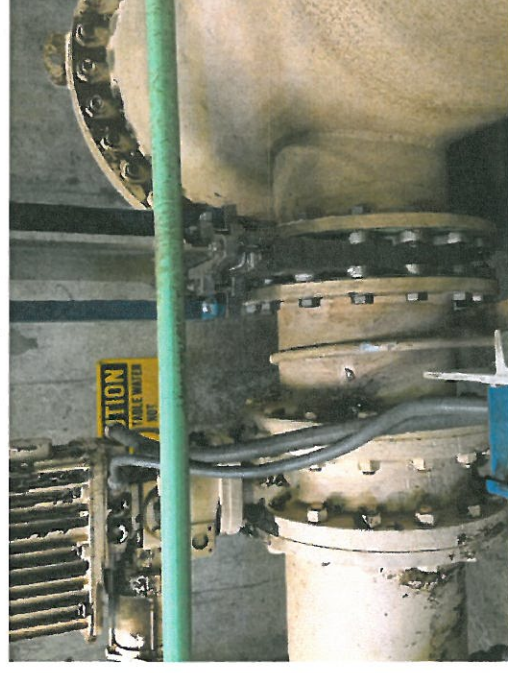
Emergency Projects

- CCWRF RAS Pump Station: Estimated Cost \$15,500
- 16" pipe wall failure repaired with temporary weld repair
- (2) New 16" pipe spools in fabrication
- Installation of pipe spools pending

Failed Pipe Spool



Temporary Repair



Questions?

