

**AGENDA**

**IRVINE RANCH WATER DISTRICT  
BOARD OF DIRECTORS  
REGULAR MEETING**

**August 24, 2015**

**PLEDGE OF ALLEGIANCE**

**CALL TO ORDER**

5:00 P.M., Board Room, District Office  
15600 Sand Canyon Avenue, Irvine, California

**ROLL CALL**

Directors Matheis, Reinhart, Swan, Withers and President LaMar

**NOTICE**

If you wish to address the Board on any item, including Consent Calendar items, please file your name with the Secretary. Forms are provided on the lobby table. Remarks are limited to five minutes per speaker on each subject. Consent Calendar items will be acted upon by one motion, without discussion, unless a request is made for specific items to be removed from the Calendar for separate action.

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**COMMUNICATIONS TO THE BOARD**

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1. A. Written:

B. Oral:

2. **ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

Recommendation: Determine that the need to discuss and/or take immediate action on item(s) introduced come to the attention of the District subsequent to the agenda being posted.

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**PRESENTATION**

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3. **CALIFORNIA LANDSCAPE CONTRACTORS ASSOCIATION 2015 TROPHY AWARD FOR DROUGHT TOLERANT LANDSCAPING AT IRWD**

Mr. Victor Zamora and Mr. Les Fields of Tropical Plaza, one of the District's landscaping contractors, will present two 2015 Trophy Awards from the California Landscape Contractors Association recognizing IRWD's use of drought tolerant landscaping at both the Operation Center's Entrance Island and the Sand Canyon Headquarters Demonstration Garden.

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**PUBLIC HEARING**

**Next Resolution No. 2015-23**

4. ADOPTION OF REVISED RULES AND REGULATIONS

Proceedings:

1. Open the Hearing.
2. Inquire of the Secretary how the hearing was noticed.
3. Receive and file the affidavit of posting and proof of publication.
4. Inquire of the Secretary if there have been any written communications.
5. Request legal counsel to describe the nature of the proceedings.
6. Request the Executive Director of Finance to provide a report.
7. Hear any person who wishes to speak concerning the adoption of revised Rules and Regulations.
8. Inquire if the Board has any comments or questions.
9. Close the Hearing.
10. The second reading be read by title only, and adopt a resolution by title.

Reso No. 2015-

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**CONSENT CALENDAR**

**Next Resolution No. 2015-23**

**Items 5 through 11**

5. MINUTES OF BOARD MEETING

Recommendation: That the minutes of the August 10, 2015 Regular Board Meeting be approved as presented.

6. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Steve LaMar, Mary Aileen Matheis, Peer Swan, Doug Reinhart, and John Withers.

7. JULY 2015 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate Swap Summary for July 2015, and Disclosure Report of reimbursements to Board members and staff; approve the July 2015 summary of payroll ACH payments in the total amount of \$1,523,262 and approve the July 2015 Accounts Payable Disbursement Summary of warrants 359851 through 360502, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$30,785,659.



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**ACTION CALENDAR (CONTINUED)**

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13. **SYPHON RESERVOIR DRY LAKEBED GEOTECHNICAL EXPLORATION**

Recommendation: That the Board approve an Expenditure Authorization in the amount of \$150,000 for geotechnical explorations and survey services for the Syphon Reservoir Expansion, Project 30382 (3808).

14. **IRVINE LAKE PIPELINE NORTH CONVERSION RESERVOIR VARIANCE**

Recommendation: That the Board authorize the General Manager to execute Variance No. 2 in the amount of \$198,126 with Kleinfelder to provide additional efforts required to complete the preliminary design report and the final design for the Irvine Lake Pipeline North Conversion Reservoir, Project 30496 (5407).

15. **PIEZOMETER AUTOMATION CONSTRUCTION AWARD**

Recommendation: That the Board authorize the General Manager to execute a construction contract with Halcyon Electric in the amount of \$110,000 for the Piezometer Automation, project 30572 (6298).

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**OTHER BUSINESS**

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Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

- 16. A. General Manager's Report
- B. Directors' Comments
- C. Adjourn

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**Availability of agenda materials:** Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office. The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

August 24, 2015  
Prepared by: L. Lewis/C. Smithson  
Submitted by: Cheryl Clary  
Approved by: Paul A. Cook 

## PUBLIC HEARING

### CHANGES TO EXISTING RULES AND REGULATIONS SECOND READING AND ADOPTION

#### SUMMARY:

Staff has compiled proposed changes to the District's Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service. The most significant change affects the billing of nonresidential sewer service customers, including the addition of criteria for an alternative service charge based on measured flows for industrial customers. The proposed changes also include greater clarity for bill adjustments along with other wording revisions. Staff recommends that the resolution be introduced for First Reading and read by title only, that further reading of the resolution be waived, and that the Secretary be directed to place the resolution on the agenda for the August 14, 2015 meeting of the Board of Directors for a second reading, hearing and adoption.

#### OUTLINE OF PROCEEDINGS

- President: Declare this to be the time and place for the hearing on the Resolution.
- President: Request the Secretary to report the manner by which the Notice of Hearing was given.
- Secretary: The Notice of this hearing was published in the Orange County Register on August 1, 2015 and on August 8, 2015. The notice was also posted in the District office on July 29, 2015. The Secretary presents an Affidavit of Posting and Proof of Publication for the Board to receive and file.
- Board: RECOMMENDED MOTION: RECEIVE AND FILE THE AFFIDAVIT OF POSTING THE PROOF OF PUBLICATION PRESENTED BY THE SECRETARY.
- President: Inquire of the Secretary whether there have been any written communications.
- Secretary: Respond.
- President: Request a report from the Executive Director of Finance.
- Exec. Dir. of Finance: Report and describe the proposed revisions and indicate that the clarifications and revisions to the Rules and Regulations are summarized in Exhibit "B".
- President: Inquire whether anyone is present who wishes to address the Board concerning the amended Resolution.

President: Inquire whether there are any comments or questions from members of the Board of Directors.

RECOMMENDATION:

THAT THE HEARING BE CLOSED, THAT THE RESOLUTION BE READ BY TITLE ONLY, THAT FURTHER READING OF THE RESOLUTION BE WAIVED.

Secretary: Read the title of the proposed Resolution:

RESOLUTION NO. 2015-

RESOLUTION RESCINDING RESOLUTION NO. 2014-50  
AND ESTABLISHING REVISED RULES AND REGULATIONS  
OF THE IRVINE RANCH WATER DISTRICT FOR WATER,  
SEWER, RECYCLED WATER, AND NATURAL  
TREATMENT SYSTEM SERVICE AND EXHIBIT "A" THERETO.

BACKGROUND:

From time to time, staff proposes changes to IRWD's Rules and Regulations. The proposed changes are limited to Sections 7 and 12, Use of District Sewerage Facilities and Service Charges, respectively, as well as the addition of an exhibit to the Rules and Regulations that identify maximum allowable local concentration discharge limits for certain constituents. Recommended changes are included in the attached redlined document provided in Exhibit "A" and will be adopted by resolution as provided in Exhibit "B".

Section 7 – Use of District Sewerage Facilities:

The recommended changes to Section 7 can be found throughout the section including several minor adjustments to existing definitions and several small textual edits. The primary change – and the most significant – provides criteria for use of an Alternative Service Charge included in the Rates and Charges for industrial customers, currently applied to only one District customer. Section 7.5.2 was added to the Rules and Regulations document to provide criteria for both District acceptance of such a request and deciding factors for disallowing or terminating use of the Alternative Service Charge.

Additionally, an exhibit will be added to the Rules and Regulations that will contain a table of the District's Maximum Allowable Local Discharge Concentration Limits on certain constituents. The Local Limits are also contained in Section 2.2 of the Schedule of Rates and Charges, and will be moved to a separate exhibit to the Rules and Regulations so that any future modification to the local limits can be made without needing to modify the Schedule of Rates and Charges.

Section 12 – Service Charges:

The recommended changes can be found throughout Section 12 and are primarily small textual edits. The most significant change is included in section 12.7.5 providing for additional bill adjustments at the District’s discretion for leak repairs due to extraneous circumstances that prolong fixing a leak.

The District’s legal counsel has reviewed the proposed changes.

FISCAL IMPACTS:

The program is currently being administered, and the proposed revisions are not expected to result in a significant fiscal impact to IRWD.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act (CEQA), Code of Regulations, Title 14, Chapter 3, Section 15378.

LIST OF EXHIBITS:

- Exhibit “A” – Redlined Proposed Rules and Regulations
- Exhibit “B” – Resolution Establishing Revised Rules and Regulations

Exhibit "A"

**Redlined Version**

**RULES AND REGULATIONS  
FOR WATER, SEWER,  
RECYCLED WATER,  
AND NATURAL TREATMENT SYSTEM SERVICE**

**Irvine Ranch Water District  
Orange County, California**

IRVINE RANCH WATER DISTRICT

RULES AND REGULATIONS FOR WATER, SEWER, RECYCLED WATER AND NATURAL  
TREATMENT SYSTEM SERVICE

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**Exhibits**

**A. Maps**

A.1 Water Improvement Districts (Separate Document Not Attached)

A.2 Sewer Improvement Districts (Separate Document Not Attached)

A.3 Cities within IRWD Boundaries (Separate Document Not Attached)

**B. Rates and Charges for Water, Sewer, and Recycled Water Service (Separate Document)**

**C. Maximum Allowable Local Limits (Separate Document- Attached)**

## IRVINE RANCH WATER DISTRICT

### Section I: GENERAL

Water, sewer, recycled water, and natural treatment system service by the Irvine Ranch Water District, subject to the availability of facilities, adequate capacity in facilities, or funds or financing for the construction thereof, or all of the foregoing, is available on the following terms and conditions including all charges hereinafter established and provided for. Service on the basis herein set forth is intended to be available to each member of the public or each segment of the public on the same basis to the extent applicants, owners, or customers are similarly situated and desire to be served and may be served in an equal and comparable manner.

The general areas presently included within the boundaries of the District and the existing Improvement Districts are as established by the Board from time to time and depicted on Exhibits A-1 and A-2 to these Rules and Regulations. Exhibits A-1 and A-2 hereto are by this reference incorporated herein and may be changed by the District from time to time. In such instances, revised Exhibits A-1 and A-2 or portions thereof will be substituted to these Rules and Regulations. Such Improvement Districts have been formed for the purpose of funding the construction and acquisition of facilities and capacities to provide water, sewer, and recycled water service. It is contemplated that additional Improvement Districts will be formed, as deemed proper by the Board, at a later date or that additional areas may be annexed, as determined by the Board, to the existing Improvement Districts or any Improvement Districts subsequently established within the District. Contracts with the District may also provide for the funding of construction and acquisition of facilities for water, sewer, recycled water or natural treatment system service. Such contracts require the construction of necessary facilities or the payment of the capital cost and annual cost of operating and maintaining such facilities.

The plans for facilities to be constructed within the District and each of the existing and future Improvement Districts are intended to be an integrated part of the District's Water Resources Master Plan, Sewer Master Plan, Natural Treatment System Master Plan, Sub-Area Master Plans; and addenda thereto, which are approved from time to time, hereinafter in some instances referred collectively to as "the Plan."

As it is the mandate of the State of California to effect conservation of water resources whenever possible, the Plan is also directed toward collecting, treating, and reclaiming sewage and wastewater and beneficially reusing the resulting recycled water.

It is the intent of the District that such recycled water be used in a manner that is in compliance with any and all applicable Federal, State, and local statutes, ordinances, regulations, and other requirements

If recycled water service is determined by the District to be feasible in accordance with Section 4.12, the applicant, owner or customer will be required to utilize recycled water service.

It is also the intent of the District, in cooperation with the County and Cities, to provide service in the treatment of urban runoff through the operation, maintenance and monitoring of constructed water quality wetlands and bio retention cells, known as Natural Treatment Systems. Natural treatment systems shall be sited in various locations in the District, as outlined in the Natural Treatment System Master Plan or as determined by the District. Use of the natural treatment system for urban runoff treatment shall be subject to the requirements of these Rules and Regulations. The level of treatment provided shall be at the discretion of the District. Property owners and developers will be

## IRVINE RANCH WATER DISTRICT

responsible for any urban runoff minimization or other best management practices that may be required by the County or Cities, notwithstanding the operation of the District's natural treatment systems.

The District constructs the facilities needed in concert with environmental and land use decisions. The District neither determines nor intends to determine or precipitate land use decisions or the accomplishment of any plans of development of various owners of undeveloped property within the District.

In most instances, the sewer service is available as herein provided only where the District is assured to its satisfaction that in perpetuity it will also be providing water service to the applicant, customer, or property owner or the successor thereto for which sewer service is desired.

Requirements set forth in these Rules and Regulations, including but not limited to applicable rates and charges, may be modified by special contract where, in the opinion of the district, unique circumstances exist.

## IRVINE RANCH WATER DISTRICT

### Section 2: DEFINITIONS

For the purpose of these Rules and Regulations, the following terms, phrases, words, and their derivations shall have the meaning given below. When not inconsistent with the context, words used in the present tense include the future, words in the plural include the singular number, and words in the singular include the plural number. The word "shall" is always mandatory and not merely directory.

- (1) AIR-GAP SEPARATION shall mean a physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, and in no case less than one inch.
- (2) APPLICANT shall mean any person, firm, corporation, association, or agency who desires to obtain water, sewer, recycled water or natural treatment system service from the District.
- (3) APPLICATION RATE shall mean the rate at which irrigation water, expressed in inches per hour, is applied to a DESIGN AREA.
- (4) APPROVED CHECK VALVE shall mean a check valve that seats readily and completely. It must be carefully machined to have free moving parts and assured water tightness. The face of the closure element and valve seat must be bronze, composition, or other non-corrodible material that will seat tightly under all prevailing conditions of field use. Pins and bushings shall be of bronze or other non-corrodible, non-sticking material, machined for easy, dependable operation. The closure element (e.g., clapper) shall be internally weighted or otherwise internally equipped to promote rapid and positive closure in all sizes where this feature is obtainable. \*
- (5) APPROVED DOUBLE CHECK VALVE ASSEMBLY shall mean an assembly of at least two independently acting approved check valves including tightly closing shut-off valves on each side of the check valve assembly and suitable leak-detector drains plus connections available for testing the water tightness of each check valve. \*
- (6) APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE shall mean a device incorporating two or more check valves and an automatically operating differential relief valve located between the two checks, two shut-off valves, and equipped with necessary appurtenances for testing. The device shall operate to maintain the pressure in the zone between two check valves, less than the pressure on the District's water supply side of the device. At cessation of normal flow, the pressure between the check valves shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve shall operate to maintain this reduced pressure by

IRVINE RANCH WATER DISTRICT

\* Devices used within the District shall be included on the list of devices approved by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California.

discharging to the atmosphere. When the inlet pressure is two pounds per square inch or less, the relief valve shall be open to the atmosphere thereby providing an air gap in the device. To be approved, these devices must be readily accessible for maintenance and testing, and installed in a location where no part of the valve will be submerged. \*

- (7) **AUTOMATIC SYSTEM** shall mean with reference to landscape irrigation systems; automatic controllers, valves, and associated equipment required for the programming of effective water application rates when using recycled water.
- (8) **AUXILIARY WATER SUPPLY** shall mean any water supply on or available to the premises other than the District's potable water and recycled water supplies.
- (9) **BACKWATER DEVICE** shall mean a unit that permits flow in lines normally under open channel flow conditions, such as sewers, to occur in one direction only by mechanically blocking the flow or by providing a pressure relief opening such that flow may not occur in the uphill direction, as approved by the District and local governing agencies.
- (10) **BUILDING SEWER** - see "UPPER LATERAL."
- (11) **BOARD** shall mean the Board of Directors of the District.
- (12) **COMMODITY CHARGE** shall mean a charge imposed by the District for all water used by general metered, temporary, and agricultural customers; whether such water used is actually metered or only estimated.
- (13) **CONNECTION FEE** shall mean a charge imposed by the District for obtaining water, sewer, recycled water or natural treatment system service from the District, including charges for capacity. The charge in no event shall be less than or on conditions other than as specified by the District or as required by any and all applicable Federal, State, or local statutes, regulations, ordinances, contracts, or other requirements. Connection fees are set forth in Exhibit B to these Rules and Regulations.
- (14) **CONSTRUCTION MANUAL** shall mean the District's "Construction Manual for the Construction of Water, Sewer, and Recycled Water Facilities," as amended from time to time.
- (15) **CONTINGENCY PLAN** is the Water Shortage Contingency Plan adopted by the District, as amended from time to time.
- (16) **CROSS CONNECTION** shall mean any unprotected connection between any part of a water system used or intended to supply water for drinking purposes and any source or system containing water or substance that is

IRVINE RANCH WATER DISTRICT

not or cannot be approved as safe, wholesome, and potable for human consumption.

* Devices used within the District shall be included on the list of devices approved by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California.
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- (17) CUSTOMER shall mean any person, firm, corporation, association, or agency who uses or desires to obtain water, sewer, recycled water and/or natural treatment system service from the District.
- (18) DESIGN AREA shall mean the specific land area or facilities designated to be served through on-site facilities when used in reference to recycled water systems.
- (19) DISTRICT shall mean the Irvine Ranch Water District.
- (20) IMPROVEMENT DISTRICT shall mean any of the Improvement Districts of the District existing or hereafter established.
- (21) INFILTRATION RATE shall mean the rate at which the soil will accept water, expressed in inches per hour, during the irrigation period.
- (22) IRRIGATION SYSTEM shall mean all equipment and materials required for applying irrigation water to the design area from the service connection including all piping, valves, sprinkler heads, and appurtenances.
- (23) LATERAL CONNECTION shall mean the point of connection of the customer's upper lateral with the lower lateral of the District.
- (24) LOWER LATERAL shall mean the District's facility between its collection system and the lateral connection, which shall normally be the exterior boundary of the easement or the street or access road right-of-way.
- (25) LOWER LATERAL CHARGE shall mean a charge imposed by the District for installation by the District of a lower lateral.
- (26) MANAGER or General Manager shall mean the General Manager of the District or the person authorized by the Board or the General Manager to act for him.
- (27) NATURAL TREATMENT SYSTEM shall mean the network of constructed water quality wetlands and bio retention cells providing treatment of urban runoff. Natural treatment systems are not flood control facilities.
- (28) NON-POTABLE WATER shall mean that water that has not been treated for human consumption in conformance with the standards referred to in the definition of POTABLE WATER, below, such as untreated imported water received from the Metropolitan Water District of Southern

## IRVINE RANCH WATER DISTRICT

California, non-potable well water, and water collected in the District's reservoirs from natural runoff.

- (29) **NON-RECYCLABLE SEWAGE** shall mean any and all liquid or solid waste substance other than recyclable sewage emanating from within the District, including but not limited to liquid or solid waste substance from any production, manufacturing, or processing operation. Non-recyclable sewage shall include any liquid or solid substance that cannot be treated or disposed of by the then-existing facilities of the District's Reclamation Plant for the treatment or disposal of sewage by reason of the design thereof, applicable waste discharge or other requirements, actual or possible increased operation and maintenance costs, or possible damage to the District's facilities.
- (30) **NON-RECYCLABLE WASTEWATER SEWERAGE FACILITIES** shall mean facilities used in the collection of wastewater that is not to be treated for direct beneficial use or a controlled use that otherwise would not occur. Such non-recyclable wastewater sewerage facilities shall generally be limited to industrial and commercial wastes that would have a detrimental effect on the treatment processes of the reclamation plant and the resultant recycled water.
- (31) **NTS DESIGN GUIDELINES** shall mean the District's "Natural Treatment System Design Guidelines," as amended from time to time
- (32) **OFFSITE FACILITIES** shall mean facilities under the control of the District including but not limited to water, sewer, and recycled water pipelines, reservoirs, pumping stations, fire hydrants, manholes, valves, connections, supply interties, treatment facilities, natural treatment systems and other appurtenances and property up to the point of connection with the customer's facilities.
- (33) **ONSITE FACILITIES** shall mean facilities under the control of the applicant, owner, or customer including but not limited to residential, commercial, and industrial building water and sewerage systems, landscape irrigation systems, and agricultural irrigation systems. For water and recycled water service, the onsite facilities shall be those downstream of the service connection, which shall normally be the downstream end of the meter tailpiece.
- (34) **ONSITE RECYCLED WATER SUPERVISOR** shall mean a qualified person designated by a recycled water user and approved by the District. This person shall be knowledgeable in the construction and operation of onsite recycled water and irrigation systems and in the application of the guidelines, criteria, standards, and rules and regulations for recycled water.
- (35) **PERMIT** shall mean processed and approved application to and agreement with the District for service.
- (36) **PERSON** is any individual, firm, partnership, association, company, or organization of any kind.

## IRVINE RANCH WATER DISTRICT

- (37) PLAN shall refer to the plans for facilities to be constructed within the District and each of the existing and future Improvement Districts are intended to be an integrated part of the District's Water Resources Master Plan, Sewer Master Plan, Natural Treatment System Master Plan, Sub-Area Master Plans; and addenda thereto, which are approved from time to time.
- (38) POTABLE WATER shall mean that water furnished to the customer which meets applicable local, state and federal standards for drinking water.
- (39) PRETREATMENT shall mean treatment that the district may require prior to permitting discharge of sewage into any District sewerage facility if necessary to insure compliance by the District with these Rules and Regulations and any and all applicable Federal, State, or local statutes, ordinances, regulations, contracts, or all of the foregoing, individually or collectively, or if determined by the District to be necessary to protect the facilities of the District from any possible present or future damage.
- (40) PROCEDURES GUIDE shall mean the District's "Procedural Guidelines and General Design Requirements," as amended from time to time.
- (41) PROPERTY OWNER or OWNER shall mean the holder of legal title, contract purchaser, or lessee under a lease with an unexpired term of more than one (1) year jointly with the holder of title.
- (42) RECLAMATION PLANT shall mean District treatment facilities that receive and treat wastewater for beneficial uses.
- (43) RECYCLABLE SEWAGE shall mean wastewater that can be treated and recycled by the District's facilities so as to be usable for beneficial purposes.
- (44) RECYCLED WATER shall mean disinfected tertiary recycled water which is produced by the treatment of wastewater by a District reclamation plant and is suitable for direct beneficial uses in accordance with California Administrative Regulations Title 22, Division 4, Chapter 3.
- (45) RECYCLED WATER DISTRIBUTION SYSTEM shall mean individually or collectively any recycled water facility or facilities which are installed by the District or financed, constructed, and dedicated to the District by an applicant, owner, or customer or which are the result of local initiative and financing in tracts and subdivisions, as well as commercial or industrial developments, and which are typically less than 6" in diameter. The District shall determine what facilities are part of a distribution system from time to time as necessary. The District's determination in this regard shall be final and conclusive.
- (46) RECYCLED WATER FACILITIES shall mean facilities used in the storage, pumping, and conveyance of recycled water. The term recycled water facilities may be used synonymously with the term irrigation water facilities in the context of references to the District's irrigation water system master plan.

IRVINE RANCH WATER DISTRICT

- (47) RECYCLED WATER SERVICE CONNECTION shall mean the point of connection of the customer's recycled water line with the recycled water service line of the District, which shall normally be the downstream end of the recycled water meter tailpiece.
- (48) RECYCLED WATER SERVICE LINE shall mean the District's facility between its recycled water distribution system and the recycled water service connection.
- (49) RECYCLED WATER SERVICE LINE CHARGE shall mean a charge imposed by the District for installation by the District of recycled water meters and service lines.
- (50) RECYCLED WATER TRANSMISSION MAINS shall mean recycled water lines and appurtenances typically 6" and larger purchased or constructed by the District with bond proceeds and/or capacity charges or those constructed by an applicant, owner, or customer subject in whole or in part to reimbursement. The District shall determine what facilities are recycled water transmission mains from time to time as necessary based on the currently adopted master plan and the terms and provisions of any reimbursement agreements. The District's determination in regard to these matters shall be final and conclusive.
- (51) RECORD DRAWINGS shall mean drawings that correctly show the completed facilities as constructed or modified (as-built).
- (52) RULES AND REGULATIONS shall mean these "Rules and Regulations for Water, Sewer, Recycled Water and Natural Treatment System Service," as amended from time to time.
- (53) SECURITY DEPOSIT shall mean monies required to be deposited with the District for the purpose of guaranteeing payment of monthly or bimonthly utility bills rendered for water, sewer, recycled water or natural treatment system service.
- (54) SELF-REGENERATIVE WATER SOFTENER shall mean a unit that in removing minerals from water produces a waste containing minerals in greater amounts than those in the influent water.
- (55) SEWER COLLECTION SYSTEM shall mean individually or collectively any sewer facilities which are financed, constructed, and dedicated to the District by an applicant, owner, or customer or which are the result of local initiative and financing in tracts and subdivisions, as well as commercial or industrial developments, and which are typically less than 12" in diameter. Sewer collection systems shall include dry sewers installed by developers prior to construction of trunk sewers. The District shall determine what facilities are part of a collection system from time to time as necessary. The District's determination in this regard shall be final and conclusive.
- (56) SEWER [SEWERAGE] FACILITIES shall mean any facilities used in the conveyance, pumping, and treatment of wastewater.

## IRVINE RANCH WATER DISTRICT

- (57) **SERVICE CHARGE** shall mean a monthly or bimonthly charge established by the District from time to time for water, sewer, recycled water or natural treatment system service. This charge does not include the commodity charge for the consumption of water or recycled water.
- (58) **SURCHARGE** shall mean a charge imposed by the District for the provision of a special service not normally provided by the District, such as situations involving unusual quantity or quality requirements. This surcharge may include, but is not necessarily limited to, pumping surcharges.
- (59) **TRUNK SEWERS** shall mean sewer lines and appurtenances purchased or constructed by the District with bond proceeds and/or capacity charges or those constructed by an applicant, owner, or customer subject in whole or in part to reimbursement typically larger than 12" in diameter. The District shall determine what facilities are trunk sewers from time to time as necessary based on the currently adopted master plan and the terms and provisions of any reimbursement agreements. The District's determination in regard to these matters shall be final and conclusive.
- (60) **UNAUTHORIZED DISCHARGE** shall mean any release of recycled water that violates the Rules and Regulations or any applicable federal, state, or local statute, regulation, ordinance, contract, or other requirement.
- (61) **UPPER LATERAL** shall mean the line from the lateral connection to the building or improvements of the applicant, owner, or customer
- (62) **URBAN RUNOFF** shall mean dry and wet weather low flow runoff from urban spaces and small storm flow.
- (63) **WASTEWATER** shall mean waste and water, whether treated or untreated, discharged into or permitted to enter a District sewer.
- (64) **WASTEWATER CONSTITUENTS AND CHARACTERISTICS** shall mean the individual chemical, physical, bacteriological, and radiological parameters, including volume and flow rate and such other parameters that serve to define, classify, or measure the quality and quantity of wastewater.
- (65) **WATER** shall mean, in the general usage of these Rules and Regulations, potable water.
- (66) **WATER DISTRIBUTION SYSTEM** shall mean individually or collectively any water facilities which are financed, constructed, and dedicated to the District by an applicant, owner or customer or which are the result of local initiative and financing in tracts and subdivisions, as well as commercial or industrial developments, and which are typically less than 12" in diameter. Water distribution systems shall include all fire hydrants. The District shall determine what facilities are part of a distribution system from time to time as necessary. The District's determination in this regard shall be final and conclusive.
- (67) **WATER FACILITIES** shall mean any facilities used in the treatment, storage, pumping, and conveyance of water.

## IRVINE RANCH WATER DISTRICT

- (68) **WATER SERVICE CONNECTION** shall mean the point of connection of the customer's building water line with the water service line of the District, which shall normally be the downstream end of the water meter tailpiece.
- (69) **WATER SERVICE LINE** shall mean the District's facility between its distribution system and the water service connection.
- (70) **WATER SERVICE LINE CHARGE** shall mean a charge imposed by the District for installation by the District of water meters, service lines, and connections for private fire protection facilities.
- (71) **WATER TRANSMISSION MAINS** shall mean water lines and appurtenances purchased or constructed by the District with bond proceeds and/or capacity charges or those constructed by an applicant, owner, or customer subject in whole or in part to reimbursement typically larger than 12" in diameter. The District shall determine what facilities are water transmission mains from time to time as necessary based on the currently adopted master plan and the terms and provisions of any reimbursement agreements. The District's determination in regard to these matters shall be final and conclusive.

## IRVINE RANCH WATER DISTRICT

### Section 3: AREA SERVED

The Rules and Regulations pertain to water, sewer, recycled water and natural treatment system service to land or improvements, or both, lying within the boundaries of the District, unless specific provision is made by agreement with the District for service outside of such boundaries. If water, sewer, recycled water or natural treatment system facilities and/or capacity do not exist in the immediate area, the applicant, owner, or customer shall provide or finance such facilities and/or capacity. The owner of property outside of a then-existing Improvement District, which property has adequate water, sewer, recycled water and/or natural treatment system facilities and/or capacity or funds therefore, must cause all such facilities and/or capacity or funds to be transferred to the District.

Property not within the District and/or not within an Improvement District, and which is to be provided with service by the District, is subject to annexation to the District and/or Improvement District(s). Annexation to the District and/or Improvement Districts may, in turn, be subject to annexation to other agencies, such as Metropolitan Water District of Southern California, Municipal Water District of Orange County, Orange County Water District and/or Orange County Sanitation District, except as otherwise provided by agreement.

The District, at its discretion, may from time to time contract with an applicant, owner, or customer to initiate and pursue to completion the establishment of an Improvement District and the sale of bonds to provide the funds to construct the District facilities or capacity necessary for service to distribution or collection facilities that are required to be provided by the applicant, owner or customer as a condition of obtaining service from the District.

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### Section 4: GENERAL REQUIREMENTS

#### 4.1 SERVICE CONDITIONS

Water, sewer and natural treatment system service shall be provided by the District only if a permit for such water, sewer and natural treatment system service is obtained in the manner hereinafter provided, unless otherwise determined by the Board. Furthermore, if the District has determined that recycled water shall be provided in accordance with the provisions of Section 4.12, such service shall be provided only if a permit for such recycled water service is obtained in the manner hereinafter provided, unless otherwise provided by the Board.

Water, sewer, recycled water and natural treatment system service shall be available only in accordance with the Rules and Regulations, as well as applicable federal, state, and local statutes, ordinances, regulations, and contracts, and other requirements including, but not by way of limitation, the California Water Code, and other state statutes and regulations imposed by the California Regional Water Quality Control Board - Santa Ana Region, and State and local health departments, as well as the terms of any service agreement and permit issued by the District. Any such permit may be revoked by the District and thereupon all such water, sewer, recycled water and natural treatment system service shall cease in the manner provided for in these Rules and Regulations (see Sections 7 and 14).

##### 4.1.1 WATER SUPPLY SUFFICIENCY

In 2001, the California State Legislature enacted legislation to improve coordination between the water supplier and the city or county during the land use entitlement process for certain large-scale developments, to ensure that projected water supplies will meet the proposed project's water demands in addition to the water supplier's planned demands.

The California statutes enacted by this legislation include Water Code Section 10910 et seq. (the "Assessment Law"), which requires a water supply assessment in conjunction with the California Environmental Quality Act (CEQA) process, and Government Code Section 66473.7 (the "Verification Law"), which requires a water supply verification in conjunction with the tentative map approval process. The Assessment Law applies to subdivisions of more than 500 units and certain other categories of projects defined by the Assessment Law. The Verification Law applies to subdivisions of more than 500 units, subject to specified exemptions. The assessment and verification require a determination to be made by the District, based on the record, whether the District's currently available and under-development water supplies are sufficient to meet the demands of the project and the District's existing and planned uses over a 20-year projection during normal, single-dry and multiple-dry years. The applicant is responsible for completing the process established by the city or county, including required application submittals, to secure a water supply assessment and/ or water supply verification from the District if required for the applicant's project. A water supply assessment or verification does not entitle the project to water service or to any right, priority or allocation in any supply, capacity or facility, or affect the District's obligation to provide service to its customers or potential

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future customers. In order to receive service, the applicant must meet all of the applicable requirements of these Rules and Regulations.

### 4.2 APPLICATION PROCEDURE

- (1) An application for water, sewer, recycled water and natural treatment system service must be made in writing, signed by the applicant, and the owner or customer, if they are not one and the same. The Manager in his discretion may provide an abbreviated form of application for permits when no unusual facts are determined in his discretion to exist. Other than specified above, the form of application shall be furnished by the District.
- (2) An applicant for sewer service may be required to obtain a discharge permit for use of the District's sewerage facilities in addition to the permit required for all applicants for sewer service. The conditions under which the above mentioned additional permit is required are based on quantities and constituents of wastewater discharged into the District's sewerage facilities. Section 7 herein sets forth these requirements. The applicant shall comply with all Federal and State requirements including, but not by way of limitation, any and all requirements of the Environmental Protection Agency and any commitments for reimbursements required by the Environmental Protection Agency in excess of the charges of the District. These requirements are set forth in the Federal Water Pollution Control Act and the Code of Federal Regulations, which by this reference are herein incorporated as though set forth in full.
- (3) The applicant for a water, sewer, recycled water or natural treatment system service permit under these Rules and Regulations must state thereon that he agrees to comply with the requirements of any and all applicable Federal, State, and local statutes, ordinances, regulations and other requirements.

The District may, at its discretion, require specific prior approval of any permit by any Federal, State, or local agency having jurisdiction over or an interest in the operation of the District's facilities.

- (4) Upon receipt of an application, the Manager shall review the application and make such investigation relating thereto as he deems necessary. The Manager may prescribe requirements in writing to the applicant as to the facilities necessary to be constructed, the manner of connection, the financial requirements, and the use of service including the availability of adequate water, sewerage, recycled water and natural treatment system facilities, and in cases of sewer service pretreatment facilities, if necessary, to insure initial and future continued compliance with the District's Rules and Regulations and any other applicable requirements.

Permits for water, sewer, recycled water and natural treatment system service and any connection for service made as provided in the permit issued under these Rules and Regulations pursuant to receipt of an application for such service shall be subject to the following conditions:

## IRVINE RANCH WATER DISTRICT

### 4.3 PERMITS

- (1) The applicant shall adhere to requirements prescribed by these Rules and Regulations and to any additional requirements prescribed by the Manager or by the Board, or both, to insure compliance with the District's Rules and Regulations as to obtaining water, sewer, recycled water and natural treatment system service and as to characteristics, quality, and quantity of recyclable and non-recyclable sewage that the District is willing to receive into its facilities.
- (2) The applicant shall pay the specified fees and charges prior to the issuance of a permit. These charges are as set forth in Exhibit B and the respective portions thereof, which set forth applicable rates and charges of the District. Exhibit B hereto and the rates and charges provided for therein are by this reference incorporated herein and may be changed by the District from time to time. In such instances, a revised Exhibit B or a portion thereof will be substituted to these Rules and Regulations.

In instances where assessment bond proceedings provide facilities normally funded by connection fees or by a developer subject to reimbursement, such assessments shall be paid concurrent with the payment of such connection fees. The Board may defer in its discretion such payment of any such assessment bonds in instances when an interim nonresidential use is to occur.

- (3) By reason of circumstances beyond the control of the District, or in order to protect the facilities of the District, or for the protection of the public health, safety, and welfare of the residents or property owners of the District, service may be terminated under the conditions set forth below:
  - [a] Water, sewer, recycled water and/or natural treatment system service may be terminated on a temporary or permanent basis in the manner provided for in Section 7 or Section 14 herein at any time the applicant's, owner's, or customer's operations do not conform to the applicable requirements, as provided for herein.
  - [b] The District may terminate recycled water service on a temporary basis at any time recycled water at the terminal point of the District's reclamation plant does not meet the requirements of regulatory agencies, including those prescribed by the State of California, Administrative Code, Title 22, Chapter 4. Recycled water service will, in such case, be restored at such time that recycled water at the terminal point of the reclamation plant again meets the requirements of regulatory agencies or at such time that the District supplements the recycled water system from sources other than the reclamation plant.
- (4) The District shall not be liable for any damage by water or recycled water or otherwise resulting from defective plumbing, broken or faulty services, or water or recycled water mains; or resulting from any condition of the water or recycled water itself, or any substance that may be mixed with or be in the water or recycled water as delivered to any customer. All applicants for service connections or water or recycled water service shall be required to accept such conditions of pressure and service as are

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provided by the distribution system at the location of the proposed service connection and to hold the District harmless from all damage arising from low pressure or high pressure conditions or from interruptions of service.

- (5) The District shall not be liable for any damage by sewage or inadequate capacity, from defective plumbing, broken or faulty upper or lower laterals, sewers, or collection systems resulting from any conditions beyond the control of the District or otherwise.

### 4.4 SIZE, LOCATION, AND INSTALLATION OF SERVICE LINE OR LOWER LATERAL

#### 4.4.1 Water and Recycled Water Service Lines

The District reserves the right to determine the size of the water and recycled water service lines, the service connections, and the meters and shall also have the right to determine the kind and size of backflow protection devices for potable water service, in accordance with Section 4.10, and any and all other appurtenances to the service. The water or recycled water service lines shall be installed to a curb line or property line of the customer's property, abutting upon a public street, highway, alley, easement, lane, or road (other than a freeway) in which are installed water and/or recycled water mains of the District.

#### 4.4.2 Lower Lateral and Lateral Connections

The District shall determine and specify in the permit the size, location, and manner of installing the lower lateral. Such design shall be in accordance with the District's Procedures Guide and Construction Manual. If a lower lateral is installed by the applicant, owner, or customer, the lower lateral joints shall remain exposed until they have been inspected and approved by the District. The size, slope, alignment, and materials of construction of the lower lateral and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling of the trench shall conform to the District's Procedures Guide and Construction Manual. The size, slope, alignment, and materials of construction of the upper lateral and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling of the trench shall conform to the applicable plumbing code(s) enacted and enforced by the cities of Irvine, Laguna Beach, Lake Forest, Newport Beach, Orange, Santa Ana, and Tustin, as well as by the County of Orange or its successor.

#### 4.4.3 Natural Treatment System Design

The District reserves the right to give final approval of the design of natural treatment systems by developers. Such design shall be in accordance with the District's Procedures Guide, Construction Manual and NTS Design Guidelines.

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### 4.5 LIMITATIONS ON SERVICE CONNECTIONS:

No permit shall be issued except on the following conditions:

#### 4.5.1 Water Service Connections

- (1) Each residence and/or building under separate ownership must be provided with a single and separate water service connection and water meter except under special conditions as determined by the District. Except as provided below, two or more buildings under one ownership and on the same lot or parcel of land shall be supplied by a single water meter. A separate landscape irrigation meter shall be required for a property under certain conditions described in Section 4.16.
- (2) The District reserves the right to limit the number of buildings, such as apartments or the area of land under one ownership to be supplied by one water service connection and water meter.
- (3) Except for a condominium building, not more than one water meter for domestic or commercial supply shall be installed for one building, except under special conditions as determined by the District.
- (4) A water service connection and water meter shall not be used to supply adjoining property of a different owner, or to supply property of the same owner across a street or alley.
- (5) When property provided with a water service connection and water meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land that it directly or first enters. Additional water mains and/or service lines will be required for all subdivided areas in accordance with these Rules and Regulations.
- (6) All water used on any premises where a meter is installed must pass through the meter. Customers shall be held responsible and charged for all water passing through their meters.
- (7) Every water service shall be equipped with an angle curb stop or wheel valve on the inlet side of the meter; such valve or angle curb stop being intended exclusively for the use of the District in controlling the water supply through the water service line. If the curb stop or wheel valve is damaged by the customer's use to an extent requiring replacement, such replacement shall be at the customer's expense.
- (8) If the customer's rate of consumption results in excessive wear of the meter, or is such that the meter is unable to measure the flow of water accurately, the District may increase the size of the meter and require payment of the actual cost of installing the new meter.

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### 4.5.2 Lower Laterals

- (1) For single family detached unit residential development a separate and independent lower lateral shall be provided for every individual parcel or building under individual ownership.
- (2) For condominium developments the following minimum number of lower laterals shall be provided:
  - [a] Non Stacked: 1 lower lateral per every two units - 4" size
  - [b] 2 Story Stacked: 1 lower lateral per every four units - 6" size
  - [c] Multi-Story: 2 lower laterals per building - 6" size
- (3) For apartment developments the following minimum number of lower laterals shall be provided:

1 lower lateral per building - 6" size
- (4) The District reserves the right to limit the number of buildings or the area of land under one ownership to be connected to one lower lateral.
- (5) When property provided with a lower lateral is subdivided, such lower lateral shall be considered as serving the lot or parcel of land that it directly or first enters. Additional sewers and/or lower laterals may/will be required for all subdivided areas in accordance with these Rules and Regulations.

### 4.5.3 Recycled Water Service Connections

- (1) The District reserves the right to limit the area of land under one ownership to be supplied by one recycled water service connection and recycled water meter.
- (2) A recycled water service connection and recycled water meter shall not be used to supply adjoining property of a different owner.
- (3) When property provided with a recycled water service connection and recycled water meter is subdivided, such connection and meter shall be considered as serving the lot or parcel of land that it directly or first enters. Additional recycled water mains and/or recycled water service lines will be required for all subdivided areas in accordance with these Rules and Regulations.
- (4) All recycled water used on any premises where a meter is installed must pass through the meter. Customers shall be held responsible and charged for all recycled water passing through their meters.
- (5) Every recycled water service line shall be equipped with an angle curb stop or wheel valve on the inlet side of the meter; such valve or angle curb stop being intended exclusively for the use of the

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District in controlling the recycled water supply through the recycled water service line. If the curb stop or wheel valve is damaged by the customer's use to an extent requiring replacement, such replacement shall be at the customer's expense.

### 4.6 RELOCATION OF WATER SERVICE LINE, LOWER LATERAL, OR RECYCLED WATER SERVICE LINE OR FIRE HYDRANT

Should a water service line, lower lateral, or recycled water service line or fire hydrant installed pursuant to the request of the applicant, owner, or customer be of the wrong size or installed at a wrong location; the cost of all changes required shall be paid by the applicant, owner, or customer. All water services, lower laterals, and recycled water services and fire hydrants provided prior to final street improvements shall be considered temporary and the costs for all repairs or changes required to be performed by the District shall be paid by the applicant, owner, or customer.

### 4.7 ILLEGAL CONNECTIONS

No person shall make connection to the District's water, sewer, recycled water or natural treatment system facilities without a permit or except as provided in the permit issued by the District. Specifically, but not by way of limitation as to any connection to the District's sewerage facilities; no roof downspouts, exterior foundation drains, areaway drains, car wash pads not covered by a roof, or other sources of surface runoff or ground water shall be connected to a District sewer facility or to a building sewer or building drain that in turn is connected directly or indirectly to a District sewer facility.

### 4.8 METER TESTING

If a water or recycled water meter fails to register during any period or is known to register inaccurately, the customer shall be charged with an average daily consumption during the same month shown by the reading of the meter when in use and registering accurately. Any customer may demand that the meter through which water or recycled water is being furnished be examined and tested by the District for the purpose of ascertaining whether or not it is correctly registering the amount of water or recycled water being delivered through it. Such demand shall be in writing and shall be accompanied by a deposit equal to the charge for testing as determined by the District.

Upon receipt of such demand and deposit, the District will have the meter examined and tested and, if upon such test the meter shall be found to register over two percent (2%) more water than actually passes through it, the meter shall be properly adjusted or another meter substituted therefore, the deposit shall be returned, and the water or recycled water bill for the current month will be adjusted proportionately. If the meter should be found to register not more than two percent (2%) more water than actually passes through it, the deposit shall be retained by the District as the expense of making the test.

### 4.9 FIRE HYDRANTS

Fire hydrants connected to the District's mains are provided for the sole purpose of furnishing water to fight fires and shall be opened and used only by persons authorized by the District. In the event that the District authorizes the use of such

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hydrants for purposes other than extinguishing fire, such authorization shall be granted only through the procedures and provisions contained in Section 4.1 of these Rules and Regulations. Rates to be charged for water extracted from such hydrant for temporary construction use or other purposes shall be in accordance with the applicable schedule contained in Exhibit B to these Rules and Regulations.

### 4.10 WATER BACKFLOW PREVENTION

#### 4.10.1 General

The purpose of these provisions is to protect the District's potable water supply against actual or potential cross-connections by isolating, within the premises, contamination or pollution that may occur because of undiscovered or unauthorized cross-connection on the premises. These provisions are in accordance with the California Administrative Code, Title 17 (Public Health), entitled "Regulations Relating to Cross-Connections."

These provisions shall be in addition to and not in lieu of the controls and requirements of other regulatory agencies, such as local governmental agencies and local and State Health Departments. These regulations are intended to protect the District's potable water supply and are not intended to provide regulatory measures for protection of users from the hazards of cross-connections within their own premises. Notwithstanding these provisions, the District accepts no responsibility for cross-connections or resulting hazards or contamination.

The District has developed an active cross-connection control program with a Cross-Connection Control Inspector to administer the program. Any questions or notifications regarding these provisions or the program should be directed to the Inspector.

Backflow prevention devices, as required in these provisions, shall be provided installed, tested, and maintained by the applicant, owner, or customer at his expense. For specific materials and installation requirements, see the District's Procedures Guide and Construction Manual. The devices shall be located on the premises served and shall not be on the District's portion of the system. All devices shall be readily accessible for testing and maintenance and no device shall be submerged at any time.

When water service is initiated, the applicant must provide sufficient information, including plumbing and building plans, to enable the District to determine the level of backflow protection required. The proper backflow protection, as determined by the District, shall then be installed and inspected before water service is provided.

Each time there is a change of customer (either owner or tenant) on any commercial or industrial premise, the new or previous owner or customer shall notify the District immediately. The District will then reassess the level of protection required. Also, any alterations to existing onsite facilities that may affect the level of protection required must be reported immediately to the District.

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From time to time, representatives of any health agency having jurisdiction and/or the District may conduct evaluations of any premises where water service is provided by the District. The purpose of such evaluations is to determine if any actual or potential cross-connections exist, if there are any unapproved uses, and to assess compliance with applicable laws and regulations. The applicant owner or customer shall provide reasonable cooperation in facilitating such evaluations.

Additional information concerning backflow prevention may be obtained from the "Manual of Cross-Connection Control," Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, School of Engineering.

### 4.10.2 Where Protection is Required

Backflow protection for the District's potable water supply shall be provided on each water service connection to:

- (1) premises having an auxiliary water supply such as recycled or non-potable water. If the auxiliary water supply is approved for potable use by the public health agency having jurisdiction, backflow protection will not be required.
- (2) premises on which any substance is handled in such fashion that could permit entry into the water system. This shall include the handling of process waters and waters originating from the District's system that have been subject to deterioration in sanitary quality.
- (3) premises that have internal cross-connections, unless such cross-connections are abated to the satisfaction of the District and approved by the state or local health agency.
- (4) premises having intricate plumbing and piping arrangements or where not all portions of the premises are readily accessible for inspection purposes.
- (5) premises having a repeated history of cross-connections being established or re-established.

### 4.10.3 Type of Protection

The type of protection required is related to the degree of hazard that exists on the premises served. The type of protective device that may be required (listed in increasing level of protection) includes: Double Check Valve (DC), Reduced Pressure Principle Backflow Prevention Device (RPPD), and an Air Gap Separation (AG). The water user may choose a higher level of protection than required by the District. The minimum types required, relative to various situations shall be as required by California Administrative Regulations, Title 17, or to the extent not covered thereby, as determined by the District and/or health agency.

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### 4.10.4 Inspection and Maintenance of Protective Devices

It shall be the duty of the water user on any premises on which backflow prevention devices are installed to have competent inspections made at least once a year, or more often in those instances where successive inspections indicate repeated failure. All inspections and testing shall be performed by a tester certified by the local health department. The devices shall also be tested immediately after they are installed, relocated or repaired and shall not be placed in service unless they are functioning as required.

The District will notify the applicant, owner or customers when routine testing is needed and also supply them with the necessary forms that must be filled out each time a device is tested or repaired. The notice will include the date when the test must be completed, generally 30 days after the date of the notice. The completed, original forms shall be returned to the District. Copies of the completed forms shall also be sent to the local health department. The applicant, owner or customer shall notify the District any time the device is repaired, replaced or relocated. A device shall be repaired or replaced by, and at the expense of the water user, whenever it is found to be defective. Records of all such tests and repairs shall be maintained by the water user. The District may request records regarding any backflow prevention device on the premises.

A device may be removed for repair or replacement, provided that (a) water use is discontinued until repair or replacement is completed and the device is returned to service, or (b) the service connection is equipped with other backflow protection approved by the District. A retest will be required following the repair or replacement of the device.

A device may be relocated following confirmation by the District that the relocation will continue to provide the required protection and satisfy installation requirements. A retest will be required following the relocation of the device.

### 4.10.5 Marking Safe and Unsafe Water Lines

Where the premises other than single-family residences contain dual or multiple water systems and piping, the exposed portions of pipelines shall be painted, banded, or marked at sufficient intervals to distinguish clearly which water is safe for drinking purposes and which is not safe. All outlets intended for drinking purposes shall be plainly marked to indicate that fact.

For single-family residences which have recycled water services provided, only those water outlets which serve non-potable water shall be marked with the words "Recycled Water - Do Not Drink."

For single-family residences which contain water systems, all potable water service piping shall all be designed and constructed in compliance with IRWD's Procedures Guide.

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### 4.10.6 Reporting of Pollution or Contamination

In the event of contamination or pollution of the potable water system due to a cross-connection on the premises, the local health officer and District shall be promptly advised by the person responsible for the water system so that appropriate measures may be taken to mitigate the contamination or pollution.

### 4.10.7 Water Service Termination

When the District determines that water uses or conditions encountered by the District represent a clear and immediate hazard to the District's water supply that cannot be immediately abated, the District shall institute the procedure for discontinuing water use.

Conditions or water uses that create a basis for water service termination shall include, but are not limited to, the following:

- (1) Refusal to install a required backflow prevention device.
- (2) Refusal to test a backflow prevention device.
- (3) Refusal to repair a faulty backflow prevention device.
- (4) Refusal to replace a faulty backflow prevention device.
- (5) Direct or indirect connection between the District's water system and a sewer.
- (6) Unprotected direct or indirect connection between the District's water system and a system or equipment containing contaminants.
- (7) Unprotected direct or indirect connection between the District's water system and an auxiliary water system.
- (8) A situation which presents an immediate health hazard to the District's water system, as determined by the health agency or the District.
- (9) At single-family residences which contain water systems, the installation of any piping shall be in conformance with IRWD's Procedures Guide.

For conditions 1, 2, 3, 4, or 9 above, the District will terminate service to a customer's premise as follows:

The District will notify the applicant, owner or customers when routine testing or corrective action is needed and also supply them with the necessary forms that must be filled out each time a device is tested or repaired. The notice will include the date when the test or corrective action must be completed, generally 30 days after the date of the notice. The completed, original forms shall be returned to the District. Copies of the completed forms shall also be sent to the local health department.

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The applicant, owner or customer shall notify the District any time the device is repaired, replaced or relocated.

A second notice shall be sent to each water user who does not have their backflow prevention device tested or take other corrective action as prescribed in the first notice within the time allowed. The second notice will give the water user a 15-day period to have their backflow prevention device tested or take other corrective action.

If no action is taken within the 15-day period, then a third notice will be sent to the water user giving the water user a final 10-day period to have the device tested or take other corrective action.

If no action is taken within the 10-day period, then the District will notify the user that water service will be terminated and proceed to turn off the water until the device is tested and passes the test or other corrective action is taken and approved.

If no action is taken within the allowed time period, water service may be terminated in accordance with Section 14, ENFORCEMENT AND PENALTIES.

For conditions 5, 6, 7 or 8 above, the District will make reasonable effort to advise the water user of intent to terminate water service. Then, the District will terminate the water service and lock the service valve in the closed position. Water service will not be reinstated until correction of all violations has been approved by the District. Failure to correct the violations may result in permanent termination of water service in accordance with Section 14, ENFORCEMENT AND PENALTIES.

### 4.11 SEWER BACKFLOW PREVENTION

Residences and other buildings served by the District's sewerage facilities shall be protected from the backflow of wastewater in the lower laterals as herein provided. Drainage piping serving fixtures, the flood level rims of which are located below the rim elevation of the uphill manhole of the District sewer and above the crown level of the District main sewer, shall drain by gravity into the District main sewer and shall be protected from backflow of sewage by installing an approved type backwater device, and each such backwater device shall be installed only in that branch or section of the drainage system that receives the discharge from fixtures located below the elevation of the curb or property line.

Backwater devices required by this section shall be located where they will be readily and easily accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a watertight masonry pit fitted with an adequately sized removable cover.

The applicant, owner, or customer shall provide and maintain, at his expense, backwater devices and appurtenances as required in this section. Each such device shall be located on the property it protects and shall not be allowed in the public right of way.

### 4.12 USE OF RECYCLED WATER

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### 4.12.1 Determination of Feasible and Authorized Uses

In accordance with the provisions of Section 1, the uses of recycled water may include, but not by way of limitation, landscape irrigation, agricultural irrigation, natural treatment system irrigation, construction water, industrial process water, cooling tower makeup water, water for flushing toilets and urinals, trap primers in dual-plumbed buildings, and public and private recreational impoundment. Each such use must be considered for approval by the District on a case-by-case basis, and the District may determine in its discretion whether it is feasible to furnish recycled water for the specific use involved. Prior to approving such uses, the District may, in its discretion, set forth specific requirements as conditions to providing such services and/or require specific prior approval from the appropriate regulatory agencies. The District's determination of feasibility will be based on the following factors:

- (1) Whether recycled water may be furnished for the intended use at a reasonable cost to the customer and the District;
- (2) Whether recycled water use is in accordance with the standards of treatment and water quality requirements set forth in Title 22, Chapter 4, of the Code of California Regulations and all other applicable federal, state and local laws and regulations;
- (3) Whether the use of recycled water can be made in a manner not detrimental to public health.

### 4.12.2 Requirement To Use Recycled Water

The District will identify customers who are located within the District's service area and within an area identified in the Plan as an area capable of receiving service from the District's recycled water system and will determine the feasibility of providing recycled water service to these customers. The District will also review applications for new permits to determine the feasibility of providing recycled water service to these applicants. If recycled water service is determined by the District to be feasible, applicants for new water service shall be required to install onsite facilities to accommodate both potable water and recycled water service in accordance with these Rules and Regulations. The District may also require existing customers to retrofit existing onsite water service facilities to accommodate recycled water service. Potential recycled water customers identified by the District that elect not to use recycled water that is available but can use recycled water in compliance with State and County regulatory requirements, these Rules and Regulations and can meet the criteria identified in Section 13550 of the California Code of Regulations, may be subject to the provisions in Section 4.12.5 of this document. Potential recycled water customers that believe recycled water cannot be used at their site shall provide written justification to support their position. The District assumes identified customers meeting the above referenced criteria can use recycled water until or unless the potential recycled water customer can provide documentation otherwise. If the District's recycled water distribution system has not yet been

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extended to the vicinity of the customer's property, the District may require a written commitment from the customer to use recycled water when the extension has been made. A customer that does not provide a written commitment may be subject to the provisions in Section 4.12.6. If the District does not require the use of recycled water service, the customer may obtain recycled water service upon request but only if the District has determined that recycled water service to the customer is feasible and authorizes such use.

### 4.12.3 Installation Costs

Except as otherwise provided herein, when an existing customer is required by the District to convert to recycled water service, the customer will pay the reasonable capital costs of retrofitting the onsite water service facilities (as defined in Section 4.12.4.1) and the District will provide the offsite facilities necessary to deliver recycled water to the meter. Applicants for new or expanded water service shall be responsible for the full capital cost of onsite recycled water facilities and applicant-furnished offsite distribution facilities required as a condition of service pursuant to Section 5.

### 4.12.4 Process of Determination

The following describes the process by which the District will determine which potential recycled water customers may be served, contact by District, response by potential recycled water customers and appeal provision to the District's Board of Directors:

#### 4.12.4.1 District staff will identify potential sites at which it believes recycled water may be used. Identified potential recycled water use sites must meet the following criteria:

- (1) Recycled water is served to an available location. "Available location" shall mean (1) the District's recycled water distribution system is in a street adjacent to the subject property, or (2) the District has notified a customer that if a written commitment to use recycled water has been received from the customer, the District will complete an extension of the distribution system to a street adjacent to the customer's property, and the customer has failed or refused to provide the written commitment, and any determination sought by the customer pursuant to 4.12.4.3 through 4.12.4.6 has become a final and non-appealable determination that recycled water use is feasible;
- (2) The District can provide recycled water in the needed volume, quality, pressure and flow rate;
- (3) The anticipated use(s) at the subject site are allowed for in Title 22 of the California Code of Regulations;
- (4) The construction/retrofit can be accomplished in compliance with Federal, State, County and District requirements;

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- (5) The anticipated use(s) will not negatively impact public health;
- (6) The use of recycled water will not diminish water rights; and
- (7) Recycled water is available at a reasonable cost, meaning:
  - [a] The commodity cost for recycled water is less than the commodity cost for a like quantity of non-interruptible potable water; and
  - [b] The net customer cost of facilities and appurtenances required to be installed can be amortized by the difference in potable and recycled water rates over a period of not more than one-hundred and twenty (120) months.

4.12.4.2 District will contact potential recycled water use site representative to discuss the use of recycled water.

4.12.4.3 Potential recycled water customers shall respond to District inquiries as to its ability to use recycled water. Customer and IRWD shall engage in dialogue to determine if recycled water can be used. At the completion of dialogue, the potential recycled water customer shall have ninety (90) calendar days to indicate its intent regarding the use of recycled water. If recycled water can be used, the customer shall work with the District toward the successful introduction and use of recycled water including obtaining regulatory approvals. If, according to the customer, recycled water cannot be used, customer shall provide written documentation to the General Manager to support their position.

4.12.4.4 District staff will review documentation provided by customer supporting why recycled water cannot be used.

- (1) In the case of potential customers that provide sufficient evidence as to why recycled water cannot be used, District shall consider the matter closed; or
- (2) In the case of potential customers that elect not to respond to District inquiries or do not provide documentation as to why recycled water cannot be used, the General Manager or designee shall report those occurrences to the Water Resources Policy and Communications Committee. With Water Resources Policy and Communications Committee approval, the General Manager or designee shall send a certified letter to the potential recycled water customer urging contact with the District to continue meaningful dialogue regarding the potential use of recycled water. The potential recycled water customer shall have thirty (30) calendar days in which to contact the District. If the potential recycled water customer does not respond within thirty (30) calendar days, a second certified letter will be sent notifying the potential recycled water customer that the billed per Section 4.12.5 of this document beginning sixty (60) calendar days after notification.

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4.12.4.5 The potential recycled water customer who contends recycled water is not feasible based on criteria described in Sections 4.12.4.1 may appeal to the General Manager by filing a written appeal within thirty (30) calendar days of the date of the notice described in Section 4.12.4.4. The General Manager shall consider the information provided and respond within thirty (30) calendar days to the potential recycled water customer.

4.12.4.6 The decision of the General Manager may be appealed to the Board of Directors in writing filed with the District Secretary within thirty (30) calendar days of the General Managers decision. The Board of Directors will conduct a hearing to consider the appeal at the next regularly scheduled Board meeting. The decision of the Board of Directors shall be transmitted in writing to the potential recycled water customer within thirty (30) calendar days of the hearing. The decision of the Board of Directors is final.

### 4.12.5 Recycled Water Non-Conforming Use Billing Rate

For potential recycled water customers that elect not to comply with section 4.12.2 of this document ("Requirement to Use Recycled Water") and fail to provide reason(s) why recycled water cannot be used, all metered potable water use at the site that could otherwise be served with recycled water shall be billed at the applicable potable water rate plus the "non-conforming use" rate until the site is converted or acceptable justification as to why the recycled water cannot be used is provided. No refunds will be provided unless a justification is accepted by the District.

### 4.12.6 Potential Recycled Water Customer Non-Participation/Non-Cooperation

Potential recycled water customers identified and contacted by the District that elect not to use recycled water or are not cooperating with the District as defined in Section 4.12.4 of this document, will be billed as defined in Section 4.12.5 of this document. In cases where the potential recycled water customer elects not to pay their bill, that customer will be subject to the provisions in Section 1.20 ("Delinquency and Service Restoration Charges") of the District's prevailing "Schedule of Rates and Charges."

### 4.12.7 Termination of Prior Recycled Water Service

If an end user that was previously accepting recycled water elects to suspend or terminate delivery of recycled water and use potable water for reasons other than those identified in Section 4.12.4 of this document, that end user may be subject to the provisions in Section 4.12.6.

## 4.13 SCHEDULING RECYCLED WATER; SUPPLY OF OTHER WATER TO RECYCLED WATER DISTRIBUTION SYSTEM

Recycled water shall be used in compliance with District's "Procedural Guidelines and General Design Requirements." The District reserves the right to control and schedule the use of recycled water if, in the opinion of the Manager or his designated representative, scheduling is necessary for purposes including, but not limited to, the maintenance of an acceptable working pressure in the recycled water system and providing for reasonable safeguards in relation to public health.

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Guidelines for such scheduling shall be as deemed appropriate by the Manager or his designated representative. The District reserves the right to supply potable or non-potable water to the District's recycled water distribution system from time to time, as the Manager or his designated representative determines to be necessary or useful to augment the recycled water supply to such system. The supply of such other water to the system shall be at the District's discretion and shall not change the rates or charges billed for recycled water service nor relieve any recycled water customer of the applicable requirements of the Rules and Regulations, including but not limited to Section 6.2.2.

### 4.14 EMERGENCY CONNECTIONS TO RECYCLED WATER SYSTEM

If in the opinion of the District, an emergency exists whereby in all or a portion of the recycled water system recycled water is not available, the Manager may approve a temporary connection to the potable water system. Before such temporary connection is made, the portion without recycled water shall be isolated by an air gap separation from the remainder of the recycled water system either at individual services or on the offsite system, as determined by the District and an approved backflow prevention device or devices of the type determined in accordance with Section 4.10 herein, shall be installed on the potable water line or lines in accordance with these Rules and Regulations and any and all applicable rules and regulations of the State and local health departments. Before the emergency connection or connections shall be removed, whether onsite or offsite, the customer shall notify the District's cross-connection department. This emergency connection or connections shall be removed before connection is re-established to the remainder of the recycled water system.

### 4.15 RESPONSIBILITY FOR MAINTENANCE

#### 4.15.1 Water and Recycled Water

The applicant, owner, or customer is responsible for maintaining all onsite facilities that are under the ownership of parties other than the District.

#### 4.15.2 Sewer - Single Family Units

The applicant, owner, or customer is responsible for maintenance of the upper lateral and lower lateral. Any upper lateral or lower lateral shall be cleared and cleaned by the applicant, owner, or customer at his own expense. The upper lateral is the responsibility of the owner to repair or reconstruct. The lower lateral is the responsibility of the District to repair or reconstruct.

#### 4.15.3 Sewer - Multi-Dwelling Units (Condominium Complexes and Townhomes)

Maintenance of onsite sewer main lines shall be the responsibility of the District up to the main line cleanout or last manhole. In order to qualify for such maintenance, these facilities must be fully dedicated to the District, including proper easements, and approved by the Manager or his designee. All laterals upstream of the main line are the responsibility of the applicant, owner or customer to maintain, repair, or reconstruct

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### 4.15.4 Sewer – Commercial and Industrial Properties

If the property has a single sewer lateral connection, the applicant, owner, or customer is responsible for maintenance of the upper lateral and lower lateral. Any upper lateral and lower lateral shall be cleared and cleaned by the applicant, owner, or customer at his own expense. The upper lateral is the responsibility of the owner to repair or reconstruct. The lower lateral is the responsibility of the District to repair or reconstruct.

If the property has an onsite sewer collection system, the maintenance of onsite sewer main lines shall be the responsibility of the District up to the main line cleanout or last manhole. In order to qualify for such maintenance, these facilities must be fully dedicated to the District, including proper easements, and approved by the Manager or his designee. All laterals upstream of the main line are the responsibility of the applicant, owner, or customer to maintain, repair, or reconstruct.

### 4.15.5 Obstruction of or Deposit of Material in Meter Boxes or Hydrants

No person shall place, dispose, or deposit or permit the placement, disposal or deposit of oil, toxic, hazardous or contaminated liquid or waste, trash, dirt, building materials or other substances, objects or obstructions in, on or around meter boxes, and it shall be the responsibility of each applicant, owner, or customer to prevent meter boxes, District hydrants or other District facilities from becoming obstructed or obscured by such applicant, owner, or customer's trees, shrubs, plants or in any other manner so as to impede their use or access to them or make their location difficult to determine.

If such substances, objects or obstructions are not cleaned and removed or are permitted to obscure or impede such facilities, the District may, after providing reasonable notice to the applicant, owner or customer, accomplish the cleaning and removal and charge the applicant, owner or customer for the cost of doing so.

### 4.15.6 Natural Treatment Systems

The developer shall be responsible for the establishment and maintenance of the natural treatment system as specified in the Procedures Guide and the NTS Design Guidelines .

## 4.16 WATER CONSERVATION AND MANAGEMENT PRACTICES

As stated in Section 1 herein, it is the desire of the District to effect conservation of water resources whenever possible, such measures being consistent with legal responsibilities to utilize the water resources of the State of California and the District. Without limiting standards that may otherwise apply pursuant to Section 4.1, facilities and fixtures shall meet the applicable water efficiency standards referenced in this section.

Facilities for irrigation of new or existing parks, median strips, landscaped public areas or landscaped areas, lawns, or gardens surrounding single-family homes, condominiums, townhouses, apartments, and industrial parks shall be designed

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and installed in such a way as to conserve water, and meet or exceed the water efficiency requirements of any applicable local or State standards.

After January 1, 2008 a separate landscape meter shall be required to provide new water service to a property with more than 5,000 square feet of landscape irrigated with potable water. This provision does not apply to single family residential connections, agricultural crops or landscape, or where water service has previously been provided.

Recycled water is considered a water resource by the District, therefore, the same restrictions shall apply for all uses of recycled water as for potable water.

Rate and extent of application of water shall be controlled by the user so as to minimize run-off from the irrigated areas.

All plumbing fixtures installed shall meet or exceed the applicable standards in effect at the time of service application.

### 4.17 INTERIM WATER SERVICES

#### 4.17.1 General

The District's potable water system has been master planned to serve the ultimate needs of residential, commercial, and industrial developments in the District's service area. Design and construction of facilities are phased in unison with the above mentioned developments. However, the District will provide service for interim uses whenever possible, although such uses shall be subject to the conditions set forth herein.

#### 4.17.2 Temporary Service Connections

- (1) Temporary service connections are primarily installed for the convenience and use of individuals, contractors, and companies during construction work. However, they are not limited to construction purposes but may be installed for any use.
- (2) The Contractor or other person applying for a meter or meters shall be held responsible for loss or damage to the meter from the time it is installed until it is removed, or until 48 hours after notice in writing has been given the District that the contractor or other person is finished using the meter.
- (3) Flows through a 2 1/2 inch or larger temporary service fire hydrant meter shall be limited to a maximum of 250 gallons per minute, unless otherwise authorized in writing at the time of application. Any deliberate attempt on the part of the applicant or user to increase the flow is just cause for the District to discontinue service.
- (4) The District reserves the right to interrupt service without notice if such usage is causing pressure in the system to drop below an acceptable range.

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- (5) Each temporary service customer shall make every attempt to maintain a constant flow through the meter. To achieve this requirement, the customer may be required to provide and install a storage facility (construction tank, small interim reservoir, etc.), approved by the District, in conjunction with the meter.
- (6) When using fire hydrants for temporary service connections, no more than one outlet per hydrant shall be used for this purpose; however, the use of siamese fittings approved by the District is acceptable provided that the additional flow does not significantly impair pressures in the distribution system.
- (7) The maximum duration of time a temporary service may be applied for is six months. At the conclusion of six months, the customer may reapply for service, subject to approval from the District.

### 4.17.3 Agricultural Service Connections

- (1) The District reserves the right to regulate agricultural users without notice if pressures in the distribution system drop below the minimum acceptable range. The District reserves the right to interrupt agricultural service at any time without notice if such usage is causing pressures in the system to drop below a minimum acceptable range. When pressure is resumed to an acceptable range for a reasonable period of time, all regulated agricultural services will be returned to their requested flows. Repeated occurrences of pressures dropping below a minimum acceptable range may result in permanent discontinuation by the District of the agricultural user's service upon 30 days, notice.
- (2) All requests for water and recycled water for agricultural purposes must be made 24 hours in advance of the intended use. Only authorized District personnel will set and adjust flows from all agricultural service connections.
- (3) Water and recycled water for agricultural use shall be delivered at a constant rate.
- (4) All changes in flows will be made between the hours of 7:00 a.m. and 3:00 p.m. All changes in flow shall be requested prior to 10:00 a.m. the day prior to the intended change.

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### Section 5: FACILITIES DESIGN AND CONSTRUCTION

#### 5.1 GENERAL

All offsite water, sewer, recycled water and natural treatment system facilities and all onsite recycled water facilities shall be designed and constructed according to the requirements, conditions, and standards set forth in the Procedures Guide and Construction Manual which document is on file at the office of the District, and by this reference is incorporated herein.

The recycled water system, including both offsite and onsite facilities, shall be separate and independent of any potable water system.

Any required backflow prevention devices on potable water services and flow or pressure control devices shall be downstream of the meter and provided by the applicant, owner, or customer at his expense.

#### 5.2 OFFSITE WATER, SEWER, RECYCLED WATER FACILITIES

Any water distribution, sewage collection, recycled water distribution system facilities determined by the District to be required to provide service within developments of the property within the District shall be provided by the applicant, owner, or customer at his expense.

Plans and specifications for all water distribution, sewer collection, recycled water distribution facilities shall be submitted to and approved by the District in advance of construction.

The District will assume responsibility for providing water, sewer, and recycled water service to the point of connection (individual lots for residential water and sewer service and residential yard recycled water irrigation service) of such development upon transfer to the District of title to all facilities in the required systems and any necessary easements therefore. All easements shall be in a form acceptable to the District and not subject to outstanding obligations to relocate such facilities or any deeds of trust, except in instances where such is determined by the Board or the Manager to be in the best interests of the District.

Modification or relocation of the meter or other facility which results in nonconformance with applicable provisions of these Rules and Regulations, the Procedures Guide or the Construction Manual is prohibited and shall be corrected at the expense of the applicant, owner, or customer. Upon failure or refusal of the applicant, owner or customer to make such correction, the District may, after providing reasonable notice to the applicant, owner or customer, make the correction and charge the applicant, owner or customer for the cost of doing so.

#### 5.3 ONSITE RECYCLED WATER FACILITIES

Any onsite recycled water facility shall be provided by the applicant, owner, or customer at his expense. The applicant, owner, or customer shall retain title to all such onsite facilities.

Onsite recycled water facilities, in addition to conforming to the Procedures Guide and Construction Manual shall conform to local governing codes, rules,

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and regulations. The Cities of Costa Mesa, Irvine, Lake Forest, Newport Beach, Orange, Santa Ana, and Tustin, and the County of Orange shall have authority over materials, equipment, design, and construction methods used for onsite recycled water facilities within their jurisdiction, provided that when the District's Procedures Guide and Construction Manual require a higher quality material, equipment, design or construction method than that required by the above local governing codes, rules, and regulations, the District's Procedures Guide and Construction Manual shall be controlling.

Plans and specifications and record drawings shall be prepared and submitted to the District in accordance with the Procedures Guide and Construction Manual. Plans and specifications must be approved by the District prior to commencing construction. Prior to commencement of service to any onsite system using recycled water, record drawings shall be provided and approved and the installed system shall be tested under active conditions to ensure that the operation is in accordance with the intent of these Rules and Regulations.

In accordance with Section 1 herein, in those areas where recycled water is not immediately available for use when the design area is ready for construction, and if the District has determined that recycled water will be supplied in the future, the onsite facilities shall nevertheless be designed to use recycled water. Provisions shall be made and these Rules and Regulations followed to allow for connection to the recycled water facilities when they become available. In the interim, potable domestic water will be supplied to the recycled water facilities through a temporary potable meter connection. A backflow preventer of the type determined in accordance with Section 4.10 herein will be required as long as the onsite facilities are using potable water. The backflow preventer shall be downstream of the meter and shall be a part of the onsite facilities. The District will remove the backflow preventer and will make the connection to the onsite facilities when recycled water becomes available.

### 5.4 NATURAL TREATMENT SYSTEM FACILITIES

Natural treatment systems that are designated as capital facilities shall be designed and constructed by the District. All other natural treatment systems shall be designed, constructed and established by the developer in accordance with the District's Procedures Guide and the NTS Design Guidelines.

Plans and specifications for developer-constructed natural treatment systems shall be submitted to and approved by the District in advance of construction.

### 5.5 CONVERSIONS OF EXISTING FACILITIES FOR RECYCLED WATER

Where it is required pursuant to Section 4.12.2 that any existing water system be converted to a recycled water facility, a comprehensive investigation shall be performed by or for the District. The facilities to be converted to recycled water use shall be investigated in detail, including review of any record drawings, preparation of required reports, and determinations by the District of measures necessary to bring the system into full compliance with these Rules and Regulations for recycled water service including, but not limited to Section 5.3 thereof and the District's Procedures Guide and Construction Manual. No potable water facilities shall be connected to or incorporated in the recycled water system that have not been approved for recycled water service by the District.

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### 5.6 ALTERNATE FINANCING FOR AFFORDABLE AND/OR LOW INCOME HOUSING PROJECTS

#### 5.6.1 Request for Public Financing

If property within the District for which water, sewer and/or recycled water service is requested will include not less than ten percent of the units as affordable and/or low income housing units as herein defined or has been designated by the City of Irvine, County of Orange, or other such entity for land use which requires that a portion of the units being developed shall be affordable and/or low income housing units as herein defined, any such applicant, owner or customer when requesting water, sewer and/or recycled water service for such property may request the District to initiate proceedings pursuant to applicable laws to form a special assessment district for the purpose of publicly financing the offsite and onsite water, sewer and/or recycled water facilities necessary to serve said development as well as any assessable portion of the future capital costs which will be incurred by or benefit the initial property owners at the time of connection to said facilities. The proposed assessment district shall include all of the area eligible for alternate financing as provided for in this Section 5.5.1 and such other area logically served by the facilities as determined by the District in its discretion. This proviso is intended to include the affordable and/or low-income housing units as well as the market rate units for which service is requested pursuant to this Section 5.5.1.

#### 5.6.2 Initiation of Public Financing

Upon receiving a request pursuant to Section 5.5.1, the District shall, unless it makes the findings set forth in Section 5.5.3, initiate proceedings pursuant to applicable laws to form a special assessment District for the purpose of publicly financing the offsite and onsite water, sewer and/or recycled water facilities necessary to serve said development as well as any assessable portion of the future capital costs which will be incurred by or benefit the initial property owners at the time of connection to said facilities.

#### 5.6.3 Refusal to Initiate Public Financing

The District may deny a request made pursuant to Section 5.5.1 only after notice and a public hearing and only if it finds that such assessment district financing is no longer consistent with sound municipal financing practices or is not economically feasible for the particular project. If other means of such alternate financing are available and are consistent with sound municipal financing practices, such other means of financing shall be implemented by the District. In making a finding under this Section 5.5.3, the District shall render a written decision which identifies the evidence it relied upon and the reasons supporting its decision.

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### 5.6.4 Time for Acting on Request

The District shall act upon a request made pursuant to Section 5.5.1 within 60 days of the receipt of the request.

### 5.6.5 Affordable and/or Low Income Housing

"Affordable and/or Low Income Housing" as used herein shall have the same meaning as used in the housing element adopted pursuant to Government Code Section 65580 of the governmental agency having jurisdiction over the zoning of any given development.

### 5.6.6 Off-Site Facilities

"Off-Site Facilities" as used herein shall mean other than in-tract facilities which are not paid for by the District pursuant to its Rules and Regulations from general obligation bonds or otherwise.

### 5.6.7 Coordination with Other Agencies

When possible, in the event that District agrees to initiate proceedings pursuant to Section 5.5.1, the District will attempt to coordinate such proceedings with similar proceedings initiated by another agency or other agencies having jurisdiction over other aspects of the infrastructure required for the development such as, but not by way of limitation, streets, lighting, open space, sidewalks, and curbs.

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### Section 6: FACILITIES OPERATION

#### 6.1 OFFSITE WATER, SEWER, RECYCLED WATER AND NATURAL TREATMENT FACILITIES

Operation and surveillance of all of the District's offsite water, sewer, recycled water and natural treatment system facilities, including, but not limited to, water, sewer, and recycled water pipelines, reservoirs, pumping stations, fire hydrants, manholes, valves, connections, supply interties, treatment facilities, and other appurtenances and property up to and including the District's meter, shall be under the management and control of the District. No other persons except authorized employees and/or representatives of the District shall have any right to enter upon, inspect, operate, adjust, change, alter, move, or relocate any portion of the foregoing or any of the District's property. In the event that such should occur, all charges and penalties shall be applicable and collected. Such action shall also be in violation of any and all applicable federal, state, and local statutes, ordinances, regulations, and other requirements.

#### 6.2 ONSITE FACILITIES

##### 6.2.1 General

The operation and surveillance of onsite water distribution, sewer collection, and recycled water distribution facilities are the responsibility of the applicant, owner, or customer.

##### 6.2.2 Onsite Recycled Water Facilities

The operation and surveillance of all onsite recycled water system facilities using the District's recycled water, shall be under the management of an "Onsite Recycled Water Supervisor" designated by the applicant, owner, or customer and approved by the District.

If there is a non-resident owner, a local Onsite Recycled Water Supervisor shall be appointed. For single-family residences which have a recycled water service connection, the owner shall be considered to be the designated "Onsite Recycled Water Supervisor" unless otherwise indicated on the application for the service connection request. In the event that someone other than the owner is designated as the "Onsite Recycled Water Supervisor" and this person is no longer associated with the property, the owner shall again be considered the "Onsite Recycled Water Supervisor" until written notification is made to the District. The District shall furnish the name of the Onsite Recycled Water Supervisor to the Regional Water Quality Control Board and State and County Health Departments at least 30 days prior to commencing service.

However, pursuant to Section 8.2 of these Rules and Regulations, the Manager or authorized representatives of the District shall monitor and inspect the entire recycled water system, including onsite and offsite facilities, and for these purposes shall have the right to enter upon the customer's premises during reasonable hours.

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The Onsite Recycled Water Supervisor shall be responsible for the installation, operation, and maintenance of the onsite recycled water system, enforcing applicable requirements of the District's permits, preventing potential hazards related to such system, maintenance of the system plans in "as-built" form, and distribution of recycled water in accordance with applicable laws and permits held by the District.

In particular, but not by way of limitation, the Onsite Recycled Water Supervisor shall have the following responsibilities in relation to operation of onsite facilities:

- (1) To make sure that all operations personnel are trained and familiarized with the use of recycled water.
- (2) To furnish their operations personnel with maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the onsite facilities design and these Rules and Regulations.
- (3) To prepare and submit to the District one (1) set of record drawings.
- (4) To notify the District of any and all updates or proposed changes, modifications, or additions to the onsite facilities, which changes shall require approval by the District and shall be designed and constructed according to the requirements, conditions, and standards set forth in the District's and set forth in these Rules and Regulations, including but not limited to Section 5.3 thereof. In accordance with the above referenced requirements, conditions, and standards changes must be submitted to the District for plan check and approval prior to construction. The construction shall be inspected by the District, and revised record drawings and controller charts shall be approved by the District. The District may, if it deems such to be in the best interest of the District, waive or modify any of the foregoing.
- (5) To ensure that the recycled water facilities remain in accordance with these Rules and Regulations including the District's Procedures Guide and Construction Manual. For example, but not by way of limitation, as stated in the design criteria section of the above referenced specifications:
  - [a] Cross-connections between potable water facilities and onsite recycled water facilities are forbidden.
  - [b] Hose bibs on recycled water facilities are forbidden.
  - [c] Drinking fountains shall be protected from the spray of recycled water.

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- [d] The District shall provide special labels for any backflow preventer and house pressure regulator, and homeowner agrees to inform plumbing or landscaping contractors of the presence of recycled water on the site.
- (6) To operate and control the system in order to prevent direct human consumption of recycled water and to control and limit runoff. The applicant, owner, or customer shall be responsible for any and all subsequent uses of the recycled water. Operation and control measures to be utilized in the regard shall include, where appropriate, but not be limited to the following:
- [a] Onsite recycled water facilities shall be operated to prevent or minimize discharge onto areas not under control of the customer. Full circle sprinklers shall not be used adjacent to sidewalks, roadways, and property lines and sprinkler types shall be selected so as to confine the discharge from sprinklers to the design area.
  - [b] The operation of the onsite recycled water facilities shall be during the periods of minimal use of the service area. Consideration shall be given to allowing a maximum dry-out time before the design area will be used by the public.
  - [c] Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities shall be compatible with the lowest infiltration rate of the soil present.
  - [d] When the application rate exceeds the infiltration rate of the soil, automatic systems shall be utilized and programmed to prevent or minimize the ponding and runoff of recycled water. The sprinkler shall not be allowed to operate for a time longer than the landscape's water requirement. If runoff occurs before the landscape's water requirements are met, the automatic controls shall be reprogrammed with additional watering cycles of shorter duration to meet the requirements. This method of operation is intended to control and limit runoff.
- (7) To orally report any failure in the onsite recycled water system that causes an unauthorized discharge of recycled water, or other non-compliance with applicable laws and the District's permits to the District and to the Regional Water Quality Control Board and State and County Health Departments, within 24 hours from the time the

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Onsite Recycled Water Supervisor becomes aware of the circumstances. The Onsite Recycled Water Supervisor shall also make a written submission to the District, with a copy to the Regional Water Quality Control Board and State and County Health Departments, within five days of the time the Onsite Recycled Water supervisor becomes aware of the circumstances, which shall contain (a) a description of the non-compliance and its cause; (b) the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and (c) steps taken or planned to reduce, eliminate and prevent recurrence of the non-compliance.

- (8) To comply with any and all applicable Federal, State, and local statutes, ordinances, regulations, contracts, these Rules and Regulations, the service application and agreement, and all requirements prescribed by the Manager and the Board pursuant to Section 4. In the event of violation, all charges and penalties shall be applied and collected by the district.

### 6.2.3 Onsite Recycled Water Supervisor Training Program

The District may, from time to time, require that an "Onsite Recycled Water Supervisor" obtain instruction in the use of recycled water, such instruction being provided by or approved by the District.

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### Section 7: USE OF DISTRICT SEWERAGE FACILITIES

#### 7.1 GENERAL

The provisions established in Section 7 shall pertain to all discharges into any District sewerage collection facility that either directly or indirectly transports wastewater to the District's Michelson Water Recycling Plant. The last paragraph of this Section 7.1 provides information relating to the applicable requirements for discharges into District sewerage collection facilities that transport wastewater to facilities other than the Michelson Water Recycling Plant.

Pursuant to the authority provided by California Government Code Section 54739, 54740, and by other applicable provisions of law, provisions are made in this document for the regulation of wastewater discharges into the District's sewerage facilities in order to comply with Federal and State of California policies and requirements and to permit the District to meet applicable standards of treatment plant effluent quality. These Rules and Regulations establish quantity and quality limitations on all wastewater discharges, which may adversely affect the District's sewerage systems, processes, or effluent quality. It is the intent of these limitations to improve the quality of wastewater being received for treatment; an implication of this intent is the District's policy of discouraging an increase in the quantity (mass emission) of waste constituents being discharged. This document also provides for regulation of the degree of waste pretreatment required, the issuance of permits including those for wastewater discharge connections, and the establishment of penalties for violation of these Rules and Regulations.

Since the District is committed to a policy of wastewater renovation and reuse in order to provide an alternate source of water supply, the renovation of wastewater through secondary and tertiary wastewater treatment processes may necessitate more stringent quality requirements on wastewater dischargers than those required by other governmental regulatory agencies.

The District has joined the Orange County Sanitation District (OCSD) in order to secure an alternate method of sewage treatment and disposal. To accomplish the administration of this union within the portion of the District that is within Revenue Area 14 of OCSD, the District entered with OCSD into a Memorandum of Understanding effective February 11, 1987, to provide for cooperative implementation of these Rules and Regulations and the ordinance of the Orange County Sanitation District as part of its regulations. In the event of a conflict between the District's Rules and Regulations and OCSD's ordinance, OCSD's ordinance shall have precedence, unless the District's Rules and Regulations are more stringent. The OCSD ordinance is also applicable in areas of the District that are within other portions of OCSD that do not transport water to the District's Michelson Water Recycling Plant. Similarly, the area of the District within the service area of the South Orange County Wastewater Authority (SOCWA) is subject to SOCWA's discharge regulations as adopted by the District, and the area discharging to the Chiquita System of Santa Margarita Water District (SMWD), the Portola Hills area, is subject to SMWD's discharge regulations as adopted by the District. In each case where dischargers are subject to the discharge regulations of two agencies, it is the responsibility of the discharger to meet the discharge requirements of both agencies.

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### 7.2 SPECIAL DEFINITIONS

In addition, unless otherwise defined herein, terms related to water quality shall be as adopted in the latest edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, the American Water Works Association and the Water Environment Federation (herein referred to as "Standard Methods"). The testing procedures for waste constituents and characteristics shall be as provided in 40 CFR 136, (Code of Federal Regulations: Title 40; Protection of Environment; Chapter I United States Environmental Protection Agency (US EPA); Part 136, Test Procedures for the Analyses of Pollutants), or as specified herein. Other terms not herein defined shall have the definitions given such terms in the latest adopted applicable editions of the California codes applicable to building construction adopted pursuant to the California Building Standards Law.

The terms hereinafter set forth shall have the following meanings when used in these Rules and Regulations or any permits or orders issued pursuant hereto, and the following definitions supersede the definitions in Section 2 for purposes of this Section 7:

- (1) Administrative Complaint shall mean a document used by the District to initiate a proceeding to impose civil penalties pursuant to Section 7.6.2.7.2.
- (2) Biochemical Oxygen Demand (BOD) shall mean the quantity of oxygen utilized in the biological oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees Celsius expressed in terms of milligrams per liter mass per volume (mg/l) as determined by appropriate testing procedure.
- (3) Board shall mean the Board of Directors of the Irvine Ranch Water District.
- (4) Building Drain - Sanitary shall mean that part of the lowest horizontal piping of a drainage system which receives sanitary or industrial sewage only, inside the walls of a building and conveys it to the building sewer beginning three (3) feet outside the building wall.
- (5) Building Drain - Storm shall mean that part of the lowest horizontal piping of a drainage system which receives stormwater or other clear water discharge, but no wastewater, from soil and other drainage pipes inside the walls of a building and conveys it to the building sewer beginning three (3) feet outside the building wall.
- (6) Building Sewer - Sanitary shall mean a sewer pipe receiving flow from a single building and connecting to a sewer main or lateral, and constructed on private property, except for street crossing.
- (7) Building Sewer - Storm shall mean the extension from the building storm drain to the public sewer or other place of disposal which conveys storm water or other clear water drainage, but no sanitary or industrial sewage.
- (8) Bypass shall mean the intentional diversion of waste streams from any location within an industrial users facility not approved in a user's permit.

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- (9) California Water District Law shall mean the law of the State of California that governs the formation of California Water Districts and establishes procedures and powers of such Districts.
- (10) California Toxics Rule shall mean the most current update of numeric criteria for priority toxic pollutants established for the State of California as codified in 40 CFR Part 131.38.
- (11) Chemical Oxygen Demand (COD) shall mean the measure of chemically oxidizable material in domestic or other waste waters as determined by appropriate testing procedures and expressed in terms of milligrams per liter (mg/l).
- (12) Class I User shall mean any user who discharges wastewater ~~which may contain at any given time, any of the components that the District and OCSD determine necessary to regulate as specified in Section 7.3 of these Rules and Regulations and Section 2.7.7 of the OCSD Ordinance~~ that is subject to Federal Categorical Pretreatment Standards; or averages 25,000 gallons per day or more of regulated process wastewater; or is determined to have a reasonable potential to adversely affecting the District's facilities or operation or for violating any pretreatment standard, local limit, or discharge requirement; or may cause, pass through or interference with the District/RWD or OCSD sewerage facilities.
- (13) Class II User shall mean any industrial user who discharges wastewater at a volume greater than 10,000 gallons per day and has a BOD and Suspended Solids greater than 375 mg/L, that discharges wastes other than sanitary, and that is not otherwise required to obtain a Class I permit.
- (14) Code of Federal Regulations (CFR) or Federal Regulations shall mean the codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.
- (15) Coliform shall mean any number of organisms common to the intestinal tract of man and animals whose presence in sanitary sewage is an indicator of pollution.
- (16) Collection Sewer shall mean a sewer whose primary purpose is to collect wastewaters from individual point source discharges.
- (17) Combined Sewage shall mean a combination of both wastewater and storm or urban runoff.
- (18) Combined Sewer shall mean a sewer intended to receive both wastewater and storm or urban runoff.
- (19) Compatible Pollutant shall mean BOD, suspended solids, pH, coliform bacteria, and such additional pollutants as are now or may be in the future specified and controlled by the District's permit, for its wastewater treatment works as said works have been designed and are operated to reduce or remove such pollutants. Some compatible pollutants may be considered non-compatible when discharged in significant quantities.

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- (20) Composite Sample shall mean a collection of individual samples obtained at selected intervals based on an increment of either flow or time. The resulting mixture (composite sample) forms a representative sample of the waste stream discharged during the sample period. Samples will be collected during the time manufacturing, processing, and/or sewer discharge occurs.
- (21) Department Head shall mean that person duly designated by the General Manager to direct the Industrial Waste Program and perform those delegated duties as specified in these Rules and Regulations.
- (22) Discharger shall mean any public or quasi-public agency, including the State of California and the United States of America but not including the District, individual, partnership, firm, company, association, society, corporation, or group discharging, causing the discharge of, or proposing to discharge or cause the discharge of any wastewater into a public sewer. Used interchangeably with the term "User" and "Industrial User".
- (23) Dissolved Solids shall mean that concentration of matter in the sewage consisting of colloidal and particulate matter 0.45 micron in diameter or less, and both organic and inorganic molecules and ions present in solution.
- (24) District shall mean Irvine Ranch Water District.
- (25) District Connection Charge shall mean a fee imposed by the District for connecting directly to a public sewer or to a sewer which ultimately discharges into the District sewerage facility.
- (26) District's Sewerage Facilities shall mean any property belonging to the District used in the treatment, reclamation, reuse, transportation, or disposal of wastewater or sludge.
- (27) Domestic Wastewater shall mean the liquid and solid waterborne wastes derived from the ordinary living processes of humans of such character as to permit disposal, without special treatment, into the public sewer or by means of a private disposal system.
- (28) Dwelling Unit shall mean one or more habitable rooms which are intended or designed to be occupied by one family with facilities for living, sleeping and cooking.
- (29) Easement shall mean an acquired legal right or interest for the specific limited use of land owned by others.
- (30) Effluent shall mean any liquid outflow that is discharged to the sewer.
- (31) Enforcement Compliance Schedule Agreement (ECSA) shall mean a mutual agreement between the District and permittee in accordance with Section 7.6.2.2.
- (32) Federal Pretreatment Requirement, National Pretreatment Standard, Pretreatment Standard or Standard shall mean any regulation containing

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pollutant discharge limits promulgated by the EPA in accordance with 40 CFR 307 (b) and (c) which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5. Categorical pretreatment standards are promulgated in 40 CFR Chapter I, Subchapter N or 40 CFR Parts 401-471.

- (33) Floor Area shall mean the area included within the surrounding exterior walls of a building or portion thereof, exclusive of ramps, docks, vent shafts and courts. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above.
- (34) Garbage shall mean solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage and sale of food.
- (35) Grab Sample shall mean a sample taken from a waste stream on a one-time basis without regard to the flow in the waste stream and without consideration of time.
- (36) Industrial User shall mean ~~a source of Indirect Discharge as defined in 40 CFR 403.3 (g)~~ any user that discharges industrial wastewater.
- (37) Industrial Wastewater shall mean all liquid wastes resulting from the processes employed in industrial manufacturing, trade, or business establishments, as distinguished from domestic wastes.
- (38) Industry shall mean any establishment listed in the Standard Industrial Classification Manual, 1972 Edition, or revision thereof, which is categorized in Divisions A, B, D, E, or I.
- (39) Infiltration shall mean the water unintentionally entering the District's sewerage facilities, or sanitary building drains and sewers, from the ground, through such means as, but not limited to, defective pipes, pipe joints, connections, or manhole walls.
- (40) Infiltration/Inflow shall mean the total quantity of water from both infiltration and inflow without distinguishing the source.
- (41) Inflow shall mean the water discharge into the District's sewerage facilities, or building storm drains and sewers, from such sources as, but not limited to, roof leaders, cellar, yard, and area drains, foundation drains, unpolluted cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm sewers and/or combined sewers, catch basins, storm waters, surface runoff, street wash waters or drainage. (Inflow does not include, and is distinguished from infiltration.)
- (42) Inspector shall mean a person authorized by the General Manager to inspect any existing or proposed wastewater generation, conveyance, processing and disposal facilities.
- (43) Interceptor Sewer shall mean a sewer whose primary purpose is to transport wastewater from collection sewers to a treatment facility.

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- (44) Interference shall mean a discharge which, by itself or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the District's facilities, its treatment processes or operations, or its sludge process, use, or disposal, or causes a violation of any requirement of the District's permits (including an increase in the magnitude or duration of a violation) or prevents sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
- (45) Local Sewering Agency shall mean any public or private corporation duly authorized under the laws of the State of California to construct and/or maintain public sewers.
- (46) Manager or General Manager shall mean the General Manager of the District or the person authorized by the Board or the General Manager to act for him.
- (47) Manifest shall mean that receipt which is retained by the generator of wastes for disposing solid wastes, recyclable wastes or liquid wastes as required by the District.
- (48) Mass Emission Rate shall mean the weight of material discharged to the District's sewerage facilities during a given time interval. Unless otherwise specified, the mass emission rate shall mean pounds per day of a particular constituent or combination of constituents.
- (49) "May" is permissive (see "Shall" ).
- (50) Memorandum of Understanding (MOU) shall mean any memorandum of understanding or other agreement between the District and OCSD governing the administration of the joint industrial waste pretreatment program.
- (51) Micrograms per Liter ( $\mu\text{g/l}$ ) shall mean a unit measurement of the concentration of a water or wastewater constituent. It is 0.001 gram of the constituent in one (1) cubic meter of water. It has replaced the unit formerly used, parts per billion, to which it is approximately equivalent in reporting the results of water and wastewater analyses.
- (52) Milligrams per Liter ( $\text{mg/l}$ ) shall mean a unit measurement of a concentration of water or wastewater constituent. It is 0.001 gram of the constituent in 1,000 milliliters of water. It has replaced the unit formerly used, parts per million, to which it is approximately equivalent in reporting the results of water and wastewater analyses.

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- (53) National Pollutant Discharge Elimination System (NPDES) shall mean the Federal pollution regulation system as detailed in Public Law 92-500, Section 402, or a permit issued pursuant to such system.
- (54) New Source shall mean those sources that are new as determined by 40 CFR 403.3 (k) as revised October 17, 1988.
- (55) Non-compatible Pollutant shall mean any non-treatable waste product, including non-biodegradable dissolved solids, which is not a compatible pollutant as defined herein.
- (56) Normal Domestic Wastewater shall mean all household-type discharges from places of human habitation including sanitary conveniences, kitchen and laundry wastes. Discharge wastes strength shall be considered to average 250 mg/l BOD and 250 mg/l Suspended Solids at a discharge rate of 100 gallons per capita per day.
- (57) Normal Working Day shall mean the period of time during which the dischargers production or operation is taking place.
- (58) NPDES Permit shall mean the National Pollutant Discharge Elimination System permit that is issued by the EPA setting the limits on constituents that the permittee may legally discharge. The limits are set in both concentration and quantity.
- (59) OCSD shall mean the Orange County Sanitation District.
- (60) OCSD Ordinance shall mean OCSD's ordinance establishing wastewater discharge regulations, currently in effect Ordinance OCSD-01 dated July 1, 1998 as amended from time to time[JA1].
- (61) Pass Through shall mean discharge through the District's facilities to navigable water or point of reuse which, alone or in conjunction with discharges from other sources, is a cause of a violation of the District's NPDES permit or Regional Water Quality Control Board Order.
- (62) Permittee shall mean a discharger who has received a permit to discharge wastewater into the District's sewerage facilities subject to the requirements and conditions established by the District and/or OCSD.
- (63) pH shall mean the logarithm of the reciprocal of the quantity of hydrogen ions in moles per liter of solution used in expressing both acidity and alkalinity on a scale ranging from 0 to 14, where 7 represents neutrality, numbers less than 7 increasing acidity, and more than 7 increasing alkalinity.
- (64) Population Equivalent shall mean a term used to evaluate the impact of industrial or other waste on a treatment works or stream. One population equivalent of normal domestic wastewater is 100 gallons of sewage per day, and/or 0.17 pounds of BOD, and/or 0.21 pounds of suspended solids. The impact on a treatment works is evaluated as the equivalent of the highest of the three parameters. Impact on a stream is the higher of the suspended solids parameters.

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- (65) Pollutant shall mean any constituent or characteristic of wastewaters on which discharge limitation may be imposed either by the District or the regulatory bodies empowered to regulate the District.
- (66) POTW shall mean Publicly Owned Treatment Works.
- (67) Pretreatment shall mean the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to discharge of the wastewater into the District's sewerage facilities. The reduction or alteration can be obtained by physical, chemical or biological process, or process changes by other means.
- (68) Pretreatment Facility shall mean any works or devices for the treatment or flow limitation of wastewater prior to discharge into a public sewer.
- (69) Pretreatment Standards shall mean requirements for the quality of wastewaters discharged into the District's sewerage facilities.
- (70) Priority Pollutants shall mean a listing of the toxic pollutants identified by EPA as having the greatest environmental concern and as non-compatible and requiring pretreatment prior to discharge in order to prevent interference with District's operation, or to prevent sludge contamination or treatment system pass-through into receiving waters or into the atmosphere.
- (71) Private Sewer shall mean a sewer which is not owned by the District.
- (72) Probation Order shall mean an order issued with terms and conditions to a permittee upon a violation of these Rules and Regulations or the terms, conditions, and limitations of its discharge permit, or upon a failure to make payment to the District of user charges, non-compliance fees, or any other fees.
- (73) Public Agency shall mean the United States and its agents, the State of California and any city, county, district, or other local governmental authority or public body of or within the State of California.
- (74) Public Sewer shall mean a sewer owned and operated by the District, or a sewer operated by a local public agency which is tributary to the District's sewerage facilities.
- (75) Pumping Station shall mean a station positioned at a location in a sewer system at which wastewater is pumped to a higher level.
- (76) Regional Administrator shall mean the Regional Administrator of Region IX of the EPA.
- (77) Regional Board shall mean the California Regional Water Quality Control Board, Santa Ana Region.
- (78) Regulatory Agencies are those agencies having regulatory jurisdiction over operations of the District, such as including but not limited to the U.S. Environmental Protection Agency (EPA), the State Department of

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Health Services (DOHS), the State Water Resources Control Board (SWRCB), the California Regional Water Quality Control Board (RWQCB), the South Coast Air Quality Management District (SCAQMD) and Orange County Health Care Agency.

- (79) Regulatory Compliance Schedule Agreement (RCSA) shall mean an agreement between the District and permittee requiring the permittee to implement pretreatment practices and/or install equipment to ensure compliance with future revised categorical pretreatment standards or revised discharge limitations.
- (80) Rules and Regulations shall mean that document entitled "Rules and Regulations for Water, Sewer, and Recycled Water Service" containing District requirements, conditions, and limitations for connecting and discharging to the District's sewerage facilities and other requirements, conditions and limitations, as may be amended and modified.
- (81) Sample Point shall mean a location approved by the District, from which wastewater can be collected that is representative in content and consistency of the entire flow of wastewater being sampled
- (82) Sampling and Evaluation Program (S&E) shall mean a program for the determination of mass emission of constituents or compliance or non-compliance with the conditions specified in the user's permit.
- (83) Sampling Facilities shall mean structure(s) provided at the user's expense for the District or user to measure and record wastewater constituent mass, concentrations, collect a representative sample, or provide access to plug or terminate the discharge.
- (84) Sanitary Sewer shall mean a sewer which carries sanitary and industrial wastes, and to which storm, surface and groundwater are not intentionally admitted.
- (85) Sewage shall mean wastewater.
- (86) Sewer shall mean a pipe or conduit that carries wastewater or drainage water.
- (87) Sewer Lateral shall mean a building sewer as defined in the latest edition of the California Plumbing Code. It is the wastewater connection between the building's wastewater facilities and a public sewer system.
- (88) Sewerage Facilities or System shall mean any and all facilities used for collecting, conveying, pumping, treating, and disposing of wastewater and sludge.
- (89) "Shall" is mandatory; (see "May").
- (90) Shredded Garbage shall mean garbage that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than 1/2 inch (1.25 centimeters) in any dimension.

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- (91) Significant Industrial User shall mean all users subject to Federal Categorical Pretreatment Standards and any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater; contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the District's treatment facilities; or is designated by the District as a significant industrial user.
- (92) Significant Non-Compliance shall mean a compliance status a) in which a major violation remains uncorrected for 45 days after notification of non-compliance; or b) which is a result of chronic violations (66% or more of all samples which exceed the daily maximum limit or average limit of the same constituent during a 6-month period), or acute violations (33% or more of all samples which exceed the product of the daily maximum limit or average maximum limit times the applicable technical review criterion in a 6-month period; or c) which is a result of failure to provide reports in response to Notice of Violation, permit application information, Report of Progress, a Report of Non-Compliance, or other reports required to administer these Rules and Regulations, within 30-days from the due date; d) any violation of any limitation that the District determined to cause alone or in combination with other discharges, interference or pass through; e) any discharge which has caused imminent endangerment to human health, welfare or to the environment, or has resulted in the District's exercise of its emergency authority (Section 7.6.2.6); f) failure to meet, within 90 days after the scheduled date, a compliance schedule milestone contained in a permit or enforcement action, for starting construction, completing construction, or attaining final compliance; or g) failure to accurately report non-compliance.
- (93) Sludge shall mean any solid, semi-solid or liquid decant, supernate or supernate from a manufacturing process, utility service, or pretreatment facility.
- (94) Slug Load shall mean any discharge of water or wastewater which in concentration of any pollutant or in quantity of flow will cause interference with the District's reclamation plant or subsequent Publicly Owned Treatment Works (POTW).
- (95) Spent Solutions shall mean any substance defined as a hazardous waste by RCRA, 40 CFR 261.21 through 261.24, and unable to be used for its original purpose.
- (96) Spill Containment shall mean an approved protection system installed by the permittee to prohibit the accidental discharge to the sewer of non-compatible pollutants.
- (97) Standard Industrial Classification (SIC) shall mean a system of classifying a user as identified in the 1987 or subsequent SIC manual as prepared by the Office of Management and Budget.
- (98) Standard Methods shall mean the laboratory procedures set forth in the latest edition, at the time of analysis, of "Standard Methods for the Examination of Water and Wastewater" prepared and published jointly by the American Public Health Association, the American Water Works

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Association and the Water Pollution Control Federation, and 40 CFR Part 136, 3, 4 and 5, and/or other recognized procedures established by EPA and California Regional Water Quality Control Board.

- (99) Storm Water shall mean all water directly derived from rainwater which has not been utilized in domestic, agricultural, industrial or other beneficial use.
- (100) Suspended Solids (SS) shall mean the solids that either float to the surface or are suspended in water, wastewater or other liquids and which are removable from said liquid through standard laboratory filtration procedure.
- (101) Technical Review Criteria shall mean those factors which, when multiplied by the appropriate limitation, set the lower limit of a significant violation. The Technical Review Criteria factor is 1.2 for all limitations except for BOD, total suspended solids, fats, oil, and grease where the factor is 1.4.
- (102) Total Organic Carbon (TOC) shall mean the measure of total organic carbon in domestic or other wastewater as determined by the appropriate testing procedure.
- (103) Total Solids shall mean the sum of suspended and dissolved solids.
- (104) Toxic Substances shall mean any pollutant or combination of pollutants which upon exposure to or assimilation into any organism will cause adverse effects, such as cancer, genetic mutations and physiological manifestations.
- (105) Unpolluted Water shall mean water to which no constituent has been added either intentionally or accidentally.
- (106) User shall mean any person who discharges or causes a discharge of wastewater directly or indirectly to a public sewer. User shall also have the same meaning as "Discharger" or "Industrial User".
- (107) User Charge shall mean a charge imposed by the District for the provision of a special service not normally provided by the District, such as situations involving unusual quantity or quality requirements.
- (108) Waste shall mean sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing or processing operation of whatever nature, including such wastes placed within containers of whatever nature, prior and for the purpose of disposal.
- (109) Waste Minimization Practices shall mean plans or programs intended to reduce or eliminate discharges to the District's sewerage system or to conserve water, including, but not limited to, product substitutions, housekeeping practices, inventory control, employee education, and other steps as necessary to minimize wastewater and/or solid waste produced.

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- (110) Wastehauler shall mean any person or entity, duly licensed, carrying on or engaging in vehicular transport of waste as part of, or incidental to, any business for that purpose.
- (111) Wastewater shall mean liquid and water-carried waste or water, whether treated or untreated, discharged into or permitted to enter a public sewer.
- (112) Wastewater Constituents and Characteristics shall mean the individual chemical, physical, biological, radiological and other parameters, including volume, flow rate, concentration and such other parameters that serve to define, classify, or measure the quality and quantity of wastewater.
- (113) Wastewater Discharge Permit shall mean any of the following permits: Class I Permit, Class II Permit, Special Purpose Permit or FOG Wastewater Discharge Permit. Used interchangeably with the word "permit".
- (114) Wastewater Treatment shall mean the structures, equipment and processes required to collect, transport and treat domestic and industrial wastewater and dispose of the effluent and accumulated residual solids.

### 7.3 WASTEWATER DISCHARGE REGULATIONS

#### 7.3.1 Prohibitions and Limitations on Wastewater Discharges

These prohibitions apply to all Users of District sewerage facilities whether or not they are subject to Federal Categorical Pretreatment Standards or any other National, State or Local pretreatment standards or requirements. No person shall discharge or allow to be discharged wastewaters directly or indirectly into District's sewerage facilities that cause or are capable of causing, either alone or by interaction with other substances, interference with the operation of the District's sewerage facilities, including but not limited to the following:

- (1) Oils and Grease. Wax, grease or oil of mineral origin in a concentration of more than 100 mg/l whether emulsified or not, or any other waste containing substances which may precipitate, solidify or become viscous at temperatures between 32° and 150°F (0° and 65°C) at the point of discharge into the District's sewerage facilities).
- (2) Explosive Mixtures. Liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the District's sewerage facilities or to the operation of the District's sewerage facilities. At no time shall the discharge into the District's sewerage facilities have a closed cup flash point less than 140°F (60°C). Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides.

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- (3) Noxious Materials. Noxious or malodorous solids, liquids or gases, which, either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or are or may be sufficient to prevent entry into a sewer for its maintenance and repair.
- (4) Improperly Shredded Garbage. Garbage that has not been ground or comminuted to such a degree that all particles will be carried freely in suspension under flow conditions normally prevailing in the public sewers, with no particle greater than one-half (1/2) inch in any dimension.
- (5) Radioactive Wastes. No person shall discharge, or cause to be discharged, any radioactive waste into a public sewer except:
  - [a] When the person is authorized to use radioactive materials by the State Department of Health or other governmental agency empowered to regulate the use of radioactive materials;
  - [b] When the waste is discharged in strict conformity with current California Radiation Control Regulations (California Administrative Code, Title 17) for safe disposal;
  - [c] When the person is in compliance with all rules and regulations of all other applicable regulatory agencies; and,
  - [d] When a Class I permit has been obtained from OCSD.
- (6) Solid or Viscous Wastes. Solid or viscous wastes which will or may cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the sewerage facilities. Prohibited materials include, but are not limited to, grease, uncomminuted garbage, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastic, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, and similar substances.
- (7) Slug Loads. Wastewaters at a flow or containing such concentrations of pollutants that will cause interference with the District's treatment plant or subsequent POTW.
- (8) Toxic Substances. Any toxic substances in amounts exceeding established standards, and any chemical elements or compounds, phenols or other taste or odor producing substances, or other substances which are not susceptible to treatment or which may interfere with the biological processes or efficiency of the treatment processes, cause acute worker health and safety problems, or that will pass through the District's sewerage facilities.

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- (9) Discolored Material. Wastes with objectionable color not removable by the treatment process.
- (10) Corrosive Wastes. Any waste which will cause corrosion or deterioration of the District's sewerage facilities. All wastes discharged to a public sewer must have a pH value in the range of (6) to (12) standard units. Prohibited materials include, but are not limited to, acids, sulfides, concentrated chloride and fluoride compounds and substances which will react with water to form acidic products.
- (11) Organic Phosphorous Compounds. Any amounts of organic phosphorus compounds released in a discharge at a flow rate or in a concentration which will cause pass through or interference with the sewerage facilities.
- (12) Non-Compliant Waste. Any waste not in compliance with national categorical pretreatment standards as represented in 40 CFR Chapter I Subchapter N or 40 CFR Parts 401-471.

### 7.3.2 Storm Water

Ground water, street drainage, subsurface drainage, foundation drains, or yard drainage shall not be discharged directly or indirectly to the District's sewerage facilities. The District at its sole discretion may approve the discharge of such water by granting a Special Purpose Permit only when no alternative method of disposal is reasonably available. The applicant shall bear the burden of demonstrating that no alternative method of disposal is reasonably available. If a Special Purpose Permit is granted for the discharge of such water into a sewer, the user shall pay connection fees, applicable charges and fees for use and shall meet such other conditions as required by the District.

### 7.3.3 Self-Regenerative Water Softeners

Any brine waste discharge from an onsite self-regenerative water softener unit is prohibited. Installation of such onsite self-regenerative water softener units within the District is specifically prohibited. However, the District may, on an individual basis, approve such units if the applicant, owner, or customer demonstrates that such brine waste will be discharged into a permanent facility other than a District sewer as approved by the plumbing codes of the cities of Irvine, Laguna Beach, Newport Beach, Orange, Santa Ana, Tustin and the County of Orange or its successors, as may be applicable or as deemed justified by the District.

### 7.3.4 Unpolluted Water

Unpolluted water, such as single-pass cooling water, shall not be discharged through direct or indirect connection to a public sewer. The District may approve the discharge of such water only when no alternative method of disposal is reasonably available by issuing a Special Purpose Permit.

### 7.3.5 Septic Tank and Cesspool Wastes

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Discharges of septic tank, or cesspool wastes, into the public sewer or directly into the treatment plant facilities is prohibited.

7.3.6 Temperature

No person shall discharge wastewater with a temperature higher than 140°F (60°C). Heat in discharged wastewater shall not cause the temperature of wastewater entering the headworks of any wastewater treatment plant to exceed 104°F (40°C).

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### 7.3.7 Point of Discharge

No person, excluding District personnel involved in maintenance functions of sewer facilities, shall discharge any water, wastewater or any substance directly into a manhole or other opening in a sewer other than through an approved building sanitary sewer, unless upon written application by the user and approved by the District and payment of the applicable charges for use and fees.

### 7.3.8 Wastewater Strength Limitations

No person shall discharge wastewater containing substances in excess of the quantities or concentrations listed in Exhibit B, Schedule of Rates and Charges, to these Rules and Regulations entitled "Discharge Limits", or containing other materials, or having other characteristics, including, but not limited to, ammonia, biochemical oxygen demand (BOD), chemical oxygen demand, total organic carbon, suspended solids, oil or grease of animal or vegetable origin, total dissolved solids, and phenolic compounds in quantities that may cause or are found to cause problems, pass through, or interference with the sewerage facilities.

No person shall discharge wastewater containing in excess of 0.01 mg/l of pesticides as a daily maximum, to include, but not limited to the following: DDT (dichlorodiphenyltrichloroethane, both isomers), DDE (dichlorodiphenylethylene), DDD (dichlorodiphenyldichloroethane), Aldrin, Benzene Hexachloride (alpha, beta, and gamma isomers), Chlordane, Endrin, Endrin aldehyde, TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin), Toxaphene (alpha)-Endosulphan, (beta)-Endosulphan, Endosulphan sulfate, Heptachlor, Heptachlor epoxide, and Dieldrin.

No person shall discharge wastewater containing in excess of 0.01 mg/l of polychlorinated biphenyls as a daily maximum to include, but not limited to the following: Aroclors 1016, 1221, 1228, 1232, 1248, 1254, 1260, and 1262.

### 7.3.9 Prohibition on Dilution

No user shall increase the use of water in, or in any other manner attempt to dilute, a discharge as a partial or complete substitute for treatment to achieve compliance with these Rules and Regulations and the user's permit or to establish an artificially high flow rate for permit mass emission rates.

### 7.3.10 Prohibition on Infectious Waste

The District shall have the authority to require that any discharge of an infectious waste to the sewer be rendered non-infectious prior to discharge if the infectious waste is deemed to pose a threat to the public health and safety, or will result in any violation of applicable waste discharge requirements.

### 7.3.11 Limitations on Disposal of Spent Industrial Solutions and Sludges

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- (1) Spent solutions, sludges, and materials of quantity or quality in violation of, or prohibited by these Rules and Regulations, or any permit issued under these Rules and Regulations must be disposed of in a legal manner at a legally acceptable point of disposal as defined by the appropriate Regulatory Agency. All waste manifests shall be retained for a minimum of three years, and made available to the District upon request.
- (2) No person shall batch dump to the District's sewerage facilities. Non-compliance fees applicable for such discharge will be as shown in Exhibit B, Schedule of Rates and Charges.

### 7.3.12 New or Increased Pollutant Discharge

No person shall increase the discharge of existing pollutants or discharge new pollutants that do not meet pretreatment standards, local limitations, or other requirements, or cause the District to violate any permit condition or limitation.

### 7.3.13 Mass Emission Rate Determination

Mass emission rates for non-compatible or compatible pollutants that are present or anticipated in the user's wastewater discharge may be set for each user and made a part of each user's permit. These rates shall be based on Local Discharge Limits contained in Exhibit C[1.2],[PW3] or Federal Categorical Pretreatment Standards, and the discharger's average daily wastewater discharge for the past three years, the most recent representative data, or other data acceptable to the General Manager or their designee.

## 7.4 WASTEWATER DISCHARGE PERMITS

### 7.4.1 General

In addition to District connection charges required by these Rules and Regulations, all significant industrial users, proposing to connect to or discharge into the District's sewerage facilities must first obtain a Wastewater Discharge Permit. No vested right shall be deemed given by issuance of permits provided for in this document. The issuance of a Wastewater Discharge Permit does not authorize the commission of any act causing injury to the person or property of another, nor relieve the discharger from compliance with, or protect the discharger from liability under Federal, State or local laws, nor guarantee the discharger a capacity right in the District's sewerage facilities.

### 7.4.2 Permit Application Procedure

Applicants for Wastewater Discharge Permits shall complete an application form available at the District's office. This application shall be accompanied by the applicable fees.

As part of the permit application process the District may require the submittal of detailed plans for a review of existing or proposed

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construction of pretreatment facilities, spill containment facilities, monitoring and metering facilities, and operating procedures. The approval of the District shall be received prior to the start of construction. This review of plans and procedures shall in no way relieve the user of the responsibility of modifying the facilities or procedures in the future, as necessary, to meet the requirements of these Rules and Regulations or any requirements of other Regulatory Agencies.

If required the user shall submit four (4) copies of all drawings for review. All drawings shall include the following:

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- 
- (1) North arrow.
  - (2) Scale size.
  - (3) User name and address.
  - (4) Drawing name and drawing number.
  - (5) Date drawn or revised.
  - (6) Name of drafter and person approving drawing.

These scaled drawings shall include but not be limited to depictions of the manufacturing process (waste generating sources), spill containment, pretreatment facilities, and monitoring/metering facilities. Schematic drawings of pretreatment facilities may be required. The District may also require that drawings be signed and sealed by a California Registered Chemical, Mechanical, or Civil Engineer.

Upon receipt of all required information, the application shall be processed and, upon approval, a permit will be issued, signed by a District representative, and returned to the applicant. When properly signed, the permit together with any documents attached thereto shall constitute a valid Wastewater Discharge Permit for the time period specified therein. Where the discharger becomes aware that relevant facts were omitted or incorrect information was submitted in the application, the facts or corrected information shall be promptly submitted to the District and the permit shall be amended if appropriate.

### 7.4.3 Permit Conditions

Wastewater Discharge Permits shall be expressly subject to all provisions of these Rules and Regulations and all other regulations, user charges and fees established by the District. The conditions of wastewater discharge permits shall be uniformly enforced by the District in accordance with these Rules and Regulations and applicable state and federal regulations. Permits may contain the following:

- (1) The unit charge or schedule of user charges and fees fixed in this section for the sewage to be discharged;
- (2) The average and maximum sewage constituents and characteristics which may be discharged into the District's sewerage facilities;
- (3) Limits on rate and time of discharge or requirements for flow regulations and equalization;
- (4) Requirements for installation of inspection and sampling facilities;
- (5) Pretreatment requirements;
- (6) Specifications for monitoring programs which may include sampling locations, frequency and method of sampling, number, types and standards for tests and reporting schedule;
- (7) Requirements for submission of technical reports or discharge reports;

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- (8) Requirements for maintaining plant records relating to sewage discharge as specified by the General Manager, and affording the General Manager access thereto;
- (9) Mean and maximum mass emission rates, or other appropriate limits when non-compatible pollutants are proposed or present in the user's sewage discharge;
- (10) A time schedule for meeting certain pretreatment requirements;
- (11) Other conditions as deemed appropriate by the General Manager to insure compliance with this section.

### 7.4.4 Duration of Permits

Permits shall be issued for a specified time period, not to exceed four years. If the user is not notified by the District ninety days prior to the expiration of the permit, the permit shall be extended one additional year. The terms and conditions of the permit are subject to modifications and change by the District and OCSD during the life of the permit as limitations or requirements are modified and changed. The user shall be informed of any proposed changes in his permit at least thirty days prior to the effective date of change. Any change or new conditions in the permit shall include a reasonable time schedule for compliance.

### 7.4.5 Transfer of a Permit

Wastewater Discharge Permits are issued to a specific operation. A Wastewater Discharge Permit shall not be reassigned or transferred or sold to a new owner or lessee, new user, different premises, or a new or changed operation. In the event of any change in the name, ownership or control of the discharger's operation or a change in the operation itself, the discharger shall so notify the District. The District may require the new owner or operator to submit a new permit application.

### 7.4.6 Permit Renewal or Modification

An industrial discharger shall file a new application with the District sixty days prior to the expiration of its existing waste discharge permit, or the implementation of changes in the operation of a discharger which increase flows beyond that specified in the existing permit or cause a significant change in the nature of the wastewater or location of the discharge, or which changes may result in non-compliance with these Rules and Regulations. A new application shall also be required to reestablish sewer service following revocation of a permit or upon disclosure of omitted relevant facts or incorrect information submitted in an application.

### | 7.4.7 \_\_\_\_\_ Pretreatment

Users shall make sewage acceptable under such limitations as may be established herein before discharging to the District's sewerage facilities. Any facilities required to pretreat sewage to a level acceptable to the District and OCSD shall be provided and maintained at the user's expense. Detailed plans, specifications and other pertinent data showing the

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pretreatment facilities and operating procedures shall first be submitted to the General Manager for review, and shall be approved by the General Manager before construction of the facility. These plans shall be signed by an engineer or responsible officer certifying that they will meet the pretreatment requirements. The review and approval of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the District under provisions of this section. Any proposed changes in the pretreatment facilities or method of operation subsequent to issuing a permit shall be reported to and be approved by the General Manager before implementing such changes. Such approval of plans or changes therein shall not exempt the user from compliance with any applicable code, ordinance, rule, regulation or order of any regulatory agency or governmental authority.

### 7.4.8 Protection From Accidental Discharge

Each user shall prevent accidental discharge to the public sewer of prohibited wastes or other materials regulated by these Rules and Regulations or Federal categorical pretreatment standard by providing spill containment facilities. Such facilities shall be provided and maintained at the user's expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the General Manager for review, and shall be approved by the General Manager before construction of the facility and before making any changes therein. The review and approval of such plans and operating procedures or change therein will in no way relieve the user from the responsibility of modifying the facility as necessary to provide the protection necessary to meet the requirements of this section or any other applicable code, ordinance, rule, regulation or order of any regulatory agency or governmental authority.

### 7.4.9 Procedure For Accidental Discharge

In the event the discharger is unable to comply with any of the permit conditions due to a breakdown of waste treatment equipment, accidents caused by human error or acts of God, the discharger shall notify the District by telephone as soon as he or his agents have knowledge of the incident, but within 24 hours. Confirmation of this notification shall be made in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the date of the incident, as well as what steps are being taken to prevent the problem from recurring and the results of repeat sampling and analyses.

If it can be shown that the discharge is the cause of the District violating its discharge requirements or incurring extraordinary operational expenses or suffering loss or damage to the sewerage facilities, then that discharger may be responsible for any costs or expenses, including assessments by other agencies or the court, incurred by District.

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### 7.4.10 Types of Permits

The Wastewater Discharge Permit shall be in one of three forms and is dependent upon the volume and characteristics of wastewater to be discharged. The three Wastewater Discharge Permits are:

- (1) Class I Permit;
- (2) Class II Permit;
- (3) Special Purpose Permit;

#### 7.4.10.1 Class I Permit

All Class I Users discharging or proposing to discharge into the District's sewerage facilities must obtain a Class I Wastewater Discharge Permit jointly issued by the District and OCSD before discharging.

#### 7.4.10.2 Class II Permit

A Class II permit shall be required for all Class II Users who are not required to obtain a Class I permit. The purpose of a Class II permit is to facilitate the collection of compatible pollutant surcharges from the user. All Class II Users discharging or proposing to discharge into the District's sewerage facilities must obtain a Class II Wastewater Discharge Permit by filing an application pursuant to Section 7.4.2.

#### 7.4.10.3 Special Purpose Permit

A special purpose permit shall be required for a user proposing to discharge storm water, groundwater, surface runoff, subsurface drainage, or unpolluted water directly or indirectly to the District's sewerage facilities. This permit may be granted when no alternative method of disposal is reasonably available, or to mitigate an environmental risk or health hazard. The applicant shall bear the burden of demonstrating that no alternative method of disposal is reasonably available.

Applicants seeking a special purpose wastewater permit shall complete and file with the District, prior to commencing discharge, an application in the form prescribed by the District. This application shall be accompanied by the applicable fees, plumbing plans, a detailed analysis of the alternatives for disposal, or other data needed by the District for review.

Discharge conditions and limitations shall be no less stringent than Section 7.3 of these Rules and Regulations and ~~Section 2.7.7 Article 2~~ [JA4] [LS] of the OCSD Ordinance. For constituents not listed in Section 7.3 of these Rules and Regulations or in ~~Section 2.7.7 Article 2~~ of the OCSD Ordinance, the District shall exercise its sole discretion to base conditions and limitations on the California Toxics Rule and other water quality criteria.

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Monitoring requirements contained in the Special Purpose Permit for storm water, groundwater, surface runoff, subsurface drainage, or unpolluted water shall be for those non-compatible pollutants known or suspected to exist in the discharge and at least one analysis prior to sewer discharge shall be performed for all constituents contained in the most current Environmental Protection Agency (EPA) "Priority Pollutant" list, excluding Asbestos, and in other water quality criteria deemed appropriate by the District.

### 7.4.11 Monitoring

Management of a pollution control program requires a constant flow of information on the quantity and quality of discharges into the District's sewerage facilities. The monitoring of discharges serves three specific purposes. These purposes include ascertaining compliance with the Rules and Regulations, completion of necessary discharge reports as required, and determination of user charge fees, if applicable. There are several modes of a monitoring program. Self-Monitoring develops a data base, and provides the necessary information for determination of compliance and calculation of user charges, if applicable. This monitoring is performed by the user. Scheduled Monitoring is a systematic sampling and inspection survey of all industrial contributors to the District's sewerage facilities in accordance with a predetermined schedule. Unscheduled Monitoring is a random spot check of users to ascertain permit compliance. Demand Monitoring is conducted when some disruption of the District's sewerage facilities develops. The District will perform scheduled, unscheduled and demand monitoring to ensure compliance with the provisions of the Rules and Regulations and permits, and will review self-monitoring reports.

### 7.4.12 Self-Monitoring

Users required to obtain a Wastewater Discharge Permit may be required to develop a self-monitoring and reporting program. The frequency of self-monitoring and reporting will be based on the following criteria as evaluated by the District:

- (1) The effect of the discharger's wastewater on the District's sewerage facilities;
- (2) The degree of toxic materials which may pass through the treatment plant;
- (3) The need to ensure that any pretreatment standards are met;
- (4) The size, nature, and type of the industrial wastewater discharge;
- (5) The extent to which the user could contribute to violation of the District's discharge requirements.

Self-monitoring programs include, at minimum, the following:

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- (1) A minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics.
- (2) For all other pollutants, 24-hour composite samples must be obtained through flow-proportional composite sampling techniques where feasible.
- (3) Where flow proportional composite sampling is infeasible, samples may be obtained through time-proportional composite sampling techniques or through a minimum of four (4) grab samples where the User demonstrates that this will provide a representative sample of the effluent being discharged.

Samples collected shall be in accordance with proper sampling and handling techniques outlined in the latest edition of "Standard Methods" or that publication entitled "Methods for Chemical Analysis of Water and Wastes" published by the EPA, or other appropriate method approved by the Regional Board.

### 7.4.13 Monitoring and Metering Facilities

The General Manager may require the user to construct at his own expense monitoring and metering facilities to allow inspection, sampling and flow measurement of the sewage or internal drainage systems. The General Manager may also require sampling and metering equipment to be provided, installed and operated at the user's expense. The monitoring and metering facility should normally be situated on the user's premises. When such a location would be impractical or cause undue hardship on the user, the user may construct such facilities in the public right-of-way provided said user has obtained any and all permits required therefore and that such equipment is located so that it will not be obstructed by landscaping or parked vehicles. If the monitoring and metering facility is inside the user's fence, there shall be accommodations to allow access for District personnel, such as a gate secured with a District lock. There shall be ample room in or near such monitoring and metering facility to allow accurate sampling and compositing of samples for analysis. The monitoring and metering facility and sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user. Whether constructed on public or private property, the monitoring and metering facilities shall be provided in accordance with the District requirements and all applicable construction standards and specifications. Construction shall be completed within ninety days following written notification by the General Manager, unless a time extension is otherwise granted by the General Manager.

### 7.4.14 Inspection and Sampling

The District shall inspect the wastewater generating and disposal facilities of any user to ascertain whether the intent of these Rules and Regulations is being met and the user is complying with all requirements. Persons or occupants of premises where wastewater is created or discharged shall allow the District or its representatives ready access during the normal working day to all parts of the wastewater generating and disposal facilities and monitoring and metering facilities for the purposes of

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inspection and sampling. The District shall have the right to set up on the user's property such devices as are necessary to conduct sampling or metering operations. Where a user has security measures in force, the user shall make necessary arrangements so that personnel from the District will be permitted to enter without delay for the purpose of performing their specific responsibilities.

### 7.4.15 Discharge Reports

An industrial user discharging or proposing to discharge sewage into the District's sewerage facilities shall be required to file discharge reports periodically or at anytime requested by the District. Industrial users subject to Federal categorical pretreatment standards, shall submit to the District by June 30 and December 31, unless required more frequently by the standard or by the District, a report indicating the nature and concentration of pollutants in the discharge which are limited by such categorical pretreatment standards. Reports generated by OCS D may serve to meet this requirement. In addition, this report shall include a record of flows as required by the District. The District may agree to alter the months during which the reports are to be submitted based on an industrial user's high or low flow rates, holidays, budgets, etc.

Where the District has imposed mass limitations on an industrial user, the report shall indicate the mass of pollutants regulated by the pretreatment standards in the discharge of the industrial user. Where the District has imposed equivalent mass or concentration limits on an industrial user, the report shall contain a reasonable measure of an industrial user's long-term production rate. For all other industrial users subject to categorical pretreatment standards expressed in terms of pollutant discharge per unit of production, the report shall include the industrial user's actual average production rate for the reporting period.

The District may also require an industrial user to include other information in the report including, but not limited to hours of operation, number and classification of employees, and quantities of liquid or gaseous materials stored on site even though they may not be discharged. Industrial users who monitor more frequently than required by permit must report the results of such monitoring.

Industrial users required to submit these reports or to keep other records under the conditions of their permit shall retain for three years all records of monitoring activities including dates, times, exact places, methods, names of persons who sampled and analyzed the discharge, and results of analysis, and shall make such records available for inspection and copying by the Regional Board, and the District. This period of retention may be extended during the course of any unresolved litigation regarding the User or the District, when requested by the Regional Board.

These reports shall be signed per Section 7.4.20 of the Rules and Regulations.

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### 7.4.16 Confidential Information

All information and data on a user obtained from reports, questionnaires, permit applications, permits, monitoring programs, and from inspections shall be available to the public or other governmental agencies without restriction unless the user specifically requests confidentiality and is able to demonstrate to the satisfaction of the General Manager that the release of such information would divulge information, processes or methods which would be detrimental to the user's competitive position. Any such claim must be asserted at the time of submittal of the information by stamping the words "confidential business information" on each page containing such information. If a claim is so asserted, the District will treat the information in accordance with Chapter 40, Code of Federal Regulations, Part 2. When requested by the person furnishing a report or other document, the portions of a report or document which might disclose trade secrets or secret processes shall not be made available to the public, but shall be made available to governmental agencies; and such portions of a report or document shall be subject to use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report or document. Sewage constituents and characteristics will in no instance be recognized as confidential information.

### 7.4.17 Toxic Solid Wastes

Industrial dischargers identified as generators of toxic solid wastes shall be notified by the District of applicable requirements promulgated under the Solid Waste Disposal Act, and the Resource Conservation and Recovery Act (RCRA) and shall be referred to the State of California Department of Health Services. The foregoing provision shall in no way relieve the discharger of full responsibility for ascertaining and complying with all such requirements.

### 7.4.18 Hazardous Waste Discharge

All industrial dischargers are required to file a one-time notification with the District of the discharge of wastes which, if otherwise disposed of, would be considered RCRA hazardous wastes. Industrial dischargers which discharge more than 220 pounds (100 kilograms) of RCRA classified wastes per month must include in the notification an identification of hazardous constituents, estimates of mass and concentration on a monthly basis for twelve consecutive months. Industrial dischargers who discharge less than 33 pounds (15 kilograms) per month of non-acute hazardous waste as defined by RCRA do not have to report under this Section. In addition, industrial dischargers need not report pollutants already addressed under self-monitoring, baseline monitoring, and other periodic compliance reports.

Industrial dischargers subject to this Section are required to certify that they have developed a program to reduce the volume or toxicity of hazardous wastes generated to the degree it has been determined to be economically practical.

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### 7.4.19 Baseline Monitoring Reports

All dischargers may be required to comply with applicable mandatory toxic waste and pretreatment standards promulgated in accordance with Sections 307 and 308 of the Federal Water Pollution Control Act, or amendments thereto. Within 180 days of the date such pretreatment standards are promulgated, or become applicable to the discharger, dischargers subject to the standards shall submit a baseline monitoring report to the District and to the U.S. Environmental Protection Agency detailing, in accordance with Section 403.12, Chapter 40, Code of Federal Regulations, as amended, the discharger's compliance status with the regulations. If the discharger is in non-compliance, the report shall include a time schedule outlining how the discharger will achieve compliance within the date established for the applicable pretreatment standards. Progress reports, monitoring and reports of compliance shall also, as required by Section 403.12, be submitted by the discharger at the specified times.

### 7.4.20 Signatory Requirements

All reports and permit applications required by the District for satisfying Federal Regulations shall contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with Federal Pretreatment Requirements."

This statement shall be signed by a manager and the person responsible for environmental matters of the industrial user as defined in 40 CFR 403.12 (1) (1-4).

## 7.5 CHARGE FOR USE

### 7.5.1 General

The purpose of a charge for use is to insure that each recipient of sewerage service from the District pays its reasonably proportionate share of all the costs of providing that sewerage service. Charges for use shall be used to recover the total cost of operation and maintenance, including the conveying, treating and disposing of wastewater in the District's sewerage facilities, as well as capital expenditures and reserve requirements for providing wastewater collection treatment and disposal. In addition, they will be used to reimburse District for the cost of monitoring and enforcement of these Rules and Regulations. Charges for sewerage service use will be on the District's non-residential service/quantity/commodity rates as specified in the District's Schedule of Rates and Charges, based on return of metered water to the sewer. Dischargers/Those dischargers may, upon request to the District, be permitted to have the amount of water being discharged into the sewer determined by means acceptable to the District. In lieu of the rates specified in the Schedule of Rates and Charges, upon request by the discharger and at the sole discretion of the District, an alternative service charge may be applied pursuant to Section 7.5.2 of

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~~these Rules and Regulations. General charges will be determined on the basis of the volume of wastewater, the mass of BOD, and the mass of SS as set forth below.~~ Additional fees will be levied by the District for compatible or non-compatible pollutants in excess of those amounts specified in the user permit.

7.5.2 Alternative Service Charge

~~At the sole discretion of the District, dDischargers may request the application of an Alternative Service Charge for use[KB7]. The acceptance of such requests and the formation and continuing application[JAB1] of an Alternative Service Charge shall be at the sole discretion of the District. The Alternative Service Charge shall be based on the measured-quantity and quality of water being discharged to the sewer from the discharger's facility, measured by a means acceptable to the District. The District may revise an Alternative Service Charge, or discontinue the application of an Alternative Service Charge to a discharger and apply the rates specified in the Schedule of Rates and Charges, if the District determines, in its sole discretion, that the Alternative Service Charge does not adequately recover costs in accordance with the purposes described in Section 7.5.1; such action may, but need not, be taken in conjunction with any enforcement remedies under Section 7.6[JAB9].~~

7.5.2.1 Determination of Flow

There are three methods for determining the volume of wastewater r-discharged into the sewer: direct measurement, metered water supply, or adjusted metered water supply. Those users exceeding 10% of the design capacity of any District sewerage facility may be required to provide a continuous, automatic total flow measurement system incorporating flow indication, totalization, and recording of the wastewater flow (direct measurement system). Those users not required to have a continuous wastewater flow measurement system shall use metered water supply or adjusted metered water supply measurements to determine flow. The District shall approve the method of wastewater flow measurement to be used in each instance.

7.5.2.1 Direct Measurement

Direct Measurement reports the volume of industrial wastewater determined by a full time flow meter, measuring the wastewater leaving the plant.

7.5.2.2 Metered Water Supply

Metered water supply reports the amount of industrial wastewater discharged when the flow volume is a measurement of the total water entering the user's plant. This amount can be taken from

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water bills or flow measuring device which measures the intake of water from either the District, water wells, or other sources.

~~7.5.2.3~~ ~~Adjusted Metered Water Supply~~

Adjusted metered water supply reports the amount of industrial wastewater discharged when amounts of water consumed in plant operations are subtracted from the total volume of metered water entering the plant. This results in a calculated rather than a measured flow volume of industrial wastewater leaving the plant. The adjusted metered water supply is determined by deducting measured quantities of water consumed in plant operations from the metered water supply.

~~7.5.2.2~~ ~~3~~ ~~Determination of Biological Oxygen Demand (BOD) and~~

~~Suspended~~

~~Solids (SS) For Charge For Use~~

~~(1) The BOD and SS concentrations in the discharged wastewater shall be determined in accordance with the results of analytical tests performed on samples collected by the District and/or discharger and in a manner specified by the District. The frequency of sampling to determine wastewater strength shall be determined by the District. (1) The BOD and SS concentrations required for charge for use will be determined from the average of six samples. Each sample shall be a 24 hour composite collected proportional to flow. Each 24 hour composite sample must have individual samples taken at least once per hour during all 24 hours or any lesser number of hours that wastewater is flowing into the sewer.~~

~~(2) The samples collected shall be in accordance with proper sampling and handling techniques outlined in the latest edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association), and/or 40 CFR 136" or that publication entitled "Methods for Chemical Analysis of Water and Wastes Guidelines Establishing Test Procedures for the Analysis of Pollutants Wastes", published promulgated by the EPA or other appropriate methods approved for use by the Regional Board. Samples collected shall be delivered to a California State Certified Laboratory for analysis within the holding period of the sample. The District may require samples to be split for concurrent analyses.~~

~~7.5.2.344~~ ~~Charge For Use~~

~~The Alternative Service eChargecharge for use for Class II usersDistrict approved dischargersusers~~

shall be computed by the following formula:

~~Charge for use = VR<sub>v</sub> + BR<sub>b</sub> + SR<sub>s</sub>~~

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- \_\_\_\_\_ Where V = total volume of flow, in hundred cubic feet
- \_\_\_\_\_ B = total discharge of biochemical oxygen demand, in pounds
- \_\_\_\_\_ S = total discharge of suspended solids, in pounds
- \_\_\_\_\_  $R_v, R_b, R_s$  = unit charge rates for volume, BOD, and suspended solids, respectively, adopted and adjusted as needed by the District Board of Directors as shown in Exhibit B, Schedule of Rates and Charges.

\_\_\_\_\_ Each unit rate shall be based on the amount attributable to the respective component as a proportionate share of the total cost for operations and maintenance, capital expenditures, debt service, and reserve requirements for providing wastewater collection, treatment, and disposal in dollars per unit. Other measurements of the organic content of the wastewater of a discharger, such as COD or TOC may be used instead of BOD when BOD is not applicable. However, the discharger must establish for the District a relationship between the BOD of his wastewater and the other measured parameter to convert the other parameter to an equivalent BOD. This relationship shall be used by the District in determining the Alternative Service Charge for use. When wastewater from typical domestic use facilities is discharged separately from the other wastewaters of a discharger, the charge for use for discharging the domestic wastewater may be determined by using the following:

- (1) 10,000 gallons per employee per year; and,
- \_\_\_\_\_ (2) 20 pounds of suspended solids per employee per year; and,
- \_\_\_\_\_ (3) 20 pounds of BOD per employee per year.  
(The number of employees will be considered at the average of people employed full time on a daily basis. This may be determined by averaging the number of people employed at the beginning and ending of each quarter, or other period that reflects normal employment fluctuations.)

| 7.5.355 Special Purpose Discharge Permit Charge For Use

A charge for use to cover all costs of the District for providing sewerage service and monitoring shall be established by the General Manager. A deposit determined by the General Manager to be sufficient to pay the estimated charges for use shall accompany the Special Purpose Discharge Permit application, and said deposit shall be applied to the charges for use.

~~7.5.6~~ ~~Mass Emission Rates—Rate Determination~~

~~Maximum mass emission rates for non-compatible or compatible pollutants that are present or anticipated in the user's wastewater discharge shall be set for each user and made a part of each user's permit. These rates shall be based on Federal pretreatment standards and rates, or the rates contained in Exhibit B, Schedule of Rates and Charges, to these Rules and Regulations, as applied pursuant to Section 7.5.4, whichever is more stringent.~~

7.5.747 Charges For Non-Compliance

Non-compliance with permit requirements, mass emission rate limits, concentrations, and/or these Rules and Regulations may be determined by an analysis of a grab or composite sample of the discharge of a permittee.

If routine sampling of the discharge of a permittee reveals non-compliance by the permittee with the mass emission rates or other conditions and limitations specified in the permittee's discharge permit, or with any provisions of these Rules and Regulations, then the permittee shall pay fees to the District as specified in Exhibit B, Schedule of Rates and Charges. The purpose of the non-compliance fees is to compensate the District for additional costs of sampling, monitoring, laboratory analysis, treatment, disposal, and administrative processing incurred as a result of the non-compliance, and shall be in addition to and not in lieu of any penalties as may be assessed pursuant to Sections 7.6.2, 7.6.3, and 7.6.4, and charges under Section 7.5.8.

Upon discovery of non-compliance with any pretreatment standard and requirement, the District shall be authorized to immediately proceed with enforcement action against the industrial user as outlined in Section 7.6. The user's status shall remain in violation until all necessary steps have been taken to restore or achieve compliance.

7.5.858 Damage to Facilities or Interruption of Normal Operations

When a discharge of wastes causes an obstruction, interference, damage, or any other impairment to District's operation or facilities, the District may assess a charge to the discharger for the work required to clean or repair the facility or costs incurred to resume normal operations and such discharge shall be grounds for permit revocation. A service fee of 25 percent of District's costs shall be added to these charges and shall be payable within forty five (45) days of invoicing by the District.

If it can be shown that the discharge is the cause of the District violating its discharge requirements established by any Regulatory Agency or incurring additional expenses or suffering losses or damage to the sewerage facilities, then that discharger shall be responsible for any costs or expenses incurred by the District, including regulatory fines, penalties, and assessments made by other agencies or a court.

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### 7.6 ENFORCEMENT

#### 7.6.1 Duty of Enforcement

- (1) The General Manager is hereby charged with the duty of enforcing this Section. The provisions of this Section shall be applicable to any discharge and any building, structure or property temporarily or permanently connected to the District's sewerage facilities, whether the same is owned, operated or controlled by a private party or by a public agency, other than the District, or quasi-public agency, corporation or association.

The District shall have legal authority to obtain remedies for non-compliance by industrial users with any pretreatment standard and requirement, including the authority to seek injunctive relief. The District shall have authority and procedures (after informal notice to the discharger) to immediately and effectively halt or prevent any discharge of pollutants which may constitute an imminent endangerment to the health or welfare of persons or to the environment, or cause interference with the operation of any treatment plant.

- (2) In addition to such other penalties as may be prescribed for a violation of these Rules and Regulations, whenever the General Manager finds that a discharge of waste has been taking place in violation of any prohibitions or limitations prescribed herein or pretreatment standards promulgated in accordance herewith, he may require the user to submit for his approval best management practice plans (BMPs) wherever necessary to implement the District's pretreatment program (e.g. plans ensuring industrial users conduct necessary routine maintenance, cleaning operations, chemical storage practices, segregation of wastes for reclamation, reduction of contaminated runoff, etc.). Any failure to comply with such BMPs shall likewise be deemed a violation of this article.

#### 7.6.2 Enforcement Remedies

The District may, at its discretion, utilize any one, combination, or all enforcement remedies provided in Section 7.6 in response to any violation of a permit or these Rules and Regulations.

##### 7.6.2.1 Probation Order

In the event that it is determined that a user has discharged in violation of any provision of these Rules and Regulations, or the terms, conditions and limitations of its discharge permit, or has not made payment of all amounts owed to the District for user charges, non-compliance fees, or any other fees, the General Manager may issue a Probation Order, whereby the user must comply with all directives, conditions, and requirements therein within the time prescribed.

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The Probation Order may contain terms and conditions including, but not limited to, installation of pretreatment equipment and facilities, submittal of drawings or technical reports, payment of fees, limits on rate and time of discharge, or other provisions to ensure compliance with these Rules and Regulations.

If at any time while a Probation Order is in effect, a user discharges wastewater to the District's sewerage facilities which is not in compliance with the Probation Order, the terms, conditions, or the limitations specified in the user's discharge permit, or with any provision of these Rules and Regulations, then the user shall pay fees to the District as specified in Exhibit B, Schedule of Rates and Charges, and the user may be assessed all other costs incurred during the sampling, including labor, equipment, materials, and overhead. The user may also be subject to permit suspension pursuant to Section 7.6.2.4 of these Rules and Regulations.

A Probation Order issued by the General Manager shall be in effect for a period not to exceed ninety (90) days. Upon satisfactory compliance with the terms of the Probation Order and expiration thereof, any fees to be assessed due to subsequent non-compliance by user shall be in accordance with these Rules and Regulations, re-established at the rate set forth in Exhibit B, Schedule of Rates and Charges. All enforcement actions thereafter shall be based on applicable provisions of these Rules and Regulations.

### 7.6.2.2

#### Enforcement Compliance Schedule Agreement (ECSA)

Upon determination that a permittee is in non-compliance with the terms, conditions or limitations specified in its permit or any provision of these Rules and Regulations, and needs to construct and/or acquire and install equipment related to pretreatment, the General Manager may require the permittee to enter into an ECSA, which will, upon the effective date of the ECSA, amend the permittee's permit. The ECSA shall contain the terms and conditions by which a permittee must operate during its term and shall provide specific dates for achieving compliance with each term and condition for construction, acquisition, and installation of required equipment related to pretreatment.

An ECSA shall have a maximum term of one hundred-eighty (180) days, and upon showing of good cause, including but not limited to reasonable progress under the terms of the ECSA, it may be extended by the General Manager for an additional period not to exceed one hundred-eighty (180) days. No further extensions shall be granted except on approval of the Board of Directors.

The ECSA may contain terms and conditions including but not limited to requirements for self-monitoring, installation of pretreatment equipment and facilities, submittal of drawings or reports, operator certification, audit of waste minimization practices, payment of fees, limits on rate and time of discharge,

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deposit of performance guarantee, or other provisions to ensure compliance with these Rules and Regulations.

An ECSA shall not be approved by the District until such time as all amounts owed to the District, including fees, charges for use, Section 7.5.8 charges, non-compliance fees, deposits, or civil penalties are paid in full, or an agreement for deferred payment secured by acceptable collateral or a third party, is approved by the District. Failure to pay all amounts owed to the District shall be grounds for permit suspension or permit revocation as set forth in Sections 7.6.2.4 and 7.6.2.5.

If, during the term of an ECSA, sampling reveals non-compliance by the permittee with the terms, conditions or limitations specified in the ECSA, the user's permit, or any provision of these Rules and Regulations, the permittee shall pay the fees as specified in Exhibit B, Schedule of Rates and Charges, and may be assessed all other costs incurred during the sampling, including labor, equipment, materials, and overhead.

If compliance is not achieved in accordance with the terms and conditions of an ECSA during its term, the General Manager may issue an order suspending or revoking the discharge permit pursuant to Sections 7.6.2.4 and 7.6.2.5.

If following the expiration of an ECSA, sampling reveals non-compliance by the permittee with the terms, conditions or limitations specified in the permit, or any provisions of these Rules and Regulations, the permittee shall pay an amount based on the fees set forth in Exhibit B, Schedule of Rates and Charges, for each violation.

If the permittee remains in consistent compliance for a two-year period following ECSA expiration, then the fees shall be re-established in accordance with Exhibit B, Schedule of Rates and Charges. All enforcement actions thereafter shall be based on applicable provisions of these Rules and Regulations.

### 7.6.2.3

#### Regulatory Compliance Schedule Agreement (RCSA)

If at any time subsequent to the issuance of a wastewater discharge permit to an industrial user, Federal Categorical Pretreatment Standards are adopted or revised by the EPA, or in the event the District enacts revised discharge limitations, the General Manager, upon determination that an industrial user would not be in compliance with the future limitations, may require the industrial user to enter into a RCSA with the District under terms and conditions that would provide for achieving compliance with all new standards by the industrial user on a specific date. The RCSA shall have a maximum term of two hundred-seventy (270) days.

The RCSA may contain terms and conditions including but not limited to requirements for installation of pretreatment equipment and facilities, submittal of drawings or reports, waste minimization

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practices or other provisions to ensure compliance with these Rules and Regulations.

During the period said RCSA is in effect, any discharge by the permittee in violation of the RCSA will require payment of non-compliance fees as specified in Exhibit B, Schedule of Rates and Charges.

Upon RCSA expiration, and in the event of non-compliance by the permittee, non-compliance fees shall be established in accordance with Exhibit B, Schedule of Rates and Charges. All enforcement actions thereafter shall be based on applicable provisions of these Rules and Regulations.

### 7.6.2.4

#### Permit Suspension

The District may suspend any permit when a permittee:

- (1) Fails to comply with the terms and conditions of either an ECSA or RCSA.
- (2) Knowingly provides a false statement, representation, record, report, or other document to the District.
- (3) Refuses to provide records, reports, plans, or other documents required by the District to determine permit terms, conditions, or limitations, discharge compliance, or compliance with these Rules and Regulations.
- (4) Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or sample collection method.
- (5) Fails to report significant changes in operations or wastewater constituents and characteristics.
- (6) Violates a Probation Order.
- (7) Refuses reasonable access to the permittee's premises for the purpose of inspection and monitoring.
- (8) Does not make timely payment of all amounts owed to the District for user charges, non-compliance fees, penalties, deposits, or any other fees and charges.
- (9) Violates any condition or limitation of its discharge permit or any provision of the District's Rules and Regulations.
- (10) Discharges effluent that causes pass through or interference with the District's collection, treatment, or disposal facilities.
- (11) Fails to submit oral notice or written report of bypass occurrence.

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When the General Manager has reason to believe that grounds exist for permit suspension, he shall give written notice thereof by certified mail to the permittee setting forth a statement of the facts and grounds deemed to exist, together with the time and place where the charges shall be heard by a Department Head. The hearing date shall not be less than fifteen (15) calendar days nor more than forty-five (45) calendar days after the mailing of such notice.

- (1) At the suspension hearing, the permittee shall have an opportunity to respond to the allegations set forth in the notice by presenting written or oral evidence. The hearing shall be conducted in accordance with procedures established by the General Manager and approved by the District's General Counsel.
- (2) After the conclusion of the hearing, the Department Head shall submit a written report to the General Manager setting forth a brief statement of facts found to be true, a determination of the issues presented, conclusions, and a recommendation.
- (3) Upon receipt of the written report, the General Manager shall make his determination and should he find that grounds exist for suspension of the permit, he shall issue his decision and order in writing within thirty (30) calendar days after the conclusion of the hearing by the Department Head. The written decision and order of the General Manager shall be sent by certified mail to the permittee or its legal counsel or representative at the permittee's business address.

Upon an order of suspension by the General Manager becoming final, the permittee shall have no right to discharge any industrial wastewater, directly or indirectly to the District's sewerage facilities for the duration of the suspension. All costs for physically terminating and reinstating service shall be paid by the permittee. Any owner or responsible management employee of the permittee shall be bound by the order of suspension. An order of permit suspension issued by the General Manager shall be deemed final upon delivery to the permittee, unless appealed to the Board of Directors pursuant to Section 7.6.2.9.

### 7.6.2.5

#### Permit Revocation

The District may revoke any permit when it is determined that a permittee:

- (1) Knowingly provides a false statement, representation, record, report, or other document to the District.
- (2) Refuses to provide records, reports, plans, or other documents required by the District to determine permit terms, conditions, or other limitations, discharge

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compliance, or compliance with these Rules and Regulations.

- (3) Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or sample collection method.
- (4) Fails to report significant changes in operations or wastewater constituents and characteristics.
- (5) Fails to comply with the terms and conditions of an ECSA, permit suspension, or probation order.
- (6) Discharges effluent to the District's sewerage facilities while its permit is suspended.
- (7) Refuses reasonable access to the permittee's premises for the purpose of inspection and monitoring.
- (8) Does not make timely payment of all amounts owed to the District for user charges, non-compliance fees, penalties, deposits, or any other fees and charges.
- (9) Discharges a batch dump to the District's sewerage facilities.
- (10) Discharges effluent that causes pass through or interference with the District's collection, treatment, or disposal facilities.
- (11) Fails to submit oral notice or written report of bypass occurrence.
- (12) Violates any condition or limitation of its discharge permit or any provision of the District's Rules and Regulations.

When the General Manager has reason to believe that grounds exist for revocation of a permit, he shall give written notice by certified mail thereof to the permittee setting forth a statement of the facts and grounds deemed to exist together with the time and place where the charges shall be heard by a Department Head. The hearing date shall not be less than fifteen (15) calendar days nor more than forty-five (45) calendar days after the mailing of such notice.

- (1) At the hearing, the permittee shall have an opportunity to respond to the allegations set forth in the notice by presenting written or oral evidence. The revocation hearing shall be conducted in accordance with the procedures established by the General Manager and approved by the District's general counsel.
- (2) After the conclusion of the hearing, the Department Head shall submit a written report to the General Manager setting forth a brief statement of facts found to be true, a

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determination of the issues presented, conclusions, and a recommendation.

- (3) Upon receipt of the written report, the General Manager shall make his determination and should he find that grounds exist for permanent revocation of the permit, he shall issue his decision and order in writing within thirty (30) calendar days after the conclusion of the hearing by the Department Head. The written decision and order of the General Manager shall be sent by certified mail to the permittee or its legal counsel or representative at the permittee's business address.

In the event that the General Manager determines to not revoke the permit he may order other enforcement actions, including, but not limited to, a temporary suspension of the permit, under terms and conditions that he deems appropriate.

Upon an order of revocation by the General Manager becoming final, the permittee shall permanently lose all rights to discharge any industrial wastewater directly or indirectly to the District's sewerage facilities. All costs for physical termination shall be paid by the permittee. Any owner or responsible management employee of the permittee shall be bound by the order of revocation. An order of permit revocation issued by the General Manager shall be deemed final upon delivery to the permittee, unless appealed to the Board of Directors pursuant to Section 7.6.2.9.

Any future application for a permit at a location within the District by any person subject to an order of revocation will be considered by the District after fully reviewing the records of the revoked permit, which records may be the basis for denial of a new permit.

### 7.6.2.6

#### Emergency Suspension

The District may, by order of the General Manager without notice or hearing, suspend sewerage service when such suspension is necessary, in order to stop an actual or impending discharge which presents or may present an imminent or substantial endangerment to the health and welfare of persons, or to the environment, or may cause interference with the District's sewerage facilities, or may cause the violation of any State or Federal Law or Regulation. An emergency suspension order is final and not appealable.

### 7.6.2.7

#### Civil Penalties

#### | 7.6.2.7.1

— Imposition By Court. Any permittee, discharger or other person who violates any provision of Section 7 of these Rules and Regulations, any permit condition, prohibition or effluent limitation, or any order, compliance schedule, suspension or revocation shall be civilly liable in a sum not to exceed twenty-five thousand dollars (\$25,000) a day for each violation. Pursuant to Sections 54739 and 54740 of the California Government Code, the

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District, upon order of the General Manager, shall petition the Superior Court to impose, assess and recover such penalties or such other penalties as the District may impose, assess and recover under Federal or State law.

### | 7.6.2.7.2

—Imposition By Administrative Procedure. Any permittee, discharger, or other person who violates any provision of Section 7 of these Rules and Regulations, any permit condition, prohibition or effluent limitation, or any order, compliance schedule, suspension or revocation shall be civilly liable in the following amounts, as applicable, imposed by the District pursuant to an administrative complaint: a sum not to exceed two thousand dollars (\$2,000) a day for failing or refusing to furnish technical or monitoring reports, a sum not to exceed three thousand dollars (\$3,000) a day for failing or refusing to comply with any compliance schedule, a sum not to exceed five thousand dollars (\$5,000) a day for each violation for discharges in violation of any waste discharge limitation, permit condition or other requirement issued, reissued or adopted by the District, and a sum not to exceed ten dollars (\$10) per gallon for any discharge in violation of any suspension, cease and desist order or other order, or prohibition issued, reissued or adopted by the District.

The District may proceed under Section 7.6.2.7.2 by issuing an administrative complaint to any person who violates any provision of Section 7 of these Rules and Regulations, any permit condition, prohibition or effluent limitation, or any order, compliance schedule, suspension or revocation, alleging the act or failure to act that constitutes the violation, the provisions of law authorizing civil liability to be imposed and the proposed civil penalty. The administrative complaint shall be served by personal delivery or certified mail on such person and shall inform the person that a hearing shall be conducted, within 60 days following service, before the General Manager. The person may waive the right to a hearing, in which case it shall not be conducted.

- (1) At the hearing, the person shall have an opportunity to respond to the allegations set forth in the administrative complaint by presenting written or oral evidence. The hearing shall be conducted in accordance with the procedures established by the General Manager and approved by the District's general counsel.
- (2) After the conclusion of the hearing, the General Manager shall make his determination and should he find that grounds exist for imposition of a civil penalty, he shall issue his decision and order in writing within thirty (30) calendar days after the conclusion of the hearing. If not appealed, the order shall be final on the 31st day after it is served on the person.

A person dissatisfied with the decision of the General Manager may appeal to the Board of Directors within thirty (30) days of

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notice of the General Manager's decision, in accordance with Section 7.6.2.9.

If after the hearing or appeal, if any, it is found that the person has violated reporting or discharge requirements, the General Manager or Board of Directors may assess a civil penalty against that person.

In the determination of the amount of the civil penalty, all relevant circumstances may be taken into consideration, including, but not limited to, the extent of harm caused by the violation, the economic benefit derived through any non-compliance, the nature and persistence of the violation, the length of time over which the violation occurs and the corrective action, if any, attempted or taken by the person.

Payment of civil penalties shall be due within thirty (30) days of the date the order assessing the penalties becomes final. The amount of any civil penalties which have remained delinquent for a period of sixty (60) days from the date they are due shall constitute a lien against the real property of the discharger from which the discharge resulting in the imposition of the penalty originated. The lien shall have no force and effect until recorded with the county recorder and when recorded shall have the force and effect and priority of a judgment lien and continue for ten (10) years and be renewable in accordance with law.

Copies of the order shall be served by personal service or by registered mail upon the party served with the administrative complaint and upon other persons who appeared at the hearing and requested a copy of the order.

Any party aggrieved by a final order issued by the Board of Directors after granting review of the order of the General Manager may obtain review of the order of the Board of Directors in the superior court, by filing in the court a petition for writ of mandate within thirty (30) days following the service of a copy of the decision and order issued by the Board of Directors.

### 7.6.2.8

#### Appeals To The General Manager

Any user, permit applicant, or permittee affected by any decision, action or determination made a Department Head may file a written request for an appeal hearing. The request must be made within fifteen (15) days of mailing of the decision. The request for a hearing shall set forth in detail all facts supporting the appellant's request.

The General Manager shall, within fifteen (15) days of receiving the request for appeal, provide written notice to the user of the hearing date, time, and place. The hearing date shall not be more than thirty (30) days from the mailing of such notice by certified mail to the appellant unless a later date is agreed to by the appellant. If the hearing is not held within said time due to actions

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or inactions of the appellant, then the original decision shall be deemed final.

At the hearing, the appellant shall have the opportunity to present information supporting its position concerning the staff's decision, action, or determination. The hearing shall be conducted in accordance with procedures established by the General Manager and approved by the District's general counsel.

After the conclusion of the hearing, the General Manager shall prepare a written report setting forth a brief statement of facts found to be true, a determination of the issues presented, and conclusions. The General Manager shall make his determination whether to uphold, modify, or reverse the decision, action, or determination of the Department Head and shall issue his decision and order within thirty (30) calendar days of the hearing. The written decision and order of the General Manager shall be sent by certified mail to the appellant or its legal counsel or representative at the appellant's business address.

The order of the General Manager shall be final in all respects fifteen (15) days after it is mailed to the appellant unless a request for hearing is filed with the Board of Directors pursuant to Section 7.6.2.9.

| ———7.6.2.9

### Appeals To The Board Of Directors

If the General Manager's order is adverse to the user, permit applicant, or permittee, it may prior to the date that the General Manager's order becomes final, file a written request for a hearing by the Board of Directors accompanied by an appeal fee in an amount shown in Exhibit B, Schedule of Rates and Charges. The request for hearing shall set forth in detail all the issues in dispute for which the appellant seeks determination and all facts supporting appellant's request.

No later than sixty (60) days after receipt of the request for hearing, the Board of Directors shall either set the matter for hearing, or deny the request for hearing.

The Board of Directors shall grant all requests for a hearing on appeals concerning administrative civil penalties (Section 7.6.2.7.2), permit suspension or revocation. Whether to grant or deny the request for a hearing on appeals of other final decisions of the General Manager shall be at the sole discretion of the Board of Directors.

The appeal fee shall be refunded if the Board of Directors denies a hearing or reverses or modifies the order of the General Manager. The fee is not refunded if the Board of Directors denies the appeal.

A hearing shall be held by the Board of Directors within sixty (60) days from the date of determination granting a hearing, unless a later date is agreed to by the permittee and the Board of Directors.

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If the matter is not heard within the required time, due to actions or inactions of the appellant, the General Manager's order shall be deemed final

The Board Secretary shall within fifteen (15) days of the Board of Directors determination, provide written notice to the appellant by certified mail of the hearing date, time, and place, or the denial. If the hearing is denied, the General Manager's decision shall be final fifteen (15) days after the date such notice is mailed.

At the hearing, the appellant shall have the opportunity to present written or oral evidence supporting its position concerning the original decision, action, or determination, in accordance with adopted Rules of Procedure of the Board of Directors.

After the hearing, the Board of Directors shall make a determination whether to uphold, modify, or reverse the original decision, action, or determination as ordered by the General Manager.

The decision of the Board of Directors shall be set forth in writing within sixty-five (65) days after the close of the hearing and shall contain a finding of the facts found to be true, the determination of issues presented, and the conclusions. The written decision and order of the Board of Directors shall be sent by certified mail to the appellant or its legal counsel or representative at the appellant's business address.

The order of the Board of Directors shall be final upon its adoption. In the event the Board of Directors fails to reverse or modify the General Manager's order, it shall be deemed affirmed.

### 7.6.3 Costs

In addition to the penalties provided herein, the District may recover reasonable attorney's fees, court costs, court reporters' fees and other expenses of litigation by appropriate suit at law against the person found to have violated these Rules and Regulations, orders of the Board or conditions of permits issued hereunder.

### 7.6.4 Other Penalties

Any violation of these Rules and Regulations which is also a violation of federal or state laws or regulations is, in addition to any enforcement penalties and proceedings contained in the Rules and Regulations, subject to enforcement penalties and proceedings applicable under such federal or state laws or regulations.

## 7.7 FALSIFYING INFORMATION

Any person who knowingly makes any false statement, representation, record, report, plan or other document filed with the District or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this regulation, shall violate these Rules and Regulations.

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### 7.8 PUBLISHED NOTICE OF NON-COMPLIANCE

The names of industries in significant non-compliance with federal pretreatment standards shall be annually published by the District, in accordance with EPA requirements specified in 40 CFR 403.8(f)(2)(vii), in the largest daily newspaper published in the District service area.

### 7.9 WAIVER OF PROVISIONS

Waivers of federal categorical pretreatment standards and thus the provisions of these Rules and regulations are prohibited under any circumstances other than those authorized under Section 403, General Pretreatment Regulations, of the Clean Water Act.

### 7.10 CONFLICT

In the event that any portion of this Section pertaining to industrial waste discharge is inconsistent or in conflict with any other provisions of the District's Rules and Regulations as to such discharge, the provisions of this Section shall take precedence.

### 7.11 FATS, OILS AND GREASE CONTROL

#### 7.11.1 Purpose

The purpose of this regulation is to facilitate the maximum beneficial public use of the District's sewer services and facilities while preventing blockages of the sewer lines resulting from discharges of FOG to the sewer facilities, and to specify appropriate FOG discharge requirements for Food Service Establishments.

This FOG regulation shall use the general definitions set forth in Section 7.2 and the additional definitions set forth in Section 7.11.2. The provisions of this regulation shall apply to the direct or indirect discharge of all wastewater or waste containing FOG carried to the sewer facilities of the District.

To comply with Federal, State, and local policies and to allow the District to meet applicable standards, this regulation shall govern discharges of all wastewater or waste containing FOG carried to the sewer facilities of the District.

This regulation establishes quantity and quality standards on all wastewater and/or waste discharges containing FOG, which may alone or collectively cause or contribute to FOG accumulation in the sewer facilities causing or potentially causing or contributing to the occurrence of SSOs.

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For convenience of reference, the District's regulations concerning discharges containing FOG are set forth in this Section 7.11.

Notwithstanding compliance with this Section 7.11, discharges of wastewater or waste containing FOG to the sewer facilities shall also be subject to Section 7 generally and all other applicable requirements of these Rules and Regulations.

### 7.11.2 Definitions

The terms hereinafter set forth shall have the following meanings when used herein or in any permits or orders issued pursuant hereto. Terms used in this Section 7.11 and not defined below shall be as defined in Section 7.2.

- (1) Best Management Practices shall mean schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the introduction of FOG to the sewer facilities.
- (2) California Plumbing Code shall mean Uniform Plumbing Code.
- (3) Change in Operations shall mean any change in the ownership, food types, or operational procedures that have the potential to increase the amount of FOG generated and/or discharged by Food Service Establishments in an amount that alone or collectively causes or creates a potential for SSOs to occur.
- (4) Effective Date of this FOG Regulation shall mean December 30, 2004.
- (5) Emulsify shall mean to disperse (as an oil) in an emulsion or to convert two or more immiscible liquids into an emulsion.
- (6) Fats, Oils, and Grease ("FOG") shall mean any substance such as a vegetable or animal product that is used in, or is a byproduct of, the cooking or food preparation process, and that turns or may turn viscous or solidifies with a change in temperature or other conditions.
- (7) FOG Control Program shall mean the program required by and developed pursuant to RWQCB Order No. R8-2002-0014, Section (c)(12)(viii).
- (8) FOG Control Program Manager shall mean the individual designated by the General Manager to administer the FOG Control Program. The FOG Control Program Manager is responsible for all determinations of compliance with the program, including approval of discretionary variances and waivers.

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- (9) FOG Wastewater Discharge Permit shall mean a permit issued by the District subject to the requirements and conditions established by the District authorizing the permittee or discharger to discharge wastewater into the District's facilities or into sewer facilities which ultimately discharge into a District facility.
- (10) Food Service Establishment shall mean a facility defined in California Uniform Retail Food Service Establishments Law (CURFFL), Health and Safety Code Section 113785, and any commercial entity within the boundaries of the District, operating in a permanently constructed structure such as a room, building, or place, or portion thereof, maintained, used, or operated for the purpose of storing, preparing, serving, or manufacturing, packaging, or otherwise handling food for sale to other entities, or for consumption by the public, its members or employees, and which has any process or device that uses or produces FOG, or grease vapors, steam, fumes, smoke or odors that are required to be removed by a Type I or Type II hood, as defined in CURFFL Section 113785. A limited food preparation establishment is not considered a Food Service Establishment when it is engaged only in reheating, hot holding or assembly of ready to eat food products and as a result, there is no wastewater discharge containing a significant amount of FOG. A limited food preparation establishment does not include any operation that changes the form, flavor, or consistency of food.
- (11) General Permit Conditions shall mean the FOG Control Program General Permit Conditions.
- (12) Food Grinder shall mean any device installed in the plumbing or sewage system for the purpose of grinding food waste or food preparation by products for the purpose of disposing it in the sewer system.
- (13) Grease Control Device shall mean any grease interceptor, grease trap or other mechanism, device, or process, which attaches to, or is applied to, wastewater plumbing fixtures and lines, the purpose of which is to trap or collect or treat FOG prior to it being discharged into the sewer system. "Grease control device" may also include any other proven method to reduce FOG subject to the approval of the District.
- (14) Grease Interceptor or Interceptor shall mean a multi-compartment device that is constructed in different sizes and is generally required to be located, according to the California Plumbing Code, underground between a Food Service Establishment and the

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connection to the sewer system. These devices primarily use gravity to separate FOG from the wastewater as it moves from one compartment to the next. These devices must be cleaned, maintained, and have the FOG removed and disposed of in a proper manner on regular intervals to be effective.

- (15) Grease Trap shall mean a grease control device that is used to serve individual fixtures and have limited effect and should only be used in those cases where the use of a grease interceptor or other grease control device is determined to be impossible or impracticable.
- (16) Hot Spots shall mean Areas in sewer lines that have experienced sanitary sewer overflows or that must be cleaned or maintained frequently to avoid blockages of sewer system.
- (17) New Construction shall mean any structure planned or under construction for which a sewer connection permit has not been issued.
- (18) Remodeling shall mean a physical change or operational change causing generation of the amount of FOG that exceed the current amount of FOG discharge to the sewer system by the Food Service Establishment in an amount that alone or collectively causes or create a potential for SSOs to occur; or exceeding a cost, set forth in the FOG Control Program, to a Food Service Establishment that requires a building permit, and involves any one or combination of the following: (1) Under slab plumbing in the food processing area, (2) an increase in the net public seating area meeting the criteria specified in the FOG Control Program, (3) an increase in the size of the kitchen area meeting the criteria specified in the FOG Control Program, or (4) any change in the size or type of food preparation equipment.
- (19) SSO shall mean sewer system overflow.

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7.11.3 FOG Discharge Limitations, Prohibitions and Requirements – General

7.11.3.1 FOG Discharge Prohibition

No Food Service establishment shall discharge or cause to be discharged into the sewer system FOG that exceeds a concentration level adopted by the Board or that may accumulate and/or cause or contribute to blockages in the sewer system or at the sewer system lateral which connects the Food Service Establishment to the sewer system.

7.11.3.2 Food Service Establishment Prohibitions

The following prohibitions shall apply to all Food Service Establishments:

- (1) Installation of food grinders in the plumbing system of new constructions of Food Service Establishments is prohibited. Furthermore, all food grinders shall be removed from all existing Food Service Establishments within 180 days of the effective date of this FOG regulation, except when expressly allowed by the FOG Control Program Manager.
- (2) Introduction of any additives into a Food Service Establishment's wastewater system for the purpose of emulsifying FOG is prohibited, unless a specific written authorization from the FOG Control Program Manager is obtained.
- (3) Disposal of waste cooking oil into drainage pipes is prohibited. All waste cooking oils shall be collected and stored properly in receptacles such as barrels or drums for recycling or other acceptable methods of disposal.
- (4) Discharge of wastewater from dishwashers to any grease trap or grease interceptor is prohibited.
- (5) Discharge of wastewater with temperatures in excess of 140°F to any grease control device, including grease traps and grease interceptors, except as permitted in the FOG Control Program, is prohibited.
- (6) The use of biological additives for grease remediation or as a supplement to interceptor maintenance, without prior authorization from the FOG Control Program Manager, is prohibited.

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- (7) Discharge of wastes from toilets, urinals, and other fixtures containing fecal materials to sewer lines intended for grease interceptor service, or vice versa, is prohibited.
- (8) Discharge of any waste including FOG and solid materials removed from the grease control device to the sewer system is prohibited. Grease removed from grease interceptors shall be wastehauled periodically as part of the operation and maintenance requirements for grease interceptors.
- (9) Increasing the use of water or in any other manner attempting to dilute a discharge as a partial or complete substitute for treatment to achieve compliance with this Section 7.11 and the FOG Wastewater Discharge Permit is prohibited.
- (10) Any other prohibited practice identified in the FOG Control Program from time to time, is prohibited.

### 7.11.3.3 FOG Wastewater Discharge Permit Required

No person shall discharge, or cause to be discharged any wastewater from a Food Service Establishment directly or indirectly into the sewer system without first obtaining a FOG Wastewater Discharge Permit if required by the District pursuant to Section 7.11.6.

### 7.11.3.4 Best Management Practices Required

Food Services Establishments shall implement Best Management Practices in their operation to minimize the discharge of FOG to the sewer system. Detailed requirements for Best Management Practices shall be specified in the permit. This may include kitchen practices and employee training that is essential in minimizing FOG discharge.

### 7.11.4 FOG Pretreatment

Food Service Establishments are required to install, operate and maintain approved type and adequately sized grease interceptors necessary to maintain compliance with the objectives of this Section 7.11. Grease interceptors shall be adequate to separate and remove FOG contained in wastewater discharges from Food Service Establishments prior to discharge to the sewer system. Fixtures, equipment, and drain lines located in the food preparation and clean up areas of Food Service Establishments that are sources

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of FOG discharges shall be connected to the grease interceptor. Compliance shall be established as follows:

### 7.11.4.1 New Construction of Food Service Establishments

New construction of Food Service Establishments after the effective date of this FOG regulation shall include and install grease interceptors prior to commencing discharges of wastewater to the sewer system.

### 7.11.4.2 Existing Food Service Establishments

- (1) For Food Service Establishments existing on the effective date of this FOG regulation, the requirement to install and to properly operate and maintain a grease interceptor may be conditionally stayed, that is, delayed in its implementation by the FOG Control Program Manager for a maximum period of three years from the effective date of this FOG regulation (3-year Amortization Period). Terms and conditions for application of a stay to a Food Service Establishment shall be set forth in the permit. The Board finds that three years is a reasonable amortization period for existing Food Service Establishments that are operating without a grease interceptor.
- (2) Existing Food Service Establishments that have reasonable potential to adversely impact the sewer system or have sewer laterals connected to hot spots, as determined by the FOG Control Program Manager, shall install grease interceptors within 180 days of the effective date of this FOG regulation.
- (3) Existing Food Service Establishments undergoing remodeling or a change in operations, or Food Service Establishments that change ownership, shall be required to install a grease interceptor.

### 7.11.4.3 Variance from Grease Interceptor Requirements

A variance from the grease interceptor requirements to allow alternative pretreatment technology, that is at least equally effective in controlling the FOG discharge, in lieu of a grease interceptor may be granted to Food Service Establishments demonstrating that it is impossible or impracticable to install, operate or maintain a grease interceptor. The applicant shall bear the burden of demonstrating that the alternative method of disposal is at least equally effective. The FOG Control Program Manager's

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determination to grant a variance will be based upon, but not limited to, evaluation of the following conditions:

- (1) There is no adequate space for installation and/or maintenance of a grease interceptor.
- (2) There is no adequate slope for gravity flow between kitchen plumbing fixtures and the grease interceptor and/or between the grease interceptor and the private collection lines or the public sewer.
- (3) The Food Service Establishment can justify that the alternative pretreatment technology is equivalent to or better than a grease interceptor in controlling its FOG discharge. In addition, the Food Service Establishment must be able to demonstrate, after installation of the proposed alternative pretreatment, its effectiveness to control FOG discharge through downstream visual monitoring of the sewer system, for at least three months, at its own expense. A variance may be granted if the results show no visible accumulation of FOG in its lateral and/or tributary downstream sewer lines.

### 7.11.4.4 Conditional Waiver from Installation of Grease Interceptor

A conditional waiver from installation of a grease interceptor may be granted for Food Service Establishments that have been determined to have negligible FOG discharge and insignificant impact to the sewer system. The FOG Control Program Manager's determination to grant or revoke a conditional waiver shall be based upon, but not limited to, evaluation of the following conditions:

- (1) Quantity of FOG discharge as measured or as indicated by the size of Food Service Establishment based on seating capacity, number of meals served, menu, water usage, amount of on-site consumption of prepared food and other conditions that may reasonably be shown to contribute to FOG discharges.
- (2) Adequacy of implementation of Best Management Practices and compliance history.
- (3) Sewer size, grade, condition based on visual information, FOG deposition in the sewer by the Food Service Establishment, and history of maintenance and sewage spills in the receiving sewer system.

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- (4) Changes in operations that significantly affect FOG discharge.
- (5) Any other condition deemed reasonably related to the generation of FOG discharges by the FOG Control Program Manager.

7.11.4.5 Reserved.

7.11.4.6 Application for Waiver or Variance of Requirement for Grease Interceptor

A Food Service Establishment may submit an application for waiver or variance from the grease interceptor requirement to the FOG Control Program Manager. The Food Service Establishment bears the burden of demonstrating, to the FOG Control Program Manager's reasonable satisfaction, that the installation of a grease interceptor is not feasible or applicable. Upon determination by the FOG Control Program Manager that reasons are sufficient to justify a variance or waiver, the permit will be issued or revised to include the variance or waiver and relieve the Food Service Establishment from the requirement. Terms and conditions for issuance of a variance to a Food Service Establishment shall be set forth in the permit. A waiver or variance may be revoked at any time when any of the terms and conditions for its issuance is not satisfied or if the conditions upon which the waiver was based change so that the justification for the waiver no longer exists.

7.11.4.7 Grease Interceptor Serving Multiple Food Service Establishments on a Single Parcel

Property owners of commercial properties or their official designee(s) shall be responsible for the installation and maintenance of the grease interceptor serving multiple Food Service Establishments that are located on a single parcel.

7.11.5 Sewer System Overflows, Public Nuisance, Abatement Orders and Cleanup Costs

Notwithstanding the three-year amortization period established in Section 7.11.4.2, Food Service Establishments found to have contributed to a sewer blockage, SSOs or any sewer system interferences resulting from the discharge of wastewater or waste containing FOG, shall be ordered to install and maintain a grease interceptor, and may be subject to a plan to

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abate the nuisance and prevent any future health hazards created by sewer line failures and blockages, SSOs or any other sewer system interferences. SSOs may cause or threaten to cause injury to public health, safety, and welfare of life and property and are hereby declared public nuisances. Furthermore, sewer lateral failures and SSOs caused by Food Service Establishments alone or collectively, are the responsibility of the private property owner or Food Service Establishment, and individual(s) as a responsible officer or owner of the Food Service Establishment.

Sewer blockage, SSOs, obstruction, interference, damage, or any other impairment to the District's sewer facilities or to the operation of those facilities, and any discharge of a waste which causes or contributes to the District's violating its discharge requirements established by any Regulatory Agency or incurring additional expenses or suffering losses or damage to the facilities, shall be subject to Section 7.5.8.

### 7.11.6 FOG Wastewater Discharge Permits for Food Service Establishments

#### 7.11.6.1 FOG Wastewater Discharge Permit Required

If required by the District under criteria established in the FOG Control Program, Food Service Establishments proposing to discharge or currently discharging wastewater containing FOG into the District's sewer system shall obtain a FOG Wastewater Discharge Permit from the District. This requirement shall be effective 180 days from the effective date of this FOG regulation.

FOG Wastewater Discharge Permits shall be expressly subject to all provisions of this Section 7.11 and all other regulations, charges for use, and fees established by the District. The conditions of FOG Wastewater Discharge Permits shall be enforced by the District in accordance with this Section 7.11 and applicable State and Federal Regulations.

If applicable, Class I and Class II dischargers may have requirements established under Section 7.11.6 incorporated in their permits, in which event the Class I or Class II Permit shall also serve as a FOG Wastewater Discharge Permit.

#### 7.11.6.2 FOG Wastewater Discharge Permit Application

Any person required to obtain a FOG Wastewater Discharge Permit shall complete and file with the District prior to commencing discharges, an application on a form prescribed by the District. Applicants for FOG Wastewater Discharge Permits shall complete an application form available at the District's office. The District's FOG Control Program General Permit Conditions

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shall be obtained from the District office or on the District's website at [www.irwd.com](http://www.irwd.com), and reviewed by the Applicant prior to the submittal of plans. The applicable FOG Wastewater Discharge Permit fees as set forth in Exhibit B, Schedule of Rates and Charges, shall accompany the application. The General Permit Conditions must also be met.

The applicant shall submit two (2) copies of all drawings for review. All drawings shall include the following:

- (1) North arrow.
- (2) Scale size.
- (3) User name and address.
- (4) Drawing name and drawing number.
- (5) Date drawn or revised.
- (6) Name of drafter and person approving drawing.

Applicant will be required to submit site plans, floor plans, mechanical and plumbing plans, and details to show all sewer locations and connections, FOG control device, grease interceptor or other pretreatment equipment and appurtenances by size, location, and elevation for evaluation. Applicant may be required to submit a schematic drawing of the grease control device, grease interceptor or other pretreatment equipment, piping and instrumentation diagram, and wastewater characterization report. District review of plan submittals will include, among other requirements, the prohibitions specified in Section 7.11.3.2 and the requirements specified in Section 7.11.6.8 and Section 7.11.6.9. The review of the plans and procedures shall in no way relieve Applicant of the responsibility of modifying the facilities or procedures in the future, as necessary to produce an acceptable discharge, and to meet the requirements of this Section 7.11 or any requirements of other Regulatory Agencies.

### 7.11.6.3 FOG Wastewater Discharge Permit

A FOG Wastewater Discharge Permit may contain any of the following conditions or limits:

- (1) Limits on discharge of FOG and other priority pollutants.
- (2) Requirements for proper operation and maintenance of grease interceptors and other grease control devices.
- (3) Grease interceptor maintenance frequency and schedule.

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- (4) Requirements for implementation of best management practices and installation of adequate grease interceptor and/or grease control device.
- (5) Requirements for maintaining and reporting status of best management practices.
- (6) Requirements for maintaining and submitting logs and records, including wastehauling records and waste manifests.
- (7) Requirements to self-monitor.
- (8) Requirements for the permittee to construct, operate and maintain, at its own expense, FOG control device and sampling facilities.
- (9) Additional requirements as otherwise determined to be reasonably appropriate by the FOG Control Program Manager to protect the District's system or as specified by other Regulatory Agencies.
- (10) Other terms and conditions, which may be reasonably applicable to ensure compliance with this Section 7.11.

### 7.11.6.4 FOG Wastewater Discharge Permit Fee

The FOG Wastewater Discharge Permit fee shall be paid by the applicant in the amount set forth in Exhibit B, Schedule of Rates and Charges. Payment of permit fees must be received by the District prior to issuance of either a new permit or a renewed permit. A permittee shall also pay any delinquent invoices for sewer, service, fines or penalties in full prior to permit renewal.

### 7.11.6.5 Duration; Modification of Terms and Conditions; Renewal

The duration of permits shall be in accordance with Section 7.4.4. The terms and conditions of an issued permit are subject to modification and change during the life of the permit in accordance with Section 7.4.4, as limitations or requirements are modified and changed, or based on determination by the FOG Control Program Manager that such modification is appropriate to further the objectives of this Section 7.11.

Permits are subject to the requirements concerning renewal and modification set forth in Section 7.4.6. The Permittee may request a modification to the terms and conditions of an issued permit.

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The request shall be in writing stating the requested change, and the reasons for the change. The FOG Control Program Manager shall review the request, make a determination on the request, and respond in writing.

### 7.11.6.6 Exemption for Limited Food Preparation Establishments

A limited food preparation establishment (as defined in the definition of Food Service Establishment), is not considered a Food Service Establishment and is exempt from obtaining a FOG Wastewater Discharge Permit.

### 7.11.6.7 Non-Transferability of Permits

FOG Wastewater Discharge Permits are restricted as to transferability, in accordance with Section 7.4.5.

### 7.11.6.8 Pretreatment - Grease Interceptor Requirements

In accordance with Section 7.4.7 and 7.4.8, all Food Service Establishments shall provide wastewater acceptable to the District, under the requirements and standards established herein, before discharging it to any public sewer. Any Food Service Establishment required to pretreat shall install, operate, and maintain an approved type and adequately sized grease interceptor necessary to maintain compliance with the objectives of this Section 7.11.

Grease interceptor sizing and installation shall conform to the current edition of the Uniform Plumbing Code. Grease interceptors shall be constructed and located in accordance with the requirements and criteria set forth in the FOG Control Program

Grease Interceptors shall be maintained in efficient operating condition in accordance with the practices, requirements and restrictions set forth in the FOG Control Program and with a maintenance frequency approved by the FOG Control Program Manager pursuant to said Program.

Food Service Establishments with grease interceptors may be required to submit data and information necessary to establish the maintenance frequency grease interceptors.

### 7.11.6.9 Grease Trap Requirements

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Food Service Establishments may be required to install grease traps in the waste line leading from drains, sink, and other fixtures or equipment where grease may be introduced into the sewer system in quantities that can cause blockage.

Sizing and installation of grease traps shall conform to the current edition of the California Plumbing Code and with applicable requirements and criteria set forth in the FOG Control Program.

Grease traps shall be maintained in efficient operating condition in accordance with the practices, requirements and restrictions set forth in the FOG Control Program and with a maintenance frequency approved by the FOG Control Program Manager pursuant to said Program.

### 7.11.6.10 Monitoring Facilities Requirements

To ensure proper operation and maintenance of the grease control device or grease interceptor and compliance with this Section 7.11, in accordance with Section 7.4.13, the District may require the Food Service Establishments to construct and maintain in proper operating condition at the Food Service Establishment's sole expense, flow monitoring, constituent monitoring and/or sampling facilities, and to submit waste analysis plans, contingency plans, and meet other necessary requirements.

### 7.11.6.11 Best Management Practices

All Food Service Establishments shall implement best management practices in accordance with the requirements and guidelines established by the District and set forth in its FOG Control Program in an effort to minimize the discharge of FOG to the sewer system

## 7.11.7 Monitoring, Reporting, Inspection and Sampling

### 7.11.7.1 Monitoring for Compliance with Permit Conditions and Reporting Requirements

The FOG Control Program Manager may require periodic reporting of the status of implementation of Best Management Practices, in accordance with the FOG Control Program.

The FOG Control Program Manager may require visual monitoring at the sole expense of the Permittee to observe the actual conditions of the Food Service Establishment's sewer lateral and sewer lines downstream.

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The FOG Control Program Manager may require reports for self-monitoring of wastewater constituents and FOG characteristics of the Permittee needed for determining compliance with any conditions or requirements as specified in the FOG Wastewater Discharge Permit or this Section 7.11. Monitoring reports of the analyses of wastewater constituents and FOG characteristics shall be in a manner and form approved by the FOG Control Program Manager and shall be submitted upon request of the FOG Control Program Manager. Failure by the Permittee to perform any required monitoring, or to submit monitoring reports required by the FOG Control Program Manager shall constitute a violation of this Section 7.11 and be cause for the District to initiate all necessary tasks and analyses to determine the wastewater constituents and FOG characteristics for compliance with any conditions and requirements specified in the FOG Wastewater Discharge Permit or in this Section 7.11. The Permittee shall be responsible for any and all expenses of the District in undertaking such monitoring analyses and preparation of reports.

Other reports may be required such as compliance schedule progress reports, FOG control monitoring reports, and any other reports deemed reasonably appropriate by the FOG Control Program Manager to ensure compliance with this Section 7.11.

### 7.11.7.2 Record Keeping Requirements

The Permittee shall be required to keep all manifests, receipts and invoices of all cleaning, maintenance, grease removal of/from the grease control device, disposal carrier and disposal site location for not less than two years. The Permittee shall, upon request, make the manifests, receipts and invoices available to any District representative, or inspector. These records may include:

- (1) A logbook of grease interceptor, grease trap or grease control device cleaning and maintenance practices. The logbook must be available during any inspection by a District representative or inspector. Failure to locate the logbook during an inspection, whether misplaced or lost, will result in the issuance of a replacement logbook by the District and require the Permittee to pay the logbook replacement fee in the amount set forth in Exhibit B, Schedule of Rates and Charges, for each violation. The replacement fee will be billed to the Permittee at the time of the replacement.

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- (2) A record of Best Management Practices being implemented including employee training.
- (3) Copies of records and manifests of wastehauling interceptor contents.
- (4) Records of sampling data and sludge height monitoring for FOG and solids accumulation in the grease interceptors.
- (5) Any other information deemed appropriate by the FOG Control Program Manager to ensure compliance with this Section 7.11.

### 7.11.7.3 Falsifying Information or Tampering with Process

It shall be unlawful to make any false statement, representation, record, report, plan or other document that is filed with the District, or to tamper with or knowingly render inoperable any grease control device, monitoring device or method or access point required under this Section 7.11.

### 7.11.7.4 Inspection and Sampling

The wastewater discharges of Food Service Establishments are subject to inspection and sampling in accordance with the requirements of Section 7.4.14 to ascertain whether the intent of this Section 7.11 is being met and the Permittee is complying with all requirements. District access to the Food Service Establishment premises and records for such purposes shall include grease control devices or interceptor, and manifests, receipts and invoices relating to the cleaning, maintenance and inspection of the grease control devices or interceptor.

In order for the FOG Control Program Manager to determine the wastewater characteristics of the discharger for purposes of determining the annual use charge and for compliance with permit requirements, the Permittee shall make available for inspection and copying by the District all notices, monitoring reports, waste manifests, and records including, but not limited to, those related to wastewater generation and wastewater disposal, without restriction but subject to the confidentiality provision set forth in this Section 7.11. All such records shall be subject to inspection and shall be kept by the Permittee in accordance with Section 7.4.15.

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### 7.11.7.5 Notification of Spill

In the event a discharger is unable to comply with any permit condition due to a breakdown of equipment, accidents, or human error or the discharger has reasonable opportunity to know that his/her/its discharge will exceed the discharge provisions of the FOG Wastewater Discharge Permit or this Section 7.11, the discharger shall immediately notify the District by telephone at the number specified in the Permit. If the material discharged to the sewer has the potential to cause or result in sewer blockages or SSOs, the discharger shall immediately notify the local Health Department, City or County, and the District.

Confirmation of this notification shall be made in writing to the FOG Control Program Manager at the address specified in the Permit no later than five (5) working days from the date of the incident. The written notification shall state the date of the incident, the reasons for the discharge or spill, what steps were taken to immediately correct the problem, and what steps are being taken to prevent the problem from recurring.

Such notification shall not relieve the Permittee of any expense, loss, damage or other liability which may be incurred as a result of damage or loss to the District or any other damage or loss to person or property; nor shall such notification relieve the Permittee of any fees or other liability which may be imposed by this Section 7.11 or other applicable law.

### 7.11.8 Enforcement

Enforcement of the provisions of this Section 7.11 and the provisions of any FOG Wastewater Discharge Permit shall be governed by Section 7.6, and for such purpose the District may utilize any one, combination or all enforcement remedies provided in Section 7.6 to the extent determined by the District to be applicable to a violation under this Section 7.11. For this purpose, "Department Head" as used in Section 7.6 shall mean the FOG Control Program Manager. In addition to the non-compliance fees specified under Section 7.6, the Permittee shall be subject to fees for FOG Program non-compliance as specified in Exhibit B, Schedule of Rates and Charges.

### 7.11.9 California Building Standards Law

Pursuant to the provisions of the California Building Standards Law, California Health and Safety Code §§ 18941.5, 17958, 17958.5 and 17958.7, the Board hereby finds that variations of this Section 7.11 from the State Building Standards and Housing Laws, more particularly the

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California Plumbing Code are necessary because of climatic, geological or topographical conditions of property in the District's jurisdiction, and as more specifically described below:

- (1) Sections 7.11.4 and 7.11.6 modify the authority and discretion of the "Administrative Authority" of Section 1014.1 of the 2001 California Plumbing Code by requiring all Food Service Establishments to install and operate a grease control device, which may be a grease interceptor or grease trap, if no other device, mechanism, or process is found to successfully trap or collect or treat FOG prior to its being discharged into the sewer system.
- (2) Section 7.11.6 modifies the general maintenance requirements for grease interceptors of Section 1014.6 of the 2001 California Plumbing Code and establishes more stringent maintenance requirements.

With respect to the foregoing differences, the District finds that the District's topography and geography and the District's proximity to the Pacific Ocean coupled with the general waste discharge requirements imposed by the RWQCB require the strict compliance with grease control device regulations to prevent sewer system overflows that threaten the health and safety of the public within the immediate vicinity of the overflow and downstream to the local beaches.

Additional amendments and deletions to the California Plumbing Code are found to be administrative or procedural and are found to be reasonable and necessary to safeguard life and property within the District.

A copy of this Section 7.11 shall be filed with the California Building Standards Commission and the California Department of Housing and Community Development by the Secretary of the Board as required by State law (Health & Safety Code Section 17958.7).

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### Section 8: MONITORING AND INSPECTION

#### 8.1: WATER AND SEWER SYSTEMS

The Manager or his authorized representative shall have the right to enter upon the customer's premises during reason-able hours for the purpose of inspecting the customer's water and sewer systems and to insure compliance with these Rules and Regulations including the provision that self-regenerating water softeners shall not be connected to the sewer facilities of the District and the provision that all cross-connections be properly protected.

#### 8.2. RECYCLED WATER SYSTEMS

The Manager or authorized representatives of the District shall monitor and inspect the entire recycled water system including both onsite and offsite facilities. The District shall conduct monitoring programs, maintain a record as deemed necessary, and provide reports as requested by regulatory agencies including the California Regional Water Quality Control Board. The Manager or authorized representatives of the District, in carrying out these functions, shall have the right to enter upon the customer's premises during reasonable hours for the purpose of inspecting onsite recycled water facilities and areas of recycled water use and to ensure compliance with these Rules and Regulations, including the provision that runoff be controlled and limited and the provision that cross-connections between potable water facilities and recycled water facilities not exist.

For sites receiving recycled water, the permit holder shall be responsible for providing access to and cooperation with the District's Inspector or designee so that the District's Inspector or designee can perform a periodic cross-connection test, site evaluations and backflow prevention device test. This evaluation shall include pressure testing of the system(s) as well as a visual check of the entire system to verify that no cross-connections or unapproved exist. The permit holder will be responsible for correcting any work which violates the District regulations at their sole expense including any costs associated with repair and re-testing the backflow prevention device should the backflow prevention device fail to pass the required test. Additionally, at such times that the permit holder changes, the District's Inspector or designee will perform a and evaluation and test to verify compliance with these Rules and Regulations.

#### 8.3 NATURAL TREATMENT SYSTEMS

Natural treatment systems that are designed and constructed by the developer shall be monitored as specified in the Procedures Guide and the NTS Design Guidelines. If, during the periods specified in the Procedures Guide and the NTS Design Guidelines, monitoring results indicate that the system is not operating as designed, the developer will provide the necessary improvements.

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### Section 9: CONNECTION FEES

#### 9.1 GENERAL

Connection fees applicable to all property to be served shall be established from time to time by the Board and set forth in Exhibit B to these Rules and Regulations. Such property to be served shall be legally described in the application for service.

If, subsequent to the issuance of the initial permit, there is a change in owner, applicant, tenant, customer, class of use, or consumption, the District may determine that additional connection fees are required. These additional charges shall be computed on the basis of the resulting increase in service capacity and flow: or, on any reclassification of user type.

Whenever a change necessitates the payment of further charges to the District, the District may compare the actual use occurring on the property [based on readings taken from the water meter(s)] with the capacity estimated to be required for existing or probable future consumption to determine whether a different use permit is required. Determination by the District in this regard shall be made in a manner and following the procedures specified for revoking a permit as set forth in Section 14 of these Rules and Regulations. Such additional amount shall be payable on the effective date of such decision specified in Section 14 and shall be delinquent thirty (30) consecutive calendar days thereafter.

Any delinquent amount shall be the responsibility of all persons, entities, or concerns who are the applicant, owner, or customer who signed the application for service or any successor thereof. Any such amount may be recovered directly from any of the foregoing by means of proceedings initiated in the proper municipal or superior court of the State of California. In addition to recovering such amount by means of judicial determination or proceeding, the District may, to the extent now or subsequently permitted by law, cause such amounts to be collected by the County Tax Collector, together with any general or special taxes or similar charges on the property to which this service has been provided, and as described in the appropriate application for service. In either event, the applicant, owner, or customer and all persons signing the application shall be liable in addition to such amount individually and collectively for all costs incurred in collecting such additional amounts to the District, as determined in the manner herein provided, including a reasonable amount for attorney's fees. Also, the District may, at its discretion, terminate water, sewer, recycled water and/or natural treatment system service in the manner provided for in these Rules and Regulations if such amounts are not paid on the date in the manner herein provided.

Land which has been designated to remain undeveloped by a governmental agency exercising land use authority and which will not receive water, sewer or recycled water service (open space) shall be excluded from acreage in the computation of density for residential connection fees and from gross acreage of any parcel in the computation of commercial-industrial connection fees.

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### 9.2 INTERPRETATION OF CONNECTION FEES

If the factual situations presented in an application by an applicant, owner, or customer do not fall within the classifications set forth in Exhibit "B" to these Rules and Regulations, the Manager shall interpret them to establish a reasonable classification and fee. In making such interpretations, the Manager shall be guided by the policy of the District set forth herein.

Further, in the event that the applicant, owner, or customer does not concur in the determination of the Manager, he may request that such be considered by the Board. Any such request shall be in writing and shall set forth detail and facts supporting the differences between the request of applicant, owner, or customer and the determination made by the Manager. No such application shall be considered unless there is a specific and detailed request for action proposed by an applicant, owner, or customer setting forth the exact amount of fees that the applicant, owner or customer believes should be established and shall include supporting information. Preferably, such supporting information should be prepared and submitted by a Registered Civil Engineer, experienced in the construction, operation, management, and financing of municipal water and/or sewage facilities.

If approved by the Board, such decision shall be implemented by a special agreement between such applicant, owner, or customer and the District, including adequate guarantees and assurances of further or additional payment at such time as the proposed use of the property described in the application for such action by the Board is modified, changed, or amended, or the extent of the use of the applicant, owner, or customer exceeds that represented to District. The decision of the District in all instances shall be final, subject to administrative or judicial review, except as otherwise provided by law.

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Section 10: WATER AND RECYCLED WATER SERVICE LINE CHARGES,  
LOWER LATERAL CHARGES AND NATURAL TREATMENT SYSTEM  
CHARGES

10.1 WATER AND RECYCLED WATER SERVICE LINE CHARGES

- (1) The District shall make charges for the installation of and perpetual maintenance of all service lines, water and recycled water meters, and appurtenances thereto; all of which are the property of the District, including the water connection fees, must be paid before work will be performed. Any required backflow prevention devices on potable water services and flow or pressure control devices shall be provided by the applicant, owner, or customer at his expense.
- (2) In those instances where the applicant provides (at no cost to the District) the water or recycled water service line and appurtenances thereto, the District shall make a charge for the installation of the water or recycled water meter only, which is to remain the property of the District. Said charge, in addition to all other usual and regular charges of the District, including any specified connection fee, as set forth in Exhibit B, must be paid before work will be performed.
- (3) The District shall make charges for the installation of and perpetual maintenance of all service lines for on-site fire hydrants or automatic fire sprinkler systems, including a check valve on potable water services of a type approved by the National Board of Fire Underwriters, equipped with a bypass meter, but not including the downstream control valve, if such is required by the customer, all to remain the property of the District. Said charges, in addition to all other usual and regular charges of the District, including any specified connection fee, as set forth in Exhibit B, must be paid before work will be performed.
- (4) Whenever an installation is required by an applicant that is not covered by the schedule of charges established from time to time by the Board and set forth in Exhibit B to these Rules and Regulations, such work will be done with charges based upon an estimate of costs made by the District. If a water or recycled water service line exceeds 50 feet in length, or for any other valid reason it cannot be installed for the amount stated in the appropriate schedule of charges set forth in Exhibit B owing to the peculiarity of the proposed service, the District reserves the right to make said installation. A deposit will be required to cover estimated costs prior to the performance of any work. Upon completion of the service installation, the deposit will be adjusted based on actual costs. If actual costs differ the from the deposit amount, the applicant, owner, or customer shall be invoiced by the District for the excess of the actual cost over the deposited amount, or refunded the difference if less than the deposit.
- (5) Whenever water or recycled water service lines, meters, fire hydrants, or other appurtenances are requested to be moved by the applicant for any reason whatsoever, a deposit will be required to cover estimated costs prior to the performance of any work. Upon completion of the service relocation, the deposit will be adjusted based on actual costs. If actual costs differ from the deposit amount, the applicant, owner, or customer

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shall be invoiced by the District for the excess of the actual cost over the deposited amount, or refunded the difference if less than the deposit.

- (6) A temporary service connection may be installed for use over a period of time not exceeding six (6) months. For each such connection, an application shall be filed in accordance with the provisions of Section 4.2 of these Rules and Regulations. Rates to be charged for water used from such connection shall be in accordance with "Temporary Construction Service" contained in Exhibit B. The user of a temporary recycled water service shall designate an "Onsite Recycled Water Supervisor" in accordance with the requirements of Section 6.2.2 herein.

### 10.2 LOWER LATERAL CHARGE

- (1) The District will charge for the installation of a lower lateral and connection to the customer's upper lateral. Said charges, in addition to all other usual and regular charges of the District, including the sewer connection fee, must be paid before the work is performed. Such work will be done with charges based upon an estimate of costs made by the District. Any required backwater valves and appurtenances shall be provided by the applicant, owner, or customer at his expense.
- (2) Whenever lower laterals, manholes, or other appurtenances are requested to be moved by an applicant for any reason whatsoever, the charges shall be made on the basis of an estimate of costs by the District. The charges herein required are in addition to all other charges required by the District for sewer service and are payable pursuant to arrangements approved by the Board. A deposit will be required to cover estimated costs prior to the performance of any work. Upon completion of the service relocation, the deposit will be adjusted for actual costs. If actual costs differ from the deposited amount, the applicant, owner, or customer shall be invoiced by the District for the excess of the actual cost over the deposited amount, or refunded the difference if less than the deposited amount.

### 10.3 NATURAL TREATMENT SYSTEM CHARGES

The District shall impose charges for modifications to natural treatment systems requested by the developer after the system has been constructed. Said charges, in addition to all other usual and regular charges of the District, including any specified connection fee, shall be as determined by the District and must be paid before work will be performed.

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### Section 11: SECURITY DEPOSIT

As permitted by law, the District may require of an applicant, owner, or customer such a deposit, if deemed necessary by reason or estimated future water, sewer, and recycled water billings or if there is an instance or instances of monthly delinquency. Such amount shall not be less than the estimated cost of water, sewer, and recycled water service for a one month-period or such other amount as determined by the Manager or Board. Deposits may be returned after one (1) year at the request of the applicant, owner, or customer; providing that all bills rendered during the succeeding twelve (12) month period have been paid within fifteen (15) days of presentation. A deposit determined by the District will be required for all construction water meters. Upon termination of service, deposit amounts not previously returned shall be applied to the final utility bill and any remaining amount refunded to the applicant, owner or customer.

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### Section 12: SERVICE CHARGES

#### 12.1 ESTABLISHMENT OF RATES

Rates to be charged and collected and the terms, provisions, and conditions to be effective respecting such rates for water, sewer, recycled water and natural treatment system service supplied by the District to customers within the District shall be as fixed and established by the Board from time to time and set forth in Exhibit B to these Rules and Regulations, which charges shall have no effect on any existing or subsequent reimbursement agreements. This provision is in addition to and not by way of derogation of any other remedies or procedures available to the District pursuant to any law or regulation or by any of the provisions of these Rules and Regulations.

#### 12.2 CHANGE OF SERVICE CHARGE

The Board reserves the right to change the schedule of water, sewer, recycled water and natural treatment system service charges and other charges at any time.

#### 12.3 SERVICE CHARGE BILLING

Water, sewer, recycled water and natural treatment system service charges will be rendered as part of the District water service bill at intervals of one month or multiples thereof. The District reserves the right to estimate bills, based on prior consumption.

#### 12.4 METERING

For the purpose of computing charges, each meter on the customer's premises will be considered separately, and readings of two or more meters will not be combined as equivalent to measurement through one meter except in those instances in which, by reason of special operating conditions, the District substitutes two or more meters of a smaller size for a single larger meter on the same service connection. In this special case, the size of service connection shall be substituted for the size of the meter in the application of the rate schedule, and shall be the basis for computing charges.

#### 12.5 TIME AND MANNER OF PAYMENT

- (1) All bills and charges for water, sewer, recycled water and natural treatment system service hereunder shall be due and payable upon presentation and shall become delinquent twenty-five (25) days thereafter. Such bills and charges shall be deemed to have been presented upon having been sent electronically or deposited in the United States mail; postage paid; and addressed to the applicant, owner, or customer reflected in the records of the District. Failure to receive the bill will not release the customer from payment obligation nor will it entitle the customer to a billing discount or exempt the customer from late fees or service disconnection for non-payment. Electronic billing and automatic payment are available to the customer on request and subject to compliance with all terms and conditions for enrollment in and use of such programs.

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- (2) If payment is not received within twenty-five (25) days after presentation of the bill, a late charge will be levied on any unpaid balance and, following such notice and proceedings as may be required by law, the water and/or recycled water service may be discontinued. Water and/or recycled water service shall not again be supplied until all delinquent bills, plus a restoration charge, which is established by the Board have been paid; if the turn-on is requested to be made outside regular working hours, an increased restoration charge shall be paid before service is restored. Payment shall be made electronically, in person or by mail at the office of the District or, at the option of the District, to its authorized collectors.
- (3) Discontinuance of service by reason of a delinquent bill shall not automatically constitute revocation of permit. However, such delinquency may be considered as sufficient reason for a revocation of permit in accordance with the provisions of these Rules and Regulations.

12.6 VARIANCE FROM RESIDENTIAL RATE STRUCTURE ALLOCATIONS;  
NONRESIDENTIAL ACREAGE AND BASE INDEX REVISIONS

12.6.1 Residential Variance - Procedure

- (1) Variance request forms will be obtained from and submitted to the Customer Service Department.
- (2) Variance requests will be processed by the Customer Service Department.
- (3) At the discretion of the District, the requesting customer may be required to have a water audit, which will be conducted by the District at no charge prior to review of the request.
- (4) Staff will notify a customer in writing if their variance request is denied.
- (5) Documents submitted by any customer as part of the variance procedure are reviewed and returned to the customer, if requested. If the customer does not request the documentation back, it will be destroyed to protect the customer's privacy, except for information retained by the District to document variances or as otherwise required by law.

12.6.2 Residential Variance – Determination

- (1) Grounds for a variance are:
  - [a] number of people residing in a dwelling unit
  - [b] medical needs
  - [c] licensed care facilities
  - [d] fire control zones (or other regulatory requirements)
  - [e] landscape area
  - [f] livestock/horses
  - [h] common area washing machines
  - [i] other, as determined on a case by case basis

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- (2) Proof acceptable to the District will be required of each ground(s) for a requested variance. The variance request form provides examples of acceptable proof.
- (3) Limitations
  - [a] An approved variance will become effective on the date the request for variance was submitted to the District.
  - [b] An approved variance will be valid for a period specified by the District (one year or less), and must be resubmitted on or before the expiration date to remain in effect.
- (4) Calculation of the increased allocations for approved variances will be made by the District pursuant to *Exhibit B* (Rates and Charges)

### 12.6.3 Nonresidential Acreage and Base Index Revisions – Procedure

- (1) Acreage (landscape) revision requests will be made by submitting an acre-change request to the Water Efficiency Department.
- (2) Base index (commercial, industrial and public authority usage) revision requests will be made by submitting a request for account evaluation to the Customer Service Department.
- (3) At the discretion of the District, the requesting customer may be required to have a water audit, which will be conducted by the District at no charge prior to review of the request.
- (4) Staff will notify a customer in writing if their request is denied.
- (5) Documents submitted by any customer as part of the account evaluation procedure are reviewed and returned to the customer ~~if requested~~. If the customer does not request the documentation back, it will be destroyed to protect the customer's privacy, except for information retained by the District to document the acreage or base index revision or as otherwise required by law.

### 12.6.4 Nonresidential Acreage and Base Index Revisions – Determination

- (1) Commercial/Industrial/Public Authority - Grounds
  - Relevant factors will include expansion of productive capacity, existing conservation practices that can be shown to have reduced water usage, severe economic hardship, and other factors determined on a case by case basis.

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### (2) Landscape Acreage - Grounds

It is the obligation of the customer to provide to the District acceptable documentation of the actual area served by each metered connection. Acceptable documentation is an irrigation plan or a controller chart (site map with irrigation zone boundaries clearly marked and square footage per zone called out) signed by a California licensed landscape architect or Irrigation Association certified irrigation designer (CID).

### (3) Limitations

- [a] An approved acreage or base index increase will become effective on the date the request was submitted to the District.
- [b] An approved acreage increase need not be resubmitted and will remain valid unless a further acreage-change is made
- [c] An approved base index increase will be valid until the account is closed or a new nonresidential tenant applies for service. When a new account is opened, the nonresidential customer will be billed at the conservation base rate for an initial period of six months. The District will then establish a base index for the customer based on the customer's usage for the initial six month period and may conduct on-site surveys to ensure water efficient business and irrigation practices are in place prior to beginning -and will begin to bill the customer (JA10) in accordance with the applicable rate structure. In the event a new tenant accepts responsibility for an existing account and the account is not closed, the existing base index for the account will remain in effect unless and until the District, on its own review or at the tenant's request, modifies the existing base index or establishes a new base index by implementing a six-month base index reestablishment period as described in the preceding sentence.

### (4) Calculation of the increased acreage or base index will be made by the District pursuant to *Exhibit B* (Rates and Charges)

## 12.7 ADJUSTMENT OF CHARGES

### 12.7.1 Billing Errors

In the event of discovery of an error in the computation of charges, crossed meters, unbilled meter or other error, a retroactive adjustment of the charges will be made by means of a credit or additional charge to the next bill, to the extent the District determines it has information from which the correct amount can be ascertained.

### 12.7.2 Variance Adjustment - Residential

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If a variance is approved as provided in Section 12.6.2, a retroactive adjustment of the charges to the customer may be made for no more than three months prior to the variance effective date if the District determines a retroactive adjustment is warranted in accordance with the variance request and the proof submitted by the customer.

12.7.3 Increase of Nonresidential Landscape or Base Index

If a nonresidential customer's base index or landscape acreage is increased as provided in Section 12.6.4, a retroactive adjustment of the charges may be made for no more than six months prior to the effective date of the increase if the District determines a retroactive adjustment is warranted in accordance with the increase request and the proof submitted by the customer.

12.7.4 Residential Landscape Adjustments

The District will authorize a retroactive adjustment of no more than three months for the purpose of establishing new landscape if the District determines a retroactive adjustment is warranted in accordance with the proof submitted by the customer. Training shall be completed if required under Section 12.7.8[AM11].

[CR12][FS13]  
12.7.5

Leak Repair Adjustments

(1) Grounds

The IRWD allocation-based conservation tiered rate structure is intended to serve as a warning sign to alert customers to possible water waste, such as a leak, by charging over-allocation at the "Inefficient", "~~Excessive~~", and "Wasteful" tiers. When an adjustment is made for a repaired leak, the excess units of water attributed to the leak and billed in the "Inefficient", "~~Excessive~~", or "Wasteful" tiers are re-billed at the "Base Rate". When a customer has a leak repaired, and usage after the repair is within the customer's allocation, the District will authorize an adjustment, for residential [JA14]customers, of no more than two bills affected by the leak. ~~Due to the additional complexity of processing an adjustment for nonresidential customers, the~~ [CR15] The District may, at its discretion, authorize an adjustment additional an-bill adjustments on a case by case basis for customers who encounter extraneous [JA16]circumstances that cause delays to the leak repair, of up to six bills affected by the leak. [AM17]

(2) Limitations

The customer is required to contact the District within two months of completing the repair of the leak in order to receive a leak adjustment. Training shall be completed if required under Section 12.7.8.

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### 12.7.6 Nonresidential Landscape Adjustments

- (1) -To be eligible for adjustment, an over-allocation charge on a single bill must exceed the minimum amount specified in the Landscape Irrigation Adjustment Form (LIAF) instructions available at [www.irwd.com](http://www.irwd.com).
- (2) Mainline breaks and leaks are eligible for adjustment.
- (3) Other non-residential landscape adjustments shall be made on a case-by-case basis at the District's discretion, based on the request and supporting documentation submitted by the customer.
- (4) Adjustment requests shall be submitted on an IRWD LIAF which is available online at [www.irwd.com](http://www.irwd.com), in accordance with the LIAF instructions. Training shall be completed if required under Section 12.7.8.

### 12.7.7 Courtesy Adjustments – Residential and Nonresidential Customers

An adjustment of charges not otherwise provided for in this Section 12.7 may be authorized by the District as a courtesy adjustment for special circumstances determined on a case-by case basis. A courtesy adjustment may include up to, but no more than six months of charges, and no more than one courtesy adjustment will be authorized within a 12-month period.

### 12.7.8 Training Requirement For Adjustments

For billing adjustments made under 12.7.4, 12.7.5 and 12.7.6, the District, at its discretion, may require the customer to complete a free water use efficiency training session offered or provided by the District, in order to receive the billing adjustment.

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Section 13: SEVERABILITY

If any section, subsection, clause, or phrase of these Rules and Regulations is for any reason held to be invalid or unconstitutional, such decision shall not affect the remaining portions of these Rules and Regulations. The Board declares that it would have passed said Rules and Regulations by section, subsection, sentence, clause, or phrase thereof.

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### Section 14: ENFORCEMENT AND PENALTIES

#### 14.1 GENERAL

Any person, firm, corporation, association, or agency found to be violating any provision of these Rules and Regulations or the terms and conditions of the applicant's, owner's, or customer's service agreement, permit, or any and all applicable Federal, State, or local statutes, regulations, ordinances, or other requirement shall be served by the District with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. This provision is in addition to and not by way of derogation of any other remedies or procedures available to the District by law, regulation, or pursuant to any of the provisions of these Rules and Regulations including, but not limited to, Section 7.

Pursuant to Section 35424 of the Water Code of the State of California, any violation of these Rules and Regulations is a misdemeanor, the violation of which shall, upon conviction thereof, be subject to a fine of not less than \$25.00 nor more than \$200.00.

Failure to permanently cease all violations within the time stated shall result in revocation of the permit by the District and termination of water, sewer, recycled water and/or natural treatment system service as provided in Sections 14.2 and 14.3. Violations regarding any one service may result, at the sole discretion of the Board or Manager, in termination of any combination of or all water, sewer, recycled water and natural treatment system service.

#### 14.2 INTERIM REVOCATION

In cases where the serious nature of the violations described above require immediate action, the Board or Manager may, in the sole discretion of the Board or Manager, immediately revoke the permit on an interim basis and thereupon cease water, sewer, recycled water and/or natural treatment system service, subject to a timely decision on permanent revocation of permit pursuant to a public hearing as provided herein. In cases of sewer service termination, there shall be no discharge of any type by an applicant, owner, or customer into the District's sewer facilities.

#### 14.3 PERMANENT REVOCATION

Permanent revocation of a permit shall occur only subsequent to a public hearing held in the manner hereinafter provided. The applicant, owner, or customer shall be given written notice ten (10) calendar days prior to a hearing on the possible permanent revocation of any permit by the District. The notice shall specify the grounds of the proposed revocation of any such permit in reasonable detail. It may but need not describe suggested corrective action acceptable to the District. Notice may be delivered personally to the applicant, owner, or customer or it may be given by depositing such in the United States mail with postage prepaid, addressed to the applicant, owner, or customer either at the address for the applicant, owner, or customer as reflected on the last equalized assessment roll of the County of Orange as defined in the Revenue and Taxation Code of the State of California. Any such action to permanently revoke the permit shall be effective

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ten (10) calendar days after notice of the Board's decision and shall be either personally delivered to the applicant, owner, or customer placed in the United States mail, postage prepaid, addressed to the applicant, owner, or customer in the manner herein above specified.

In the alternative to such action, the District may establish a surcharge on the continuation of water, sewer, recycled water and/or natural treatment system service by the District until such time as the applicant, owner, or customer has taken action to comply with all of the herein above described requirements for obtaining service from the District in its reasonable discretion. Any request to reestablish service subsequent to the revocation of a permit and the termination of water, sewer, recycled water and/or natural treatment system service shall be in the manner prescribed for initially obtaining service from the District, which may include the collection of a security deposit. However, in addition, the District may, in its discretion, require that an agreement and financial security conditioned upon compliance with the District's Rules and Regulations be provided in an amount, manner, and for a period of time as determined by the Board.

The foregoing provisions of these Rules and Regulations are a requirement of any permit, and any application for service and permit therefore shall be subject to such provisions. The Board, if it deems such to be in the best interest of the District, may on an interim basis or otherwise waive or modify any of the foregoing.

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Section 15: WATER CONSERVATION AND WATER SUPPLY SHORTAGE  
PROGRAM AND REGULATIONS

15.1 GENERAL

15.1.1. Title

This section will be known as the Irvine Ranch Water District Water Conservation and Water Supply Shortage Program.

15.1.2 Findings

- A. A reliable minimum supply of water is essential to the public health, safety and welfare of the people and economy of the southern California region.
- B. Southern California is a semi-arid region and is largely dependent upon imported water supplies. A growing population, climate change, environmental concerns and other factors in other parts of the State and western United States make the region highly susceptible to water supply reliability issues.
- C. Careful water management that includes active water conservation measures, not only in times of drought but at all times, is essential to ensure a reliable minimum supply of water to meet current and future water supply needs.
- D. Article X, Section 2, of the California Constitution declares that the general welfare requires that water resources be put to beneficial use, that waste or unreasonable use or unreasonable method of use of water be prevented and that conservation of water be fully exercised with a view to the reasonable and beneficial use thereof.
- E. California Water Code section 375 authorizes a water supplier to adopt and enforce a comprehensive water conservation program to reduce water consumption and conserve supplies.
- F. The adoption and enforcement of a water conservation and supply shortage program is necessary to manage the District's water supply in the short and long term and to avoid or minimize the effects of a supply shortage within the District. Such a program is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare.

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G. Recycled water is produced and supplied by the District to conserve potable water. Recycled water, like potable water, must be used efficiently and is therefore included in this Program.

### 15.1.1 Application

The provisions of this section shall apply to all persons using water in any area of this District in which the District provides retail water service, regardless of whether any person using water shall have a contract for such service, and shall apply to all potable and recycled water supplied by the District.

### 15.1.2 Water Shortage Contingency Plan

The District has adopted a Water Shortage Contingency Plan. The Water Shortage Contingency Plan, as amended from time to time, describes the restrictions and other response measures that can be implemented by the Board in declaring a water shortage level and provides policy considerations, criteria and other guidance for the selection and implementation of these measures.

## 15.2 DECLARATION OF PURPOSE AND INTENT

The purpose of this section is to establish a water conservation and supply shortage program that will reduce water consumption within the District through conservation, enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, and maximize the efficient use of water within the District to avoid and minimize the effect and hardship of water shortage to the greatest extent possible.

This section establishes permanent water use efficiency standards intended to alter behavior related to water use efficiency for non-shortage conditions and further establishes four levels of water supply shortage response actions to be implemented during times of declared water shortage or declared water shortage emergency, with measures designed to achieve progressively greater levels of conservation in response to worsening shortage or emergency conditions and decreasing supplies.

This section is intended to complement and be used in tandem with the allocation-based tiered pricing structure adopted by the District in 1991 and implemented under Section 12.1 of these Rules and Regulations on an ongoing basis as part of the District's rates and charges. The allocation-based tiered pricing structure encourages use within allocation through a significantly tiered commodity pricing system, and discourages wasteful use. The response measures for the levels of water supply shortage include a set of measures, referred to as "demand management" measures, that can be implemented through the allocation-based tiered pricing structure.

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### 15.3 EXEMPTIONS

Persons may be exempted from application of the permanent restrictions set forth in 15.4 or restrictions implemented pursuant to the Water Shortage Contingency Plan during a shortage level under 15.5, if the General Manager of the District or his designee issues a permit allowing such use, and if such permit issuance is based on a finding that enforcement of the applicable restriction would either (1) cause an unnecessary and undue hardship to the applicant or the public, or (2) would cause or threaten an emergency condition affecting the health, sanitation, fire protection, or safety of the applicant or the public.

The General Manager of the District or his designee may require the use of such water conservation devices or practices as he deems appropriate as a condition of the exemption permit. He shall promulgate a list of approved devices.

Section 12.6 sets forth the procedures to apply for variances from water allocations under the allocation-based tiered pricing structure.

### 15.4 GENERAL PROHIBITIONS AND ONGOING MEASURES

#### 15.4.1 Prohibitions

The following prohibitions are in effect at all times, regardless of whether any declared shortage condition is in effect.

- (1) *Gutter Flooding* - No person shall cause or permit any water furnished to any property within the District to run or to escape from any hose, pipe, valve, faucet, sprinkler, or irrigation device into any gutter or otherwise to escape from the property if such running or escaping can reasonably be prevented.
- (2) *Leaks* - No person shall permit leaks of water that he has the authority to eliminate.
- (3) *Washing Hard Surface Areas* - Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards.
- (4) *Waste* - No person shall cause or permit water under his control to be wasted. Wasteful usage includes, but is not limited to, the uses listed in Section 1.1 of Exhibit 1 to the Memorandum of Understanding Regarding Urban Water Conservation in California, dated September 16, 2011, as

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amended from time to time, or the counterpart of said list contained in any successor document.

### 15.4.2 Demand Management

When a declared shortage condition is not in effect, basic allocations established by the District under the allocation-based tiered pricing structure will be limited to the amount that is reasonable for the customer's needs and property characteristics, and will exclude wasteful use. Reductions may be applied to basic allocations to establish a reasonable amount during a declared shortage condition, as specified herein.

### 15.5 IRWD Water Supply Shortage Levels

The District's Water Shortage Contingency Plan provides representative measures that may be implemented during water shortage resulting from drought conditions or system interruptions. The measures may be applied individually or in combination and may vary according to the severity and duration of the shortage.

The following are the levels of shortage which may be declared by the Board in the manner prescribed by applicable provisions of the California Water Code, the approximate ranges of conditions the levels represent and the reductions to be achieved:

**Level One (Shortage Warning):** Up to 10% shortage. Measures selected would be designed to achieve the following:

- Reduce over-irrigation
- Reduce over-allocation use
- Encourage diligent repair of water leaks

**Level Two (Significant Shortage Condition):** 10-25% shortage. Measures selected would be designed to incorporate the objectives listed under Level One, and achieve the following further reduction in use:

- Reduce irrigation by a percentage to be specified in the shortage declaration
- Discourage filling of fountains, pools and water features and other discretionary uses

**Level Three (Severe Shortage):** 25-40% shortage. Measures selected would be designed to incorporate the objectives listed under Level Two, and achieve the following further reduction in use:

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- Further reduce irrigation by a percentage to be specified in the shortage declaration
- Further reduce or eliminate discretionary uses
- Reduce commercial, industrial and institutional use by a percentage to be specified in the shortage declaration
- Eliminate specified municipal uses such as street cleaning, hydrant-flushing and water-based recreation

Level Four (Crisis Shortage): More than 40% shortage. Measures selected would be designed to incorporate the objectives listed under Level Three, and achieve the following further reduction in use:

- Cease all outdoor water uses for landscape and agriculture, subject to reserved rights relating to local wells

Generally, in all Levels, it is anticipated that the District will use voluntary customer response measures and demand management measures implemented under Section 12 through the adjustments in the allocation-based pricing structure. Response measures during Levels Three and Four are anticipated to also include restrictions or prohibitions, but this will be determined by the District in its discretion at time of implementation. To achieve the reductions indicated above under the various levels, the conservation measures that may be implemented by the shortage declaration are listed below, shown with the levels in which they are anticipated to be used. Reference is made to the Water Shortage Contingency Plan for a more detailed discussion of response measures and the manner in which they may be used in the various shortage levels. At the time of declaring a level of shortage conditions, the Board in its discretion will determine the particular response measures that will be implemented. The list below is intended to be illustrative and not exclusive, and does not preclude the implementation of measures in a different level from the level(s) shown or the implementation of other measures in lieu of or in addition to those described below or in the Water Shortage Contingency Plan:

- Enhanced public awareness campaign (all Levels)
- Intensified use of surveys/assistance for customers in highest allocation tiers (all Levels)
- Reduction of basic water allocations (all Levels)
- Adjustment of pricing tier thresholds, shifting usage into higher tiers (Levels Two, Three and Four)
- Increase of rates for pricing tiers, including adjustments to recover Metropolitan's penalty rates for purchases of imported water (Levels Three and Four)
- Restriction of uses (Level Four)

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- Prohibition of uses (Level Four)

The demand management measures included in the list above will be implemented through changes in the District's allocation-based tiered pricing structure designed to strengthen the pricing signal and achieve desired water savings in the declared shortage level, including changes in the allocation based water budgets of customers or customer classes (residential, landscape, commercial, etc), changes in the usage volumes subject to the pricing tiers, and changes in the applicable commodity rates for the tiers. These changes will be implemented under Section 12 through the adoption of a revised Exhibit B setting forth the District's rates and charges.

The general prohibitions specified in Section 15.4 shall apply to the use of potable (domestic), untreated and recycled water. The application of shortage level response measures or restrictions may vary as to type of water service. In the implementation of measures or restrictions on potable water service through the declaration of a shortage level, the District will determine and set forth how and to what extent, if any, such measures or restrictions, or different measures or restrictions, will be applied to non-potable water services furnished by the District.

### 15.6 REPORTING AND ENFORCEMENT

#### 15.6.1 Measures implemented through allocation-based tiered pricing structure

As described in Section 15.2, the District's allocation-based tiered pricing structure complements and is used in an integral manner within the water conservation and water supply shortage program. As part of the program, the pricing structure performs both reporting and enforcement functions: (1) the billing of water usage within the various pricing tiers serves as an effective *reporting mechanism* to identify customers who are overusing water or may be using water in discouraged or prohibited manners, and tells the District and the District's customer what amounts of conservation are being achieved and where high usage should be the focus of additional effort; and (2) the effectiveness of the allocation-based tiered pricing structure means that the rate structure and adjustments to it can achieve the same result as, and be used by the District *in lieu or partially in lieu of, restrictions and enforcement measures* in times of declared shortage conditions. As a result the response measures in Section 15.5 include demand management measures to be implemented through the allocation-based tiered pricing structure, which is enforced through the District's billing procedures.

## IRVINE RANCH WATER DISTRICT

### 15.6.2 Enforcement of Restrictions

- (1) Prior to enforcement of the restrictions pursuant to Section 15.4 and 15.5, any person who is suspected of violating the restrictions hereby imposed shall be given a preliminary notice in writing of such violation, with the description of violation set forth in such preliminary notice. Such person shall have 24 hours to correct such violation, or terminate the use. If the violation is not corrected or the use not terminated, the General Manager of the District or his designee may forthwith either (a) disconnect service, (b) install flow-restricting devices restricting non-health and safety related water service, or (c) order issued a second preliminary notice. (Service disconnected or restricted pursuant to (a) or (b) above shall be restored only upon payment of the turn-on and other charges fixed by the Board of Directors as provided in these Rules and Regulations.)
- (2) Any other sanctions or penalties that the District is presently authorized to impose or that the District may at some future time be authorized to impose may be imposed to enforce this prohibition of water wastage.
- (3) From and after the publication or posting of any ordinance or resolution implementing any restrictions or mandatory measures under the Water Shortage Contingency Plan, violations thereof shall be misdemeanors punishable by imprisonment in the County Jail for not more than 30 days or by fine of not more than \$1,000, or both, or as otherwise provided by law or such resolution or ordinance.

IRVINE RANCH WATER DISTRICT

Section 16: WATER WELLS

16.1 GENERAL

The District has an important interest, along with other appropriate regulatory agencies, in monitoring the groundwater basin located within its boundaries to obtain information as to its quantity, quality and other characteristics on an historical and ongoing basis. Many wells have been constructed and operated within the District for agricultural purposes by private users. From time to time, due to increasing urbanization, some of these wells are no longer needed as production wells. The purpose of this section is to regulate the construction and reconstruction of all existing and future water wells, to provide for the destruction or other use of abandoned wells, and to provide for the initiation and completion of corrective measures relative to wells within the District, to accomplish the following:

- (1) To protect the quality of the groundwater within the District;
- (2) To protect the health, safety, and welfare of the residents of the District;
- (3) To protect the capability of the District to produce and distribute water for the use, benefit and protection of the residents of the District;
- (4) To avoid premature destruction of wells that can be converted to monitoring or production use.

16.2 DEFINITIONS

- (1) "Destruction" of a well means the complete filling and sealing of the well in accordance with the procedures outlined in the standards incorporated into this Section.
- (2) "Well" means any excavation constructed by any method for the purpose of extracting water from or injecting water into the underground, for providing cathodic protection or electrical grounding of equipment, for making tests or observations of underground conditions, or for any other similar purpose. Wells shall include, but shall not be limited to, community water supply wells, individual domestic wells, industrial wells, agricultural wells, cathodic protection wells, electrical grounding wells, test and exploratory holes, observation wells, saltwater barrier wells, and other wells whose regulation is necessary to fulfill the purpose of this chapter as determined by the Manager. Wells shall not include:
  - [a] Oil and gas wells, geothermal wells, or other wells constructed under the jurisdiction of the State Department of Conservation, except any such wells converted to use as water wells;
  - [b] Wells used for the purpose of dewatering excavations during construction, monitoring high groundwater during construction, monitoring or ascertaining the existence of groundwater contamination, or stabilizing hillsides or earth embankments; or
  - [c] Wells less than 50 feet in depth or 6 inches in diameter.

## IRVINE RANCH WATER DISTRICT

- [d] Other wells whose regulation is not necessary to fulfill the purpose of this chapter as determined by the Manager.
- (3) A well shall be presumed to be "abandoned" when it has not been used for its intended purpose for a period of one year.

### 16.3 PROHIBITED ACTS -- PERMITS REQUIRED

- (1) No person, firm, or private or public corporation or agency shall construct or reconstruct any well within the boundaries of the District unless such construction or reconstruction is carried out pursuant to and in conformance with a written permit issued for that purpose by the Manager as provided in this Section.
- (2) No owner or operator of an existing well shall allow it to remain in an unused condition except in accordance with Section 16.4. An used well determined to be abandoned shall be destroyed pursuant to and in conformity with the requirements of the District as set forth in this Section unless the Manager determines that the District desires to acquire and equip the well for monitoring or production purposes.

### 16.4 UNUSED WELLS - - DETERMINATION OF NONABANDONMENT

- (1) If a well has not been used for any of the purposes set forth in the definition of "well" for a period of one year, such well shall be presumed to have been abandoned, and the burden of proof shall thereupon be upon the owner or operator of the well to establish to the satisfaction of the Manager that the well has not been abandoned and that the owner and operator intends to continue to use the well for the intended purposes. The Manager shall require a written declaration under penalty of perjury concerning intended future use to be filed by the owner or operator of the well before the Manager determines that the well has not been abandoned. Application for the renewal of a determination of nonabandonment shall be required to be presented to the Manager by the owner or operator at the beginning of each calendar year. Such renewal applications shall be accompanied by a new written declaration filed under penalty of perjury. Test holes and exploratory holes shall be considered abandoned twenty-four hours after construction work has been completed unless otherwise determined by the Manager.
- (2) In the event the Manager determines that a well is indeed abandoned, unless the Manager determines that the District desires to acquire and equip the well for monitoring or production purposes, the well shall be destroyed within thirty days in accordance with the provisions of this chapter. However, the owner shall be given written notice of this determination by the Manager. The notice shall specify the reasons for this decision and shall notify the owner of his right to request a hearing before the Board of Directors within ten days.

## IRVINE RANCH WATER DISTRICT

### 16.5 PERMITS

- (1) Applications for permits to construct, reconstruct, or destroy any well shall be made to the Manager and shall contain or provide such information as he shall require.
- (2) Each application shall be accompanied by a fee which shall be established by the Board of Directors. A permit shall remain in effect for one year from the date of issuance.
- (3) Permits may be issued subject to any condition or requirement found by the Manager to be necessary to accomplish the purposes of this chapter.
- (4) A permit may be canceled or the conditions amended by the Manager if he determines that to proceed with the work would result in a violation of the terms of the permit or of this Section.
- (5) In the event that a permit is denied or canceled, the applicant or permit holder shall be given written notice by the Manager, which notice shall specify the reasons for his action, and shall notify the applicant or permit holder of his right to request a hearing before the Board of Directors within ten days.

### 16.6 COMPLETION OF WORK -- NOTICE TO MANAGER -- INSPECTION

The permittee shall notify the Manager in writing upon completion of the work performed under the permit, and no work shall be deemed to have been completed until such written notification has been received. A final inspection of the work shall be made by the Manager, and no permittee shall be deemed to have complied with the provisions of this chapter of his permit until such inspection has been performed and the work approved by the Manager.

### 16.7 NOTICE UPON DETERMINATION OF THREAT TO WATER QUALITY, HEALTH OR SAFETY

In the event the Manager determines that a well threatens to impair the quality of the groundwater or otherwise jeopardize the health or safety of the public, he shall send written notice to the owner and shall post a copy of the notice on the property. The notice shall state the specific facts relative to the condition, the corrective measures deemed necessary, and the date on or before which such measure shall be completed. The owner shall also be notified of his right to request a hearing before the Board of Directors within thirty days from the date such notice is issued.

### 16.8 IMMEDIATE ABATEMENT OF THREAT TO WATER QUALITY, HEALTH OR SAFETY

If the Manager finds that immediate action is necessary to prevent impairment of the groundwater or a threat to the health or safety of the public he may correct the condition without giving notice. The District may charge the cost of the corrective measure to the owner. However, within twenty-four hours after initiating such corrective measure, the Manager shall notify the owner of the time, date and place at which a hearing shall be held by the Board of Directors relating

## IRVINE RANCH WATER DISTRICT

thereto; which date shall be not less than ten nor more than thirty days after the date of such notification.

### 16.9 BOARD OF DIRECTORS HEARING

- (1) At the time fixed for a hearing before the Board of Directors concerning an abandoned well, a permit, or a threat to water quality, health or safety, as provided for in this chapter, the Board of Directors shall hear and consider all relevant testimony and evidence offered by the property owner and by any other interested person.
- (2) If the Board of Directors determines that an unused well was incorrectly classified as abandoned or that a permit was improperly denied or canceled, it shall direct the Manager to reclassify the well or to issue or reinstate the permit.
- (3) If the Board of Directors finds that a threat to water quality, health or safety, as determined by the Manager, does exist, then it shall direct the Manager to take any necessary action to protect the groundwater or the health and safety of the public unless the situation is corrected by the owner on or before a date to be specified by the Board of Directors. The cost of such corrective measures by the Manager shall be charged to the owner or operator.
- (4) In instances where the Manager has corrected a condition under the immediate correction provision of Section 16.8, the Board of Directors shall ascertain and review the pertinent facts concerning the correction. If the Board of Directors determines that the Manager's actions were justified, then it shall direct that the cost be charged to the owner or operator.

### 16.10 STANDARDS FOR CONSTRUCTION, RECONSTRUCTION OR DESTRUCTION

Standards for the construction, reconstruction, or destruction of wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74, Chapter II, and future amendments thereto. Standards for the construction, reconstruction, or destruction of cathodic protection wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74-1, and future amendments thereto.

### 16.11 VIOLATION -- PENALTY

Any violation or failure to comply with any of the provisions of this Section shall be handled as provided in herein and shall also be subject to Section 14 as applicable.

### 16.12 AGREEMENTS

The District may enter into agreements with property owners concerning the drilling or abandonment of wells and/or other matters covered in this Section, and providing for alternate or modified methods of meeting certain of the requirements contained herein. In such cases, the agreement(s) will govern as to

## IRVINE RANCH WATER DISTRICT

the applicability of the affected requirements, in the area(s) subject to such agreements.

### 16.13 NO LIABILITY ASSUMED

Notwithstanding the provisions of this Section permitting or requiring the District or Manager to issue permits, make determinations and/or take corrective measures relative to construction, reconstruction abandonment and destruction of wells and quality of groundwater, the District assumes no liability to the property owners or operators of wells or any third parties, for the making of or failure to make any such determination, or the taking of or failure to take any such measure, or the issuing of or failure to issue any such permit.

## IRVINE RANCH WATER DISTRICT

### Section 17: DISTRICT NATURAL TREATMENT SYSTEM FACILITIES

#### 17.1 GENERAL

The District, in cooperation with the County of Orange and various local cities, is developing a network of constructed water quality wetlands and bioretention cells designed to treat urban runoff within the drainage watersheds that are completely or partially within the District boundaries. These constructed water quality wetlands and bioretention cells are also known as natural treatment systems (NTS).

Developers shall provide for the design, construction and establishment of one or more natural treatment systems per the Procedures Guide, the District's Natural Treatment System Master Plan, the NTS Design Guidelines and these Rules and Regulations to treat urban runoff from their proposed development and reduce pollutants to the levels set by the regulating agencies. If permissible, and at the District's discretion, these natural treatment systems may be located within first flush stormwater retention basins provided by the developer to comply with other regulatory requirements. If, during the period specified in the Procedures Guide and the NTS Design Guidelines, the natural treatment system's level of treatment provided does not meet other regulatory requirements the District, at its discretion, may act on behalf of the County and various local Cities to direct the developer to make corrective improvements to the natural treatment system to meet the aforementioned regulatory requirements.

The operation, maintenance and water quality monitoring of the natural treatment system will be governed by agreements between the District and the County or City, as applicable. The responsibility for regulation and enforcement of surface water runoff discharges shall remain with the County and Cities.

#### 17.2 URBAN RUNOFF DISCHARGE PERMITS

The County of Orange, Orange County Flood Control District and the Incorporated Cities of Orange County within the Santa Ana and San Diego Regions of the Regional Water Quality Control Board (RWQCB) are required, under the terms of their National Pollutant Elimination Discharge System (NPDES) Permit, to control and manage the discharge of pollutants from urban runoff. The definition and enforcement of permitted discharges into the natural treatment system will be the responsibility of the County of Orange and the co-permittees under the NPDES permit.

#### 17.3 FEES AND CHARGES FOR USE

1. The applicant for Natural Treatment System service shall pay the fees as set forth in the rates and charges. The fees and operational charges are as set forth in Exhibit B and the respective portions thereof, which set forth applicable rates and charges of the District. Exhibit B hereto

## IRVINE RANCH WATER DISTRICT

and the rates and charges provided for therein are by this reference incorporated herein and may be changed by the District

### 17.4 MONITORING AND MAINTENANCE

The District shall monitor and maintain the natural treatment system, as specified in the Procedures Guide and the NTS Design Guidelines, to ensure that the system is operating as designed. The District reserves the right to make modifications to the natural treatment system, based on the monitoring results, to increase the water quality treatment effectiveness of the system.

The District's monitoring and maintenance shall be limited to the water quality functions of the natural treatment system operation and, and the District assumes no responsibility or liability for flood control functions of natural treatment systems or sites. The District, at its discretion, may provide water quality monitoring for the combined natural treatment system and first flush stormwater retention facilities.

### 17.5 CONFLICT

In the event that any portion of this Section pertaining to discharges to the natural treatment system is inconsistent with any other provisions of the Rules and Regulations as to such discharge, the provisions of this Section shall take precedence.

**EXHIBIT C to the Rules and Regulations  
IRVINE RANCH WATER DISTRICT  
MAXIMUM ALLOWABLE LOCAL LIMITS\***

<b>Constituent</b>	<b>Concentration Limit in Milligrams/Liter (mg/L)</b>
Arsenic	2.00
Cadmium	1.00
Chromium	2.00
Copper	3.00
Lead	2.00
Mercury	0.03
Nickel	10.00
Silver	5.00
Zinc	10.00
Cyanide (Total)	5.00
Cyanide (Amenable)	1.00
Polychlorinated Biphenyls	0.01
Pesticides	0.01
Total Toxic Organics	0.58
Sulfide (Total)	5.00
Sulfide (Dissolved)	0.50
Oil and grease of mineral or petroleum origin	100.00

\* Users subject to Federal Categorical Pretreatment Standards may be required to meet more stringent limits.

## Exhibit "B"

### RESOLUTION NO. 2015-

#### RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA RESCINDING RESOLUTION NO. 2014-50 AND ESTABLISHING REVISED RULES AND REGULATIONS OF THE IRVINE RANCH WATER DISTRICT FOR WATER, SEWER, RECYCLED WATER, AND NATURAL TREATMENT SYSTEM SERVICE AND EXHIBIT A THERETO

WHEREAS, Irvine Ranch Water District (IRWD) is a California Water District organized and existing under the California Water District Law, and all of the lands within the boundaries of said District are located in the County of Orange, State of California; and

WHEREAS, Section 35423 of the California Water Code empowers the District to establish, print and distribute equitable Rules and Regulations for the distribution of water; and

WHEREAS, the District is also empowered to exercise or use any of the powers contained in the California Water District Law in carrying out its powers and purposes to furnish sewer service and natural treatment system service, under Sections 35506 and 35539.14, respectively, of said Water Code; and

WHEREAS, California Water Code Section 375 authorizes a water supplier to adopt and enforce a comprehensive water conservation program to reduce water consumption and conserve supplies; and

WHEREAS, by adoption of Resolution No. 2014-50 on November 10, 2014, the Board of Directors adopted revised Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service; and

WHEREAS, from time to time, the District reviews and proposes changes to its Rules and Regulations. The proposed changes have been made to update definitions and promote consistent and conforming nomenclature throughout the document. In addition, changes have been made to specific sections as follows:

Section 7: Updates and simplifies the definitions of Discharger, Industrial User, and User. Provides wording for an Alternative Service Charge for non-residential customers based on measured quantity and quality of water being discharged to the sewer. Adds an Exhibit that lists the District's Maximum Allowable Local Limits.

Section 12: Provides for conducting on-site surveys to ensure water efficient business and irrigation practices are in place prior to beginning to bill the customer. Authorizes additional bill adjustments on a case by case basis for customers who encounter extraneous circumstances that cause delays to a leak repair.

WHEREAS, the Board of Directors of IRWD find it to be in the best interest of the District to revise and update said Rules and Regulations.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of IRWD as follows:

Section 1. That Resolution No. 2014-50 be and hereby is rescinded in its entirety.

Section 2. That the Rules and Regulations of the Irvine Ranch Water District for Water, Sewer, Recycled Water, and Natural Treatment System Service, inclusive of Exhibit A thereto but not inclusive of Exhibit B thereto, as more specifically set forth in EXHIBIT "A" to this Resolution, attached hereto and by this reference made a part hereof, be and hereby are approved and adopted.

Section 3. That the provisions of this Resolution shall become effective upon adoption.

Section 4. That said Rules and Regulations, including Exhibit A attached thereto, shall be certified by the Secretary of this District and the Secretary is hereby ordered and directed to publish a summary of the amendments to said Rules and Regulations, together with the internet address and the physical location where the complete text of the amended Rules and Regulations may be viewed, once a week for two weeks in a newspaper of general circulation published in Orange County, California, pursuant to the provisions of Section 35424 of the California Water Code.

ADOPTED, SIGNED and APPROVED this 24<sup>th</sup> day of August, 2015.

\_\_\_\_\_  
President, IRVINE RANCH WATER DISTRICT  
and of the Board of Directors thereof

\_\_\_\_\_  
Secretary, IRVINE RANCH WATER DISTRICT  
and of the Board of Directors thereof

APPROVED AS TO FORM:  
BOWIE, ARNESON, WILES & GIANNONE  
Legal Counsel - IRWD

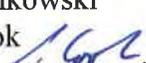
By \_\_\_\_\_

August 24, 2015

Prepared and

Submitted by: L. Bonkowski

Approved by: P. Cook

CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the August 10, 2015 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE AUGUST 10, 2015 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – Minutes of August 10, 2015

## EXHIBIT "A"

### MINUTES OF REGULAR MEETING – AUGUST 10, 2015

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President LaMar on August 10, 2015 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Withers (arrived at 5:08 p.m.), Matheis, Reinhart, LaMar and Swan.

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Finance and Administration Clary, Executive Director of Water Policy Weghorst, Director of Human Resources Roney, Assistant Director of Recycling Operations Lee, Assistant Director of Water Operations Roberts, Director of Administration Services Mossbarger, Director of Treasury and Risk Management Jacobson, Director of Public Affairs Beeman, Director of Water Resources Sanchez, Assistant Director of Maintenance Drake, Principle Engineer Hoolihan, Principal Engineer Mori, Public Affairs Manager Veeh, Purchasing Manager Aguilar, Assistant Treasurer Fournier, Regulatory Compliance Manager Lewis, Legal Counsel Arneson, Secretary Bonkowski, Ms. Kellie Welch, Ms. Gretchen Ronin, Mr. Jeff Thomas, Mr. Brett Barbre, Mr. Sat Tamaribuchi, Ms. Marta Ramos, Ms. Jennifer Davis, Ms. Shana Llewellyn, Ms. Shavonne Mays, Ms. Shelly Wang, Ms. Megan Vigliotti, Mr. Jim Reed, and other members of the public and staff.

WRITTEN AND ORAL COMMUNICATIONS: None.

ITEMS TOO LATE TO BE AGENDIZED: None.

### PRESENTATIONS

#### EXTRAORDINARY SUPPLY PROGRAM PRESENTATION

Executive Director of Water Policy Weghorst provided a presentation explaining the successful conclusion of recharging, recovering, and conveying 1,000 acre-feet of water from IRWD Strand Ranch to the IRWD service area. Mr. Weghorst highlighted the critical roles of each of IRWD's partners in the Extraordinary Supply Program and thanked MWDOC by presenting Board members Barbre, Thomas, and Tamaribuchi along with its Assistant General Manager/District Engineer Seckel a plaque.

#### CSUF LEADERSHIP DEVELOPMENT FOR PUBLIC AGENCIES PRESENTATION AND RECOGNITION OF DISTRICT GRADUATES

Ms. Megan Vigliatti and Ms. Shelly Wang with the University Extended Education, California State University, Fullerton provided a presentation about their series entitled "Leadership Development for Public Agencies" and honored the District's most recent graduates of the program including Ms. Marta Ramos, Sr. Human Resources Analyst; Ms. Jennifer Davis, Treasury Analyst; Ms. Shana Llewellyn Customer Service Specialist, Ms. Shavonne Mays, Water Use Efficiency Specialist and Mr. Colt Martin, Mechanical Services Manager was absent.

## CONSENT CALENDAR

On MOTION by Swan, seconded and unanimously carried, CONSENT CALENDAR ITEMS 5 through 16 were approved as follows:

5. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the July 27, 2015 Regular Board meeting be approved as presented.

6. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve meetings and events for Steven LaMar, John Withers, Peer Swan, Mary Aileen Matheis and Douglas Reinhart.

7. FISCAL YEAR 2015-16 GENERAL COUNSEL SERVICES FOR BOWIE, ARNESON, WILES & GIANNONE

Recommendation: That the Board approve and authorize the General Manager to execute the Engagement Agreement with Bowie, Arneson, Wiles & Giannone effective July 1, 2015 for general counsel services in the amount not to exceed \$400,000.

8. 2016 MEDICAL INSURANCE COVERAGE RENEWAL

Recommendation: That the Board authorize the continuance of the District's health care coverage with CalPERS for calendar year 2016 with changes in employee and District contribution levels as listed in Table A.

9. DENTAL INSURANCE COVERAGE FOR CALENDAR YEAR 2016

Recommendation: That the Board authorize the General Manager to extend the District's contract with the Association of California Water Agencies' Joint Power Insurance Authority for Delta Preferred Option Plan A with child and adult orthodontic coverage for calendar year 2016.

10. 2015 LEGISLATIVE UPDATE

Recommendation: That the Board take a "SEEK AMENDMENTS" position on the Santa Ana Mountains to Sea National Monument proposal.

11. AMENDMENTS TO REMARKETING AGREEMENTS FOR FEE REDUCTIONS

Recommendation: That the Board approve the amendments to the Remarketing Agreements with Merrill Lynch and Goldman Sachs for the Series 1993, Refunding Series 2008A, and Series 2009B bonds and authorize the President to execute the amended Remarketing Agreements.

CONSENT CALENDAR (CONTINUED)

12. HIDDEN CANYON ZONE 3 TO 4 DOMESTIC WATER AND ZONE B TO C RECYCLED WATER BOOSTER PUMP STATIONS FINAL ACCEPTANCE

Recommendation: That the Board authorize the General Manager to accept construction of Hidden Canyon Zone 3 to 4 Domestic Water and Zone B to C Recycled Water Booster Pump Stations, projects 10446 (1648) and 30446 (1063); authorize the General Manager to file a Notice of Completion; and authorize the release of retention 35 days after filing a Notice of Completion.

13. WELLS ET-1 AND ET-2 REHABILITATION FINAL ACCEPTANCE

Recommendation: That the Board accept construction of Wells ET-1 and ET-2 Rehabilitation, project 30402 (4328); authorize the General Manager to file a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

14. GREEN ACRES PROJECT PIPELINE SEGMENT CATHODIC PROTECTION SYSTEM UPGRADES FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Green Acres Project Pipeline Segment Cathodic Protection System Upgrades, project 30415 (4396); authorize the General Manager to file a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

15. AMENDMENT NO. 2 TO SANTA ANA WATERSHED TASK FORCE AGREEMENT

Recommendation: That the Board authorize the General Manager to execute Amendment No. 2 to the Agreement to Form a Task Force to Conduct a Basin Monitoring Program for Nitrogen and Total Dissolved Solids in the Santa Ana River Watershed.

16. FISERV ELECTRONIC COMMERCE SERVICES AGREEMENT EXTENSION

Recommendation: That the Board authorize the General Manager to execute a five-year agreement with Fiserv Solutions, LLC for electronic commerce services effective August 1, 2015 for a total cost of \$900,000.

## ACTION CALENDAR

### BUSINESS INTELLIGENCE SOFTWARE UPGRADE CONSULTANT SELECTION

Director of Administration Mossbarger reported that staff issued a Request for Proposal for consulting services to upgrade the District's Oracle Business Intelligence (BI) software. The installed version of the Oracle BI software is no longer supported and requires an upgrade to a version supported by Oracle. Mr. Mossbarger said that a Request for Proposal was issued on May 15, 2015 to five consultants with experience performing Oracle BI software upgrades including BI Minds, Cogizant, DiLytics, Infosys, and KPMG. He said that staff reviewed and ranked the proposals and selected DiLytics, Infosys and KPMG for interviews. He said that based on the interviews and the proposal rankings, staff believes that DiLytics has the best understanding of the Oracle BI Software Upgrade project, has the most experienced project team, submitted an optimal project schedule, and is the most capable of assisting the District with the upgrade.

Director Swan reported that this item was reviewed and approved by the Finance and Personnel Committee on August 4, 2015. On MOTION by Swan, seconded and unanimously carried, THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH DILYTICS, INC. IN THE AMOUNT OF \$417,600 AND APPROVED A CAPITAL BUDGET INCREASE OF \$119,900 EACH FOR PROJECTS 6181 AND 6184 FOR A TOTAL BUDGET INCREASE OF \$239,800.

### CHANGES TO EXISTING RULES AND REGULATIONS FIRST READING AND INTRODUCTION

General Manager Cook reported that from time to time staff compiles proposed changes to the District's Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service. Mr. Cook said the proposed changes are limited to Sections 7 and 12, Use of District Sewerage Facilities and Service Charges, respectively, as well as the addition of an exhibit to the Rules and Regulations that identify maximum allowable local concentration discharge limits for certain constituents.

Regulatory Compliance Manager Lewis reported on the proposed changes to Section 7 - Use of District Sewerage Facilities. Ms. Lewis said that the primarily minor adjustments relate to existing definitions and small textual edits. She said that the most significant changes were for: 1) non-residential customers - consistent with what the Board approved in the Rates and Charges, added an option for customers to request an "Alternative Service Charge" based on the quality and quantity of discharged flows which may or may not be accepted based on the discretion of the District; and 2) added an exhibit which contains maximum allowable discharge concentration limits for certain constituents.

Executive Director of Finance Clary said that changes to Section 12 - Service Charges include primarily small textual edits including: 1) added livestock in addition to horses as a grounds for a residential variance (i.e., pigs, chickens, goats, etc.); and 2) commercial, industrial and irrigation customers - subsequent to the establishment of a base index, allow for the possibility of an on-site survey to ensure water efficient business uses; and 3) adjustments for leaks, allowances for bill adjustments on a case by case basis if there are circumstances causing a delay in fixing a leak (as

opposed to up to six months- some customers believed they should receive six months of adjustments).

On MOTION by Swan, seconded and unanimously carried, THE RESOLUTION WAS INTRODUCED FOR A FIRST READING TO BE READ BY TITLE ONLY BY THE SECRETARY, THAT FURTHER READING OF THE RESOLUTION BE WAIVED, AND THE SECRETARY WAS DIRECTED TO PLACE THE RESOLUTION ON THE AGENDA FOR THE AUGUST 24, 2015 MEETING OF THE BOARD OF DIRECTORS FOR A SECOND READING, HEARING AND ADOPTION.

Secretary Bonkowski then read the title of the resolution as follows:

RESOLUTION NO. 2015-

RESOLUTION RESCINDING RESOLUTION NO. 2014-50  
AND ESTABLISHING REVISED RULES AND REGULATIONS  
OF THE IRVINE RANCH WATER DISTRICT FOR WATER,  
SEWER, RECYCLED WATER, AND NATURAL  
TREATMENT SYSTEM SERVICE AND EXHIBIT "A" THERETO.

OTHER BUSINESS

GENERAL MANAGER'S REPORT

General Manager Cook said that staff placed before each Director an IRWD Drought Reporting Update with the good news of reduced water use by residents. In response to Director Reinhart's inquiry, Director of Water Resources Sanchez reported on the chart noting a 27% overall savings or 2,047 acre-feet of potable water saved to reach the District's interim goal, which is on track for the overall savings target.

Mr. Cook said that tomorrow he will be attending an ACWA Storage Task Force meeting in Sacramento. Director Swan asked for a briefing of this effort.

Mr. Cook further noted that Ms. Fiona Sanchez was interviewed today by the TV station Univision relative to the drought and the feature will broadcast tonight at 11:00 p.m.

DIRECTORS' COMMENTS

Director Withers reported that tomorrow he will be attending an OCBC Infrastructure meeting, and this Wednesday a LAFCO meeting where an item is agendaed on the Focused Municipal Service review for Orange County Sanitation District Service Area 7.

Director Swan reported on meetings he attended including a Newport Bay Watershed Organizational Committee meeting, a briefing and tour with LAFCO Commissioner Brothers, OCWD meetings, a Newport Chamber of Commerce meeting, and a WACO meeting.

Director Reinhart reported that he attended a MWDOC Board workshop and a SOCWA Board meeting.

Director Matheis reported that she attended a WACO meeting and tomorrow she will be attending a WEROC emergency training class.

Director LaMar also reported on a briefing with a LAFCO commissioner, a COAST meeting with the Orange County Fire Authority, a WACO meeting, and that he will be attending a WEROC emergency training meeting.

Following Director Swan's comments on a WACO report in which OCWD is supporting Proposition 1 funding for SAWPA projects in the upper watershed, he suggested that an item be submitted to the WRP Committee to discuss if a comment letter be sent to OCWD. General Manager Cook noted that the Groundwater Producers will be briefed on this item on Wednesday.

IRWD's consultant Mr. Jim Reed said that he attended an ISDOC Quarterly and Executive meeting, a SOCWA Board meeting, and a WACO monthly meeting on behalf of the District.

### CLOSED SESSION

President LaMar reported that the following Closed Sessions would be held this evening:

- 1) - Conference with Legal Counsel relative to existing litigation –Government Code Section 54945.9(d)(1) –Williams vs. Irvine Ranch Water District and Metropolitan Water District of Southern California, and related consolidated cases (30-2011-00519887; 30-2012-00586258; 30-2012-00616648; 30-2012-00619294; 30-2013-00666627; 30-2013-00666636);
- 2) Conference with Labor Negotiators - Government Code Section 54957.6:  
Agency Designated Representatives: Paul Cook and Jenny Roney  
Employees Organization: Irvine Ranch Water District Employees Association; and
- 3) Conference with legal counsel relative to anticipated litigation pursuant to Government Code Section 54956.9(d)(4) - initiation of litigation (two potential cases).

### OPEN SESSION

Following the Closed Session, the meeting was reconvened with all Directors present. President LaMar said that there was no action to report.

### ADJOURNMENT

There being no further business, President LaMar adjourned the meeting at 8:30 p.m.

APPROVED and SIGNED this 24<sup>th</sup> day of August, 2015.

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President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson,  
Wiles & Giannone

August 24, 2015

Prepared and

Submitted by: N. Savedra

Approved by: P. Cook

NS  
/ Cook

CONSENT CALENDAR

RATIFY/APPROVE BOARD OF DIRECTORS'  
ATTENDANCE AT MEETINGS AND EVENTS

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, approval of attendance of the following events and meetings are required by the Board of Directors.

Events/Meetings

Steven LaMar

8/06/15 COAST Meeting at OCFA relative to NCC  
8/13/15 FivePoint Pre-Grand Opening Celebration Event - Beacon Park  
8/17/15 Monthly meeting with General Manager Paul Cook regarding District Activities  
8/19/15 South Orange County Agencies' Meeting  
8/25/15 ACWA Headwater Task Force Meeting

Mary Aileen Matheis

8/13-14/15 Water Education Foundation Board Retreat, Santa Rosa, CA

Douglas Reinhart

8/19/15 South Orange County Agencies' Meeting

Peer Swan

8/12/15 OCWD Water Issues Committee Meeting  
8/19/15 Newport Bay Watershed Executive Committee Meeting  
8/19/15 OCWA Monthly Meeting  
8/21/15 Mimi Walters' Inaugural Local Elected Officials Event  
8/26/15 Southern California Water Dialogue Meeting

John Withers

8/12/15 OCBC Infrastructure Committee Meeting  
8/19/15 OCWA Monthly Meeting  
8/21/15 Mimi Walters' Inaugural Local Elected Officials Event

RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LAMAR, MARY AILEEN MATHEIS, DOUGLAS REINHART, PEER SWAN, AND JOHN WITHERS AS DESCRIBED.

LIST OF EXHIBITS:

None

August 24, 2015

Prepared by: Jennifer Davis/Tanja Fournier

Submitted by: Robert Jacobson/Cheryl Clary

Approved by: Paul Cook

## CONSENT CALENDAR

### JULY 2015 TREASURY REPORTS

#### SUMMARY:

The following is submitted for the Board's information and approval:

- A. The Investment Summary Report for July 2015. This Investment Summary Report is in conformity with the 2015 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Monthly Interest Rate Swap Summary as of July 31, 2015, as outlined in Exhibit "B".
- C. The Summary of Payroll ACH payments in the total amount of \$1,523,262, as outlined in Exhibit "C".
- D. The July 31, 2015 Disbursement Summary of warrants 359851 through 360502, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$30,785,659 as outlined in Exhibit "D".
- E. The Disclosure Report of Reimbursements to Board Members and Staff for July 2015, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "E".

#### FISCAL IMPACTS:

As of July 31, 2015, the book value of the investment portfolio was \$260,236,772, with a 0.52% rate of return and a market value of \$260,265,889. Based on the District's June 30, 2015 quarterly real estate investment rate of return of 13.31%, the District's weighted average return for the fixed income and real estate investments was 3.27%.

As of July 31, 2015, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in July from all swaps was negative \$624,238.

Payroll ACH payments totaled \$1,523,262, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for July totaled \$30,785,659.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3 Section 15378.

COMMITTEE STATUS:

This item was not submitted to a Committee; however, the investment and interest rate swap reports are submitted to the Finance and Personnel Committee on a monthly basis.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE MONTHLY INTEREST RATE SWAP SUMMARY FOR JULY 2015, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE JULY 2015 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$1,523,262 AND APPROVE THE JULY 2015 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 359851 THROUGH 360502, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$30,785,659.

LIST OF EXHIBITS:

Exhibit "A" – Investment Summary Report

Exhibit "B" – Monthly Interest Rate Swap Summary

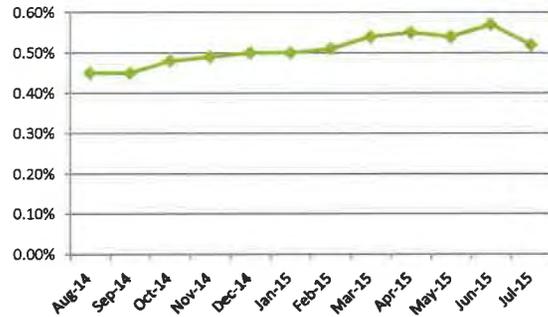
Exhibit "C" – Monthly Payroll ACH Summary

Exhibit "D" – Monthly Summary of District Disbursements

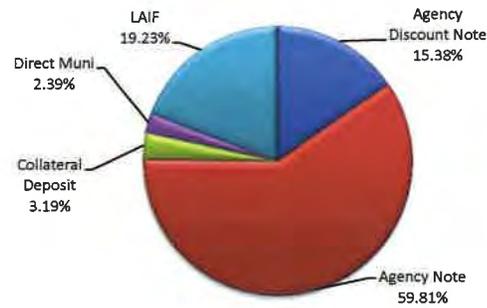
Exhibit "E" – Disclosure of Reimbursements to Board Members and Staff

Exhibit "A"  
**Irvine Ranch Water District  
Investment Portfolio Summary  
July 2015**

**Monthly Fixed Income Yield**



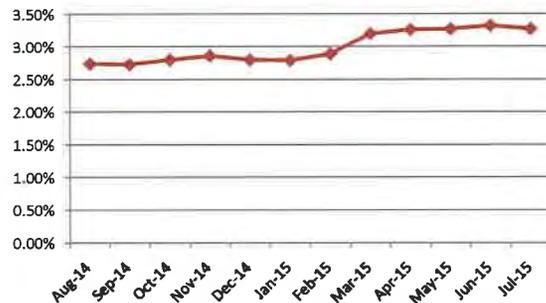
**Portfolio Distribution**



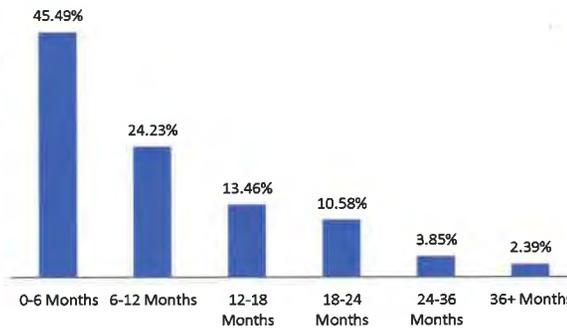
**Investment Summary**

Type	PAR	Book Value	Market Value
Agency Note	155,500,000	155,755,217	155,762,815
LAIF	50,000,000	50,000,000	50,018,799
Agency Discount Note	40,000,000	39,972,980	39,975,700
Collateral Deposit	8,292,711	8,292,711	8,292,711
Direct Muni	6,215,864	6,215,864	6,215,864
<b>Grand Total</b>	<b>260,008,575</b>	<b>260,236,772</b>	<b>260,265,889</b>

**Weighted Average Return Including Real Estate Portfolio**



**Maturity Distribution**



**Top Issuers**

Issuer	PAR	% Portfolio
Fed Home Loan Mortgage Corp	79,500,000	30.58%
Fed Home Loan Bank	61,000,000	23.46%
State of California Treasury - LAIF	50,000,000	19.23%
Fed Natl Mortgage Assoc	25,000,000	9.62%
Fed Farm Credit Bank	25,000,000	9.62%
ETWD	6,215,864	2.39%
Citi-Group Collateral	6,082,711	2.34%
Fed Ag Mortgage Corp	5,000,000	1.92%
Merrill Lynch Collateral	2,210,000	0.85%

IRVINE RANCH WATER DISTRICT  
INVESTMENT SUMMARY REPORT

07/31/15

SETTLMT *	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	YTC	ORIGINAL COST	CARRY VALUE	MARKET VALUE <sup>(1)</sup> 7/31/2015	UNREALIZED <sup>(2)</sup> GAIN/(LOSS)
07/27/15			08/01/15		LAIF	State of California Tsy	\$50,000,000		0.310%		\$50,000,000.00	\$50,000,000.00	50,018,798.95	18,798.95
03/04/14	N/A	N/A	08/28/15	Aaa/AA+/NR	FHLMC - Note	Fed Home Loan Mortgage Corp	2,000,000	0.500%	0.225%		2,008,140.00	2,000,405.50	2,000,620.00	214.50
03/04/14	N/A	N/A	08/28/15	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	8,000,000	0.375%	0.225%		8,017,720.00	8,000,882.73	8,001,600.00	717.27
05/28/14	N/A	N/A	09/10/15	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.750%	0.165%		5,101,550.00	5,008,642.55	5,008,300.00	(342.55)
04/23/15	N/A	N/A	09/24/15	NR	FHLMC - Discount Note	Fed Home Loan Mortgage Corp Discount Note	10,000,000	0.081%	0.082%		9,996,556.00	9,998,792.36	9,999,300.00	507.64
05/26/15	N/A	N/A	10/14/15	NR	FHLB - Discount Note	Fed Home Loan Bank Discount Note	5,000,000	0.085%	0.086%		4,998,335.42	4,999,126.39	4,999,400.00	273.61
11/19/14	N/A	N/A	11/18/15	Aaa/NA/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.125%	0.193%		4,996,635.00	4,998,992.35	4,998,750.00	(242.35)
10/09/14	N/A	N/A	12/01/15	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.270%	0.233%	0.233%	5,002,100.00	5,000,612.92	5,000,350.00	(262.92)
10/29/14	N/A	N/A	12/18/15	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.300%	0.200%	0.200%	5,005,670.00	5,001,899.11	5,001,650.00	(249.11)
05/27/14	N/A	N/A	12/21/15	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.375%	0.241%		5,010,450.00	5,002,589.70	5,001,950.00	(639.70)
01/15/13	N/A	07/15/13	01/15/16	NA/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	0.375%	0.390%		4,997,750.00	4,999,500.68	5,001,800.00	2,299.32
06/30/15	N/A	N/A	01/25/16	NR	FHLB - Discount Note	Fed Home Loan Bank Discount Note	5,000,000	0.150%	0.152%		4,995,645.83	4,996,312.64	4,996,600.00	287.36
07/29/15	N/A	N/A	02/24/16	NR	FHLMC - Discount Note	Fed Home Loan Mortgage Corp - Discount Note	10,000,000	0.175%	0.178%		9,989,791.67	9,989,937.50	9,990,300.00	362.50
04/28/15	N/A	N/A	02/26/16	NR	FNMA - Discount Note	Fed Natl Mortgage Discount Note	10,000,000	0.190%	0.193%		9,983,797.22	9,988,811.11	9,990,100.00	1,288.89
03/14/14	Continuous after	06/10/14	03/10/16	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.350%	0.413%	0.874%	4,993,750.00	4,998,091.47	4,999,200.00	1,108.53
04/29/14	Continuous after	07/25/14	04/25/16	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.390%	0.448%	0.878%	4,994,250.00	4,997,547.05	4,996,750.00	(797.05)
05/20/15	N/A	N/A	05/04/16	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	3,000,000	0.300%	0.315%		2,999,565.00	2,999,655.73	2,998,920.00	(735.73)
05/20/15	N/A	N/A	05/18/16	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.250%	0.305%		4,997,285.00	4,997,829.49	4,997,350.00	(479.49)
05/20/15	N/A	N/A	05/27/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.500%	0.304%		5,111,650.00	5,089,798.93	5,087,250.00	(2,548.93)
06/04/15	N/A	N/A	06/20/16	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.340%	0.355%		4,999,200.00	4,999,321.47	4,996,900.00	(2,421.47)
07/01/15	N/A	N/A	06/24/16	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.375%	0.345%		5,001,450.00	5,001,324.79	5,000,150.00	(1,174.79)
11/20/14	N/A	N/A	06/27/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.375%	0.424%		4,996,091.65	4,997,788.61	4,999,250.00	1,461.39
05/08/14	N/A	N/A	07/05/16	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.375%	0.484%		4,988,300.00	4,994,973.00	4,997,300.00	2,327.00
04/29/14	Continuous after	07/29/14	07/29/16	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.550%	0.550%	0.550%	5,000,000.00	5,000,000.00	5,000,100.00	100.00
06/09/15	N/A	N/A	08/25/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	2.000%	0.467%		10,184,900.00	10,162,778.78	10,160,900.00	(1,878.78)
06/15/15	N/A	N/A	10/13/16	NR	FAMCA - Note	Fed Ag Mortgage Corp	5,000,000	0.970%	0.578%		5,025,900.00	5,023,395.27	5,027,050.00	3,654.73
11/28/14	Quarterly	05/15/15	11/15/16	Aaa/AA+/NR	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.600%	0.600%	0.600%	5,000,000.00	5,000,000.00	5,000,250.00	250.00
12/19/13	Quarterly	06/19/14	12/19/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.750%	0.750%	0.750%	5,000,000.00	5,000,000.00	4,998,450.00	(1,550.00)
12/20/13	Quarterly	06/19/14	12/19/16	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.750%	0.755%	0.755%	4,999,250.00	4,999,653.42	4,998,450.00	(1,203.42)
06/15/15	N/A	06/13/14	03/30/17	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.625%	0.727%		4,990,950.00	4,991,600.38	4,996,400.00	4,799.62
04/25/14	Continuous after	04/24/15	04/24/17	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.900%	0.976%	1.142%	4,988,750.00	4,993,445.21	5,000,200.00	6,754.79
10/28/14	Quarterly	01/28/15	04/28/17	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	0.820%	0.820%	0.820%	10,000,000.00	10,000,000.00	9,990,000.00	(10,000.00)
03/30/15	Quarterly	06/30/15	06/30/17	Aaa/AA+/NR	FHLMC - Note	Fed Home Loan Mortgage Corp	7,500,000	0.875%	0.875%	0.875%	7,500,000.00	7,500,000.00	7,507,575.00	7,575.00
10/24/14	Continuous after	09/18/13	09/18/17	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.980%	1.033%	1.033%	4,992,500.00	4,994,488.21	5,000,200.00	5,711.79
07/29/15	Continuous after	01/16/13	10/16/17	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.000%	0.997%		5,000,000.00	5,000,000.00	4,995,150.00	(4,850.00)
05/30/15	N/A	N/A	04/30/36	NR	Direct Muni	ETWD	6,215,864	4.570%	4.570%	4.570%	6,215,863.76	6,215,863.76	6,215,863.76	
SUB-TOTAL							\$251,715,864				\$252,083,796.55	\$251,944,061.12	\$251,973,177.71	\$29,116.59
<b>RESTRICTED CASH (Swap Collateral Deposits)<sup>(3)</sup></b>														
06/01/15					Collateral Deposit	Citi-Group	\$6,082,711		0.130%		\$6,082,710.95	\$6,082,710.95	6,082,710.95	
05/29/15					Collateral Deposit	Merrill Lynch	\$2,210,000		0.130%		\$2,210,000.00	\$2,210,000.00	2,210,000.00	
SUB-TOTAL							\$8,292,711				\$8,292,710.95	\$8,292,710.95	\$8,292,710.95	
<b>TOTAL INVESTMENTS</b>														
							\$260,008,575				\$260,376,507.50	\$260,236,772.07	\$260,265,888.66	
											3,400.00			
											(1,444,431.98)			
											\$258,935,475.52			

<sup>(1)</sup> LAIF market value is as of the most recent quarter-end as reported by LAIF.  
<sup>(2)</sup> Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing.  
<sup>(3)</sup> Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers  
<sup>(4)</sup> Real estate rate of return is based on most recent quarter end return  
<sup>(5)</sup> Calculation excludes Direct Muni - ETWD  
<sup>(6)</sup> Swap Collateral Deposits assumes 6 month maturity, dependent on interest rate changes

Outstanding Variable Rate Debt \$327,300,000  
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps) \$197,300,000  
Investment Balance \$258,935,476  
Investment to Variable Rate Debt Ratio: 131%  
Portfolio - Average Number of Days To Maturity<sup>(4)</sup> 254

	Investment Portfolio	Real Estate <sup>(5)</sup> Portfolio	Weighted Avg. Return
July	0.52%	13.31%	3.27%
June	0.57%	13.11%	3.32%
Change	-0.05%		

This Investment Summary Report is in conformity with the 2015 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.  
\* \$ - Step up

IRVINE RANCH WATER DISTRICT  
SUMMARY OF MATURITIES

07/31/15

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Collateral Deposit	Direct Muni
07/15	\$50,000,000	19.23%	\$50,000,000				
08/15	10,000,000	3.85%		10,000,000			
09/15	15,000,000	5.77%		5,000,000	10,000,000		
10/15	5,000,000	1.92%			5,000,000		
11/15	13,292,711	5.11%		5,000,000		\$8,292,711	
12/15	15,000,000	5.77%		15,000,000			
01/16	10,000,000	3.85%		5,000,000	5,000,000		
02/16	20,000,000	7.69%			20,000,000		
03/16	5,000,000	1.92%		5,000,000			
04/16	5,000,000	1.92%		5,000,000			
05/16	13,000,000	5.00%		13,000,000			
06/16	15,000,000	5.77%		15,000,000			
<b>SUB-TOTAL</b>	<b>\$176,292,711</b>	<b>67.80%</b>	<b>\$50,000,000</b>	<b>\$78,000,000</b>	<b>\$40,000,000</b>	<b>\$8,292,711</b>	
<b>13 Months - 3 YEARS</b>							
07/01/16 - 9/30/2016	20,000,000	7.69%		20,000,000			
10/01/16 - 12/31/2016	20,000,000	7.69%		20,000,000			
1/1/2017 - 3/31/2017	5,000,000	1.92%		5,000,000			
04/01/17-06/30/17	22,500,000	8.65%		22,500,000			
07/01/17 - 9/30/2017	5,000,000	1.92%		5,000,000			
10/30/17 - 12/31/2017	5,000,000	1.92%		5,000,000			
	-						
04/30/2036	6,215,864	2.39%					6,215,864
<b>TOTALS</b>	<b>\$260,008,575</b>	<b>100.00%</b>	<b>\$50,000,000</b>	<b>\$155,500,000</b>	<b>\$40,000,000</b>	<b>\$8,292,711</b>	<b>\$6,215,864</b>

% OF PORTFOLIO

19.23%

59.81%

15.38%

3.19%

2.39%

Irvine Ranch Water District  
 Summary of Real Estate  
 6/30/2015

	<u>ACQUISITION DATE</u>	<u>PROPERTY TYPE</u>	<u>OWNERSHIP INTEREST</u>	<u>ORIGINAL COST</u>	<u>RATE OF RETURN QUARTER ENDED Jun-15</u>
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	17.77%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	8.56%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	4.03%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	5.31%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	8.33%
				<u>\$ 72,569,826</u>	<u>13.31%</u>

**IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT**  
**INVESTMENT ACTIVITY**  
**July 2015**

**MATURITIES/SALES/CALLS**

**PURCHASES**

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
7/20/2015	FFCB - Note	\$5,000,000	0.59%	7/1/2015	6/24/2016	FHLMC - Discount Note	\$5,000,000	0.35%
7/29/2015	FHLB - Note	\$15,000,000	0.18%	7/29/2015	2/24/2016	FHLMC - Discount Note	\$10,000,000	0.18%
7/30/2015	FHLMC - Note	\$5,000,000	1.10%	7/29/2015	10/16/2017	FHLB - Note	\$5,000,000	1.00%

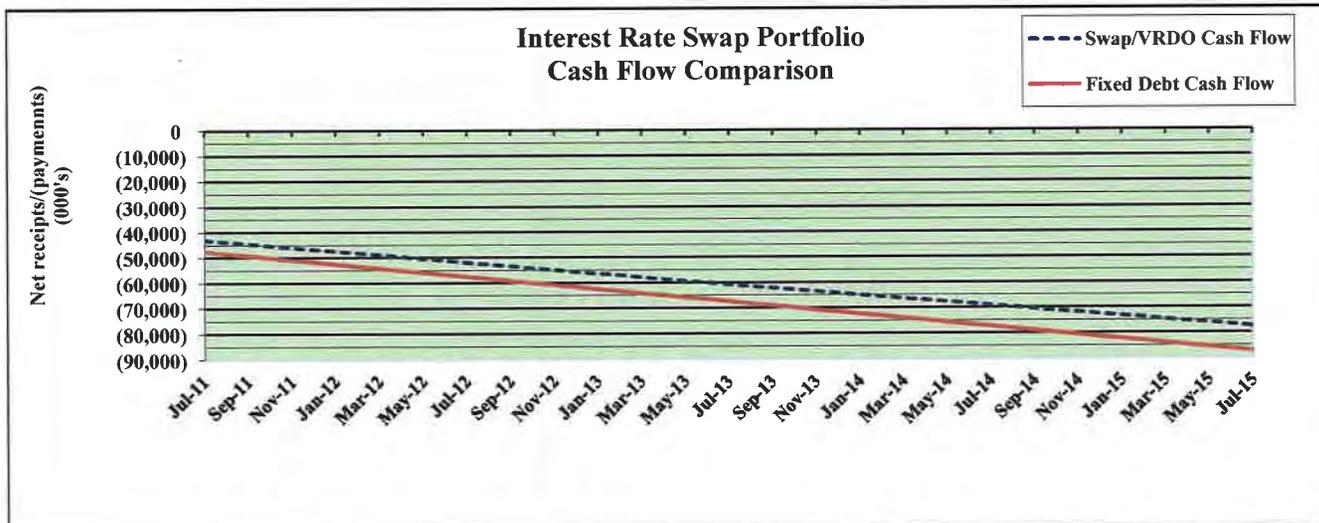
**IRVINE RANCH WATER DISTRICT  
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL  
July 31, 2015**

LIBOR Avg %	Prior Mo.	Current Mo.	12-Mo Avg
	0.19%	0.19%	0.17%

Current Fiscal Year Active Swaps								Cash Flow				(Since 6/06)	Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference	
<b>Fixed Payer Swaps - By Effective Date</b>														
6/4/2006	6/4/2019	3.8	ML	\$ 20,000,000	FXP	LIBOR	6.200%	(106,887)	(100,203)	\$ (100,203)	\$ (8,755,170)	\$ 16,319,423	\$ (3,680,577)	
6/4/2006	6/4/2019	3.8	CG	20,000,000	FXP	LIBOR	6.200%	(106,887)	(100,203)	(100,203)	(8,755,170)	16,320,520	(3,679,480)	
6/17/2006	6/17/2019	3.9	CG	30,000,000	FXP	LIBOR	6.140%	(158,679)	(148,860)	(148,860)	(12,986,763)	24,507,845	(5,492,155)	
3/10/2007	3/10/2029	13.6	ML	30,000,000	FXP	LIBOR	5.687%	(146,596)	(137,486)	(137,486)	(11,647,294)	18,267,471	(11,732,529)	
3/10/2007	3/10/2029	13.6	CG	30,000,000	FXP	LIBOR	5.687%	(146,596)	(137,486)	(137,486)	(11,647,294)	18,218,822	(11,781,178)	
Totals/Weighted Avgs		8.4		\$ 130,000,000			5.949%	\$ (665,645)	\$ (624,238)	\$ (624,238)	\$ (53,791,692)	\$ 93,634,081	\$ (36,365,919)	
<b>Total Current Year Active Swaps</b>				\$ 130,000,000				\$ (665,645)	\$ (624,238)	\$ (624,238)	\$ (53,791,692)	\$ 93,634,081	\$ (36,365,919)	

Current Fiscal Year Terminated Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date		Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference
<b>Total Current Year Terminated Swaps</b>								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference								
\$ (665,645)	\$ (624,238)	\$ (624,238)	\$ (53,791,692)	\$ 93,634,081	\$ (36,365,919)								



Cash Flow Comparison	
Synthetic Fixed vs. Fixed Rate Debt	
Cash Flow to Date	
Synthetic Fixed =	\$77,433,726
Fixed Rate =	\$96,221,774
<b>Assumptions:</b>	
- Fixed rate debt issued at 5.10% in Jun-06, and 4.93% in Mar-07 (estimated TE rates - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

Exhibit "C"

**MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS**

**July  
2015**

DATE	AMOUNT	VENDOR	PURPOSE
7/10/2015	765,057.03	BANK OF AMERICA	ACH Payments for Payroll
7/24/2015	758,204.67	BANK OF AMERICA	ACH Payments for Payroll
	<u><b>\$1,523,261.70</b></u>		

# Exhibit "D"

>

IRWD Ledger

Void Payment Register

Report Date: 30-JUL-2015 19:35  
Page: 1

Include Zero Amount Payments: Yes  
Display Payee Address: No

Period From: 01-JUL-15

To: 31-JUL-15  
Date: Void Date

Bank: Bank of America N.A.

Branch: Los Angeles

Account: Checking AP and PR

Bank Account Currency: USD

Payment Currency: USD ( US Dollar )

Payment Number	Date	Payee Name	Site	Address	Payment Amount	Void Date
-----						
Payment Document: IRWD CHECK						
357395	01-APR-15	BANK OF AMERICA	PAY		108.35	27-JUL-15
357456	01-APR-15	KIM, CHAN	PAY		30.52	23-JUL-15
357521	01-APR-15	WANG, YAN	PAY		0.68	23-JUL-15
357961	23-APR-15	LOPEZ, ALEXANDRIA	PAY		55.26	23-JUL-15
357971	23-APR-15	METROPOLITAN LIFE INSURANCE	PAY		304.53	27-JUL-15
358057	30-APR-15	AMJADI, SAYEDEH S	PAY		513.76	27-JUL-15
358968	04-JUN-15	LIN, NA	PAY		26.54	01-JUL-15
359232	11-JUN-15	YAN, TIANXING	PAY		52.07	27-JUL-15
359298	18-JUN-15	ALONSO, MARK	PURCHASE		1,468.03	02-JUL-15
359319	18-JUN-15	CAI, YIYU	PAY		38.76	27-JUL-15
360030	09-JUL-15	ORANGE COUNTY SHERIFF'S OFF		4601 JAMBOREE	532.78	22-JUL-15

Payment Document Subtotal 3,131.28

Bank Account Subtotal 3,131.28

Report Count: 11

Report Total 3,131.28 **Voids**

\*\*\* End of Report \*\*\*

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IRWD Ledger Payment Register For 01-JUL-15 To 31-JUL-15 Report Date: 30-JUL-2015 19:34  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
359851		02-JUL-15	3M COMPANY		254.46	10-JUL-15	254.46	Reconciled
359852		02-JUL-15	ADT SECURITY SERVICES INC		2.51	10-JUL-15	2.51	Reconciled
359853		02-JUL-15	AKM CONSULTING ENGINEERS, INC.		28,170.00	13-JUL-15	28,170.00	Reconciled
359854		02-JUL-15	AUTOZONE PARTS, INC.		161.83	07-JUL-15	161.83	Reconciled
359855		02-JUL-15	CALIFORNIA BARRICADE INC		700.00	08-JUL-15	700.00	Reconciled
359856		02-JUL-15	COMMERCIAL DOOR OF ORANGE COUNTY, INC.		9,012.00	07-JUL-15	9,012.00	Reconciled
359857		02-JUL-15	DATAZEO, INC.		71.52	07-JUL-15	71.52	Reconciled
359858		02-JUL-15	FARRELL & ASSOCIATES		179.98	10-JUL-15	179.98	Reconciled
359859		02-JUL-15	FEDEX		293.53	08-JUL-15	293.53	Reconciled
359860		02-JUL-15	HELPMATES STAFFING SERVICES		962.50	07-JUL-15	962.50	Reconciled
359861		02-JUL-15	MAILFINANCE INC		9,931.08	06-JUL-15	9,931.08	Reconciled
359862		02-JUL-15	MARRIOTT INTL DBA SAN DIEGO MARRIOTT HOTEL & MARINA		2,425.40	13-JUL-15	2,425.40	Reconciled
359863		02-JUL-15	MR CRANE INC		1,245.50	06-JUL-15	1,245.50	Reconciled
359864		02-JUL-15	MSC INDUSTRIAL SUPPLY CO		122.80	09-JUL-15	122.80	Reconciled
359865		02-JUL-15	PRO GROWERS INC		2,381.40	08-JUL-15	2,381.40	Reconciled
359866		02-JUL-15	R & R INDUSTRIAL SERVICES, INC.		587.50	10-JUL-15	587.50	Reconciled
359867		02-JUL-15	RED WING SHOES		298.08	06-JUL-15	298.08	Reconciled
359868		02-JUL-15	SANTA MARGARITA FORD		496.42	06-JUL-15	496.42	Reconciled
359869		02-JUL-15	SANTIAGO AQUEDUCT COMMISSION		7,166.83	08-JUL-15	7,166.83	Reconciled
359870		02-JUL-15	SERRANO WATER DISTRICT		181,329.10	13-JUL-15	181,329.10	Reconciled
359871		02-JUL-15	SOUTH COAST ANSWERING SERVICE		479.70	07-JUL-15	479.70	Reconciled
359872		02-JUL-15	SPATIAL WAVE, INC.		14,016.00	09-JUL-15	14,016.00	Reconciled
359873		02-JUL-15	THYSSENKRUPP ELEVATOR CORPORATION		347.30	06-JUL-15	347.30	Reconciled
359874		02-JUL-15	TYCO INTEGRATED SECURITY, LLC		3,695.92	08-JUL-15	3,695.92	Reconciled
359875		02-JUL-15	UNITED PARCEL SERVICE INC		450.83	06-JUL-15	450.83	Reconciled

IRWD Ledger Payment Register For 01-JUL-15 To 31-JUL-15 Report Date: 30-JUL-2015 19:34  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
359876		02-JUL-15	UNITED STATES POST OFFICE		54,166.66	13-JUL-15	54,166.66	Reconciled
359877		02-JUL-15	VA CONSULTING, INC		20,432.50	08-JUL-15	20,432.50	Reconciled
359878		02-JUL-15	VALLEYCREST LANDSCAPE DEVELOPMENT, INC.		3,375.12	06-JUL-15	3,375.12	Reconciled
359879		02-JUL-15	WASTE MANAGEMENT OF ORANGE COUNTY		1,514.74	06-JUL-15	1,514.74	Reconciled
359880		02-JUL-15	Chaney, David (Dave)		350.00	06-JUL-15	350.00	Reconciled
359881		02-JUL-15	Barreto, Gustavo		11.52	13-JUL-15	11.52	Reconciled
359882		02-JUL-15	Ahumada, Paul		102.60	06-JUL-15	102.60	Reconciled
359883		02-JUL-15	Nguyen, Sunny		173.99	02-JUL-15	173.99	Reconciled
359884		02-JUL-15	Inada, Thomas		162.00	02-JUL-15	162.00	Reconciled
359885		02-JUL-15	ALONSO, MARK	PURCHASE	1,468.03			Negotiable
359886		06-JUL-15	JCI JONES	CINCINNATI	3,279.57	09-JUL-15	3,279.57	Reconciled
359887		07-JUL-15	CHEMICALS INC UNITED STATES POSTIRVINE OFFICE		27,083.33	13-JUL-15	27,083.33	Reconciled
359888		09-JUL-15	Brunning, Anthony M (Tony)		300.00	10-JUL-15	300.00	Reconciled
359889		09-JUL-15	Mossbarger, Anthony J (Tony)		20.05	09-JUL-15	20.05	Reconciled
359890		09-JUL-15	Kelly, Cheryl D (Cheryl)		234.90	13-JUL-15	234.90	Reconciled
359891		09-JUL-15	Nicholson, Darin		188.99	14-JUL-15	188.99	Reconciled

359892	09-JUL-15	Sanchez, Fiona M (Fiona)	42.00	17-JUL-15	42.00	Reconciled
359893	09-JUL-15	Gronek, Joan D	60.26	20-JUL-15	60.26	Reconciled
359894	09-JUL-15	Weghorst, Paul A (Paul)	271.27			Negotiable
359895	09-JUL-15	ADS LLC	1,991.00	13-JUL-15	1,991.00	Reconciled
359896	09-JUL-15	AGUILAR, JOSEPH	163.31	15-JUL-15	163.31	Reconciled
359897	09-JUL-15	ALEXANDER'S CONTRACT SERVICES, INC.	108,731.16	15-JUL-15	108,731.16	Reconciled
359898	09-JUL-15	ALKEMA SOLUTIONS	15,846.00	16-JUL-15	15,846.00	Reconciled
359899	09-JUL-15	ALPHA TRAFFIC SERVICES, INC.	520.00	13-JUL-15	520.00	Reconciled
359900	09-JUL-15	ANTHEM BLUE CROSS	562.26	17-JUL-15	562.26	Reconciled
359901	09-JUL-15	AQUA-METRIC SALES COMPANY	13,240.80	21-JUL-15	13,240.80	Reconciled
359902	09-JUL-15	ARMORCAST PRODUCTS COMPANY	6,305.04	13-JUL-15	6,305.04	Reconciled

IRWD Ledger Payment Register For 01-JUL-15 To 31-JUL-15 Report Date: 30-JUL-2015 19:34  
 BANK: Bank of America N.A. Branch: Los Angeles Account: Checking AP and PR Page: 3  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
359903		09-JUL-15	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA		32,082.47	17-JUL-15	32,082.47	Reconciled
359904		09-JUL-15	AT&T		50.96	15-JUL-15	50.96	Reconciled
359905		09-JUL-15	AT&T		2,918.42	14-JUL-15	2,918.42	Reconciled
359906		09-JUL-15	AUTOZONE PARTS, INC.		16.32	13-JUL-15	16.32	Reconciled
359907		09-JUL-15	BIANCHI, CLAUDETTE		25.92	13-JUL-15	25.92	Reconciled
359908		09-JUL-15	BIOMAGIC INC		387.07	13-JUL-15	387.07	Reconciled
359909		09-JUL-15	BLACK & VEATCH CORPORATION		690,428.16	17-JUL-15	690,428.16	Reconciled
359910		09-JUL-15	BOYD & ASSOCIATES		390.00	13-JUL-15	390.00	Reconciled
359911		09-JUL-15	C WELLS PIPELINE MATERIALS INC		7,939.08	17-JUL-15	7,939.08	Reconciled
359912		09-JUL-15	CALIFORNIA BARRICADE INC		11,121.25	16-JUL-15	11,121.25	Reconciled
359913		09-JUL-15	CANON SOLUTIONS AMERICA, INC.		407.01	13-JUL-15	407.01	Reconciled
359914		09-JUL-15	CEDAR CREEK APTS		3.07	17-JUL-15	3.07	Reconciled
359915		09-JUL-15	CHEN, JUAN		14.14	21-JUL-15	14.14	Reconciled
359916		09-JUL-15	CHOI, YOUNGMI		42.14			Negotiable
359917		09-JUL-15	COMMERCIAL DOOR OF ORANGE COUNTY, INC.		2,274.00	13-JUL-15	2,274.00	Reconciled
359918		09-JUL-15	CSAC EXCESS INSURANCE AUTHORITY		604,206.00	16-JUL-15	604,206.00	Reconciled
359919		09-JUL-15	DDB ENGINEERING, INC.		1,027.19	13-JUL-15	1,027.19	Reconciled
359920		09-JUL-15	DELL MARKETING LP		33,621.56	15-JUL-15	33,621.56	Reconciled
359921		09-JUL-15	DEX MEDIA INC.		75.75	14-JUL-15	75.75	Reconciled
359922		09-JUL-15	DODDRIDGE, JULIE H		310.21	15-JUL-15	310.21	Reconciled
359923		09-JUL-15	ELEMENT MATERIALS TECHNOLOGY HUNTINGTON BEACH INC		725.00	13-JUL-15	725.00	Reconciled
359924		09-JUL-15	ELITE EQUIPMENT, INC.		428.65	17-JUL-15	428.65	Reconciled
359925		09-JUL-15	EQUIPMENT DIRECT INC		351.71	13-JUL-15	351.71	Reconciled
359926		09-JUL-15	EXECUTIVE LIGHTING & ELECTRIC		461.87	14-JUL-15	461.87	Reconciled
359927		09-JUL-15	FEDEX		481.88	15-JUL-15	481.88	Reconciled
359928		09-JUL-15	FISHER SCIENTIFIC COMPANY LLC		4,630.03	13-JUL-15	4,630.03	Reconciled

IRWD Ledger Payment Register For 01-JUL-15 To 31-JUL-15 Report Date: 30-JUL-2015 19:34  
 BANK: Bank of America N.A. Branch: Los Angeles Account: Checking AP and PR Page: 4  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
359929		09-JUL-15	FRANK LA PLACA EXTERMINATING INC		175.00	17-JUL-15	175.00	Reconciled
359930		09-JUL-15	GABERLAVAGE, STAN		30.27	13-JUL-15	30.27	Reconciled
359931		09-JUL-15	GANAHL LUMBER CO.		45.67	15-JUL-15	45.67	Reconciled
359932		09-JUL-15	GHD INC.		35,475.00	16-JUL-15	35,475.00	Reconciled
359933		09-JUL-15	GIRAUDO, CYNTHIA		165.07			Negotiable
359934		09-JUL-15	GOLDFARB, DOUGLAS		16.64	23-JUL-15	16.64	Reconciled
359935		09-JUL-15	GRAINGER		240.77	13-JUL-15	240.77	Reconciled
359936		09-JUL-15	GRAYBAR ELECTRIC COMPANY		4,664.19	13-JUL-15	4,664.19	Reconciled

359937	09-JUL-15	GUNDERSEN, WENDI		36.54	13-JUL-15	36.54	Reconciled
359938	09-JUL-15	HACH COMPANY		17,110.04	16-JUL-15	17,110.04	Reconciled
359939	09-JUL-15	HADRONEX INC		15,342.28	15-JUL-15	15,342.28	Reconciled
359940	09-JUL-15	HAMILTON, KURT		2,007.32	13-JUL-15	2,007.32	Reconciled
359941	09-JUL-15	HARRINGTON INDUSTRIAL PLASTICS LLC		99.80	13-JUL-15	99.80	Reconciled
359942	09-JUL-15	HELPMATES STAFFING SERVICES		15,240.26	15-JUL-15	15,240.26	Reconciled
359943	09-JUL-15	HOME DEPOT USA INC		213.13	14-JUL-15	213.13	Reconciled
359944	09-JUL-15	INDUSTRIAL METAL SUPPLY CO		14.97	13-JUL-15	14.97	Reconciled
359945	09-JUL-15	IRVINE PIPE & SUPPLY INC		781.11	13-JUL-15	781.11	Reconciled
359946	09-JUL-15	IRWD-PETTY CASH CUSTODIAN		750.35	10-JUL-15	750.35	Reconciled
359947	09-JUL-15	JACOBS PROJECT MANAGEMENT CO.		28,000.00	16-JUL-15	28,000.00	Reconciled
359948	09-JUL-15	JOHN MICHAEL COVAS		194.20	17-JUL-15	194.20	Reconciled
359949	09-JUL-15	KALSA, DANA		536.42	14-JUL-15	536.42	Reconciled
359950	09-JUL-15	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES		650.00	13-JUL-15	650.00	Reconciled
359951	09-JUL-15	KIMBALL MIDWEST		328.89	14-JUL-15	328.89	Reconciled
359952	09-JUL-15	KYAW, HTET S		28.93			Negotiable
359953	09-JUL-15	LA HABRA FENCE COMPANY INC		9,848.00	14-JUL-15	9,848.00	Reconciled
359954	09-JUL-15	LCS TECHNOLOGIES, INC.		7,312.50	13-JUL-15	7,312.50	Reconciled
359955	09-JUL-15	LEEHEY, WHITNEY		37.28	13-JUL-15	37.28	Reconciled
359956	09-JUL-15	LETENDRE, DARREN		612.82	20-JUL-15	612.82	Reconciled
359957	09-JUL-15	LOMELI, REGGIE		462.93	13-JUL-15	462.93	Reconciled
359958	09-JUL-15	LOTUS CONSULTING		8,640.00	13-JUL-15	8,640.00	Reconciled
359959	09-JUL-15	LUU, DAVID		17.71			Negotiable
359960	09-JUL-15	LYSKOSKI, BRIAN		24.80			Negotiable
359961	09-JUL-15	MARVIN GARDENS LLC		117.90	09-JUL-15	117.90	Reconciled

IRWD Ledger Payment Register For 01-JUL-15 To 31-JUL-15 Report Date: 30-JUL-2015 19:34  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 5  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
359962	09-JUL-15	MC MASTER CARR SUPPLY CO			999.64	13-JUL-15	999.64	Reconciled
359963	09-JUL-15	MILES, NATALIE			141.46	13-JUL-15	141.46	Reconciled
359964	09-JUL-15	MISSION COMMUNICATIONS LLC			4,731.00	17-JUL-15	4,731.00	Reconciled
359965	09-JUL-15	NALCO CAL WATER, LLC			240.00	13-JUL-15	240.00	Reconciled
359966	09-JUL-15	NATIONAL READY MIXED CONCRETE CO.			599.40	13-JUL-15	599.40	Reconciled
359967	09-JUL-15	NATURALWELL, LLC			687.50	13-JUL-15	687.50	Reconciled
359968	09-JUL-15	NINYO & MOORE			17,962.38	16-JUL-15	17,962.38	Reconciled
359969	09-JUL-15	NMG GEOTECHNICAL INC			11,670.70	17-JUL-15	11,670.70	Reconciled
359970	09-JUL-15	NORTHWOOD PLACE APTS			105.70	17-JUL-15	105.70	Reconciled
359971	09-JUL-15	OLIN CORPORATION			8,523.76	15-JUL-15	8,523.76	Reconciled
359972	09-JUL-15	ONEIL, DAYNA			31.84			Negotiable
359973	09-JUL-15	ONESOURCE DISTRIBUTORS LLC			4,890.79	13-JUL-15	4,890.79	Reconciled
359974	09-JUL-15	ORANGE COUNTY VECTOR CONTROL DISTRICT			170.93	17-JUL-15	170.93	Reconciled
359975	09-JUL-15	PACIFIC COAST BOLT CORP			2,799.00	14-JUL-15	2,799.00	Reconciled
359976	09-JUL-15	PAPER DEPOT DOCUMENT DESTRUCTION LLC			569.00	17-JUL-15	569.00	Reconciled
359977	09-JUL-15	PATEL, HAYLESH			12.80			Negotiable
359978	09-JUL-15	PAYNE & FEARS LLP			5,137.61	14-JUL-15	5,137.61	Reconciled
359979	09-JUL-15	PINNACLE TOWERS LLC			640.42	15-JUL-15	640.42	Reconciled
359980	09-JUL-15	PIVOT INTERIORS INC			232.98	13-JUL-15	232.98	Reconciled
359981	09-JUL-15	POLLARDWATER.COM			963.20	13-JUL-15	963.20	Reconciled
359982	09-JUL-15	PONTO AND SON'S WHOLESALE			1,010.25	14-JUL-15	1,010.25	Reconciled
359983	09-JUL-15	PRUDENTIAL OVERALL SUPPLY			6,154.65	13-JUL-15	6,154.65	Reconciled
359984	09-JUL-15	PTI SAND & GRAVEL INC			1,378.25	14-JUL-15	1,378.25	Reconciled
359985	09-JUL-15	PUENTE HILLS POWER CENTER			255.81			Negotiable
359986	09-JUL-15	PYRO-COMM SYSTEMS INC			1,490.00	13-JUL-15	1,490.00	Reconciled
359987	09-JUL-15	QUICKEL PAVING INC			4,785.00	13-JUL-15	4,785.00	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
359988		09-JUL-15	QUINCY COMPRESSOR LLC		2,120.91	13-JUL-15	2,120.91	Reconciled
359989		09-JUL-15	R & R INDUSTRIAL SERVICES, INC.		587.50	14-JUL-15	587.50	Reconciled
359990		09-JUL-15	RAM AIR ENGINEERING INC		1,608.79	13-JUL-15	1,608.79	Reconciled
359991		09-JUL-15	RESPONSE ENVELOPE, INC		5,760.72	15-JUL-15	5,760.72	Reconciled
359992		09-JUL-15	RICHTER, JOSEPH A		381.32	14-JUL-15	381.32	Reconciled
359993		09-JUL-15	RINGCLEAR LLC		65.04	13-JUL-15	65.04	Reconciled
359994		09-JUL-15	SANCHEZ, EDUARDO A		7.13	29-JUL-15	7.13	Reconciled
359995		09-JUL-15	SANTA ANA BLUE PRINT		69.48	14-JUL-15	69.48	Reconciled
359996		09-JUL-15	SCHINDLER ELEVATOR CORPORATION		180.14	13-JUL-15	180.14	Reconciled
359997		09-JUL-15	SEWARD, SCOTT B		383.52	21-JUL-15	383.52	Reconciled
359998		09-JUL-15	SHAMROCK SUPPLY CO INC		1,158.84	13-JUL-15	1,158.84	Reconciled
359999		09-JUL-15	SHIELDS, HARPER & CO.		684.69	13-JUL-15	684.69	Reconciled
360000		09-JUL-15	SIMI VALLEY LANDFILL AND RECYCLING CENTER		732.29			Negotiable
360001		09-JUL-15	SIRIUS COMPUTER SOLUTIONS INC		3,399.00	14-JUL-15	3,399.00	Reconciled
360002		09-JUL-15	SOUTH COAST WATER CO.		191.68	14-JUL-15	191.68	Reconciled
360003		09-JUL-15	SOUTHERN CALIFORNIA EDISON COMPANY		298,612.08	10-JUL-15	298,612.08	Reconciled
360004		09-JUL-15	SPARKLETTTS		42.61	14-JUL-15	42.61	Reconciled
360005		09-JUL-15	SPX CORP		180.13	13-JUL-15	180.13	Reconciled
360006		09-JUL-15	STANDARD AUTOMATION & CONTROL		84,771.20	17-JUL-15	84,771.20	Reconciled
360007		09-JUL-15	STANDARD REGISTER COMPANY		2,537.55	13-JUL-15	2,537.55	Reconciled
360008		09-JUL-15	STATE BOARD OF EQUALIZATION		3,016.00	22-JUL-15	3,016.00	Reconciled
360009		09-JUL-15	SUNSHINE SUPPLY COMPANY, INC.		3,692.75	13-JUL-15	3,692.75	Reconciled
360010		09-JUL-15	Support Product Services, Inc.		1,306.92	16-JUL-15	1,306.92	Reconciled
360011		09-JUL-15	TAMJIDI, MARYAM		35.38	15-JUL-15	35.38	Reconciled
360012		09-JUL-15	TEL SEC CONSULT, LLC		17,250.00	17-JUL-15	17,250.00	Reconciled

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Payment Document : IRWD CHECK								
360013		09-JUL-15	THERMO ELECTRON NORTH AMERICA LLC		22,850.00	17-JUL-15	22,850.00	Reconciled
360014		09-JUL-15	TROPICAL PLAZA NURSERY INC		1,430.60	13-JUL-15	1,430.60	Reconciled
360015		09-JUL-15	TSUGE, BRANDON		42.37			Negotiable
360016		09-JUL-15	U.S. HEALTHWORKS MEDICAL GROUP, P.C.		90.00	13-JUL-15	90.00	Reconciled
360017		09-JUL-15	VERIZON WIRELESS SERVICES LLC		932.97	17-JUL-15	932.97	Reconciled
360018		09-JUL-15	WALNUT SQ HOA		1,772.27	13-JUL-15	1,772.27	Reconciled
360019		09-JUL-15	WALTERS WHOLESALE ELECTRIC		815.35	17-JUL-15	815.35	Reconciled
360020		09-JUL-15	WASTE MANAGEMENT OF ORANGE COUNTY		3,365.62	13-JUL-15	3,365.62	Reconciled
360021		09-JUL-15	WATERSMART SOFTWARE, INC		7,500.00	14-JUL-15	7,500.00	Reconciled
360022		09-JUL-15	WAXIE'S ENTERPRISES, INC		206.45	13-JUL-15	206.45	Reconciled
360023		09-JUL-15	WECK LABORATORIES INC		3,075.00	14-JUL-15	3,075.00	Reconciled
360024		09-JUL-15	WONG, SAMANTHA		38.39	14-JUL-15	38.39	Reconciled
360025		09-JUL-15	YF LLC		125.14	13-JUL-15	125.14	Reconciled
360026		09-JUL-15	ZHU, YUCHENG		204.91			Negotiable
360027		09-JUL-15	FULL SPECTRUM ANALYTICS, INC.	LIVERMORE	3,266.00	16-JUL-15	3,266.00	Reconciled
360028		09-JUL-15	PERS LONG TERM CARE	PASADENA	851.14	15-JUL-15	851.14	Reconciled
360029		09-JUL-15	IRWD EMPLOYEE ASSOCIATION	15600 SC	780.00	10-JUL-15	780.00	Reconciled

360030	09-JUL-15	ORANGE COUNTY SHERIFF'S OFFICE	4601 JAMBOREE	532.78			Voiced
360031	09-JUL-15	CLEARINGHOUSE	PHOENIX	477.67	13-JUL-15	477.67	Reconciled
360032	09-JUL-15	STATE WATER RESOURCES CONTROL BOARD	PO BOX 1888	194,145.30	10-JUL-15	194,145.30	Reconciled
360033	10-JUL-15	MORRISROE, EDWARD	PURCHASE	207.25	20-JUL-15	207.25	Reconciled
360034	14-JUL-15	HUMANA INSURANCE COMPANY	PAY	202.80	20-JUL-15	202.80	Reconciled
360035	16-JUL-15	4IMPRINT, INC.		1,309.60	21-JUL-15	1,309.60	Reconciled
360036	16-JUL-15	ADVANCED ELECTRONICS INC		1,003.52	21-JUL-15	1,003.52	Reconciled
360037	16-JUL-15	AIRGAS, INC.		5,143.71	20-JUL-15	5,143.71	Reconciled
360038	16-JUL-15	ALL STAR GLASS		340.37	20-JUL-15	340.37	Reconciled
360039	16-JUL-15	ALPHA TRAFFIC SERVICES, INC.		570.00	20-JUL-15	570.00	Reconciled

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Payment Document : IRWD CHECK								
360040		16-JUL-15	ARCADIS U.S., INC.		110,069.85	24-JUL-15	110,069.85	Reconciled
360041		16-JUL-15	ARMORCAST PRODUCTS COMPANY		6,700.98	20-JUL-15	6,700.98	Reconciled
360042		16-JUL-15	ASHFORD, WALT		310.36	24-JUL-15	310.36	Reconciled
360043		16-JUL-15	AT&T		2,014.33	22-JUL-15	2,014.33	Reconciled
360044		16-JUL-15	ATHENS SERVICES		7,762.74	23-JUL-15	7,762.74	Reconciled
360045		16-JUL-15	AUTOZONE PARTS, INC.		28.42	21-JUL-15	28.42	Reconciled
360046		16-JUL-15	BATTERIES PLUS AND BATTERIES PLUS BULBS		342.99	20-JUL-15	342.99	Reconciled
360047		16-JUL-15	BAY AREA TRENCHERS, INC.		53.98	20-JUL-15	53.98	Reconciled
360048		16-JUL-15	BDC SPECIAL WASTE		207.20	20-JUL-15	207.20	Reconciled
360049		16-JUL-15	BENVENISTE, RUTH		93.20	27-JUL-15	93.20	Reconciled
360050		16-JUL-15	BIGWIG MONSTER, LLC		26,760.00	23-JUL-15	26,760.00	Reconciled
360051		16-JUL-15	BORCHARD SURVEYING & MAPPING, INC.		2,382.50	21-JUL-15	2,382.50	Reconciled
360052		16-JUL-15	BOWIE, ARNESON, WILES & GIANNONE		33,221.83	29-JUL-15	33,221.83	Reconciled
360053		16-JUL-15	CDW GOVERNMENT LLC		463.87	20-JUL-15	463.87	Reconciled
360054		16-JUL-15	CEMEX, INC.		922.80	20-JUL-15	922.80	Reconciled
360055		16-JUL-15	CH2M HILL, INC		33,608.66	27-JUL-15	33,608.66	Reconciled
360056		16-JUL-15	CHEN, LYDIA		37.15	23-JUL-15	37.15	Reconciled
360057		16-JUL-15	CITY OF IRVINE		743.35			Negotiable
360058		16-JUL-15	CIVILSOURCE, INC.		17,248.00			Negotiable
360059		16-JUL-15	COMMERCIAL DOOR OF ORANGE COUNTY, INC.		312.88	21-JUL-15	312.88	Reconciled
360060		16-JUL-15	COUNTY OF ORANGE		23,141.26	23-JUL-15	23,141.26	Reconciled
360061		16-JUL-15	CR & R INCORPORATED		12.95	22-JUL-15	12.95	Reconciled
360062		16-JUL-15	CREATIVE ALLIANCE GROUP LLC		500.00			Negotiable
360063		16-JUL-15	DEE JASPAR & ASSOCIATES, INC.		1,460.72	20-JUL-15	1,460.72	Reconciled
360064		16-JUL-15	DELL MARKETING LP		78,658.06	22-JUL-15	78,658.06	Reconciled
360065		16-JUL-15	DETECTION INSTRUMENTS CORP		453.28	29-JUL-15	453.28	Reconciled
360066		16-JUL-15	DMS FACILITY SERVICES, INC.		100.50	21-JUL-15	100.50	Reconciled
360067		16-JUL-15	DUARTE, DONALD		20.99	24-JUL-15	20.99	Reconciled
360068		16-JUL-15	ELITE EQUIPMENT, INC.		1,213.50	24-JUL-15	1,213.50	Reconciled

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Payment Document : IRWD CHECK								
360069		16-JUL-15	ENVIRONMENTAL RESOURCE ASSOCIATES		168.81	24-JUL-15	168.81	Reconciled
360070		16-JUL-15	EXECUTIVE LIGHTING & ELECTRIC		1,439.47	20-JUL-15	1,439.47	Reconciled
360071		16-JUL-15	FARWEST CORROSION CONTROL COMPANY		648.00	20-JUL-15	648.00	Reconciled
360072		16-JUL-15	FEDEX		259.20	23-JUL-15	259.20	Reconciled
360073		16-JUL-15	FIERRO, SERGIO D		3,324.99			Negotiable
360074		16-JUL-15	FIRE EXTINGUISHING SAFETY & SERVICE		553.10	22-JUL-15	553.10	Reconciled
360075		16-JUL-15	FIRST CHOICE		1,223.10	21-JUL-15	1,223.10	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
360076	16-JUL-15		SERVICES FISERV		15,496.00	22-JUL-15	15,496.00	Reconciled
360077	16-JUL-15		FISHER SCIENTIFIC COMPANY LLC		5,057.43	20-JUL-15	5,057.43	Reconciled
360078	16-JUL-15		FLEET SOLUTIONS LLC		4,366.15	20-JUL-15	4,366.15	Reconciled
360079	16-JUL-15		GANAHL LUMBER CO.		1,498.08	22-JUL-15	1,498.08	Reconciled
360080	16-JUL-15		GHD INC.		5,605.00	23-JUL-15	5,605.00	Reconciled
360081	16-JUL-15		GJ AUTOMOTIVE EQUIPMENT CO INC		742.50	24-JUL-15	742.50	Reconciled
360082	16-JUL-15		GRAINGER		3,301.36	20-JUL-15	3,301.36	Reconciled
360083	16-JUL-15		HAAG, LAUREN		38.61	23-JUL-15	38.61	Reconciled
360084	16-JUL-15		HACH COMPANY		5,670.93	20-JUL-15	5,670.93	Reconciled
360085	16-JUL-15		HARMSWORTH ASSOCIATES		1,905.00	27-JUL-15	1,905.00	Reconciled
360086	16-JUL-15		HARTFORD LIFE INSURANCE COMPANY		24,884.45	24-JUL-15	24,884.45	Reconciled
360087	16-JUL-15		HELPMATES STAFFING SERVICES		14,354.73	23-JUL-15	14,354.73	Reconciled
360088	16-JUL-15		HERNANDEZ, ENRIQUE		91.55			Negotiable
360089	16-JUL-15		HERTZ EQUIPMENT RENTAL CORPORATION		1,387.80	23-JUL-15	1,387.80	Reconciled
360090	16-JUL-15		HILL BROTHERS CHEMICAL COMPANY		10,171.20	23-JUL-15	10,171.20	Reconciled
360091	16-JUL-15		HOME DEPOT USA INC		236.12	23-JUL-15	236.12	Reconciled
360092	16-JUL-15		HORN, JACLYN		30.69	20-JUL-15	30.69	Reconciled
360093	16-JUL-15		HSG INC		1,536.00	21-JUL-15	1,536.00	Reconciled
360094	16-JUL-15		HUNSAKER & ASSOCIATES IRVINE		1,792.00	21-JUL-15	1,792.00	Reconciled
360095	16-JUL-15		IBM CORPORATION		1,179.00	21-JUL-15	1,179.00	Reconciled
360096	16-JUL-15		INDUSTRIAL ELECTRIC MACHINERY LLC		773.60	21-JUL-15	773.60	Reconciled

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Payment Document : IRWD CHECK								
360097	16-JUL-15		IRVINE PIPE & SUPPLY INC		3,738.09	20-JUL-15	3,738.09	Reconciled
360098	16-JUL-15		JOHN CRANE, INC.		647.42	21-JUL-15	647.42	Reconciled
360099	16-JUL-15		JORDAN, KENDALL		78.12			Negotiable
360100	16-JUL-15		KENT & AMY DAHLBERG		400.00	20-JUL-15	400.00	Reconciled
360101	16-JUL-15		KIM, SOOK HEE		4,368.62	20-JUL-15	4,368.62	Reconciled
360102	16-JUL-15		LAKE WEEDERS DIGEST, LLC		50,448.00	24-JUL-15	50,448.00	Reconciled
360103	16-JUL-15		LIU, TAO		104.30			Negotiable
360104	16-JUL-15		MARINA LANDSCAPE MAINTENANCE, INC.		6,152.82	21-JUL-15	6,152.82	Reconciled
360105	16-JUL-15		MC FADDEN-DALE INDUSTRIAL		825.63	21-JUL-15	825.63	Reconciled
360106	16-JUL-15		MC MASTER CARR SUPPLY CO		745.81	21-JUL-15	745.81	Reconciled
360107	16-JUL-15		MCCLAIN'S FURNITURE INC		810.00	24-JUL-15	810.00	Reconciled
360108	16-JUL-15		MUNICIPAL MAINTENANCE EQUIPMENT INC		3,719.52	20-JUL-15	3,719.52	Reconciled
360109	16-JUL-15		NATIONAL READY MIXED CONCRETE CO.		613.80	20-JUL-15	613.80	Reconciled
360110	16-JUL-15		NATURALWELL, LLC		302.50	20-JUL-15	302.50	Reconciled
360111	16-JUL-15		NATURES IMAGE INC		3,283.08	21-JUL-15	3,283.08	Reconciled
360112	16-JUL-15		NAVIGANT CONSULTING, INC		15,265.00	24-JUL-15	15,265.00	Reconciled
360113	16-JUL-15		NEWAGE INDUSTRIES INC		727.00	23-JUL-15	727.00	Reconciled
360114	16-JUL-15		NINYO & MOORE		20,840.00	23-JUL-15	20,840.00	Reconciled
360115	16-JUL-15		OLIN CORPORATION		34,051.78	27-JUL-15	34,051.78	Reconciled
360116	16-JUL-15		ONESOURCE DISTRIBUTORS LLC		461.61	20-JUL-15	461.61	Reconciled
360117	16-JUL-15		ORANGE COUNTY AUTO PARTS CO		86.61	20-JUL-15	86.61	Reconciled
360118	16-JUL-15		ORANGE COUNTY FIRE AUTHORITY		328.00	21-JUL-15	328.00	Reconciled
360119	16-JUL-15		ORANGE COUNTY SANITATION DISTRICT		301,963.13	23-JUL-15	301,963.13	Reconciled
360120	16-JUL-15		ORANGE COUNTY VECTOR CONTROL DISTRICT		500.81	29-JUL-15	500.81	Reconciled
360121	16-JUL-15		PAC RIM ENGINEERING		5,687.50	27-JUL-15	5,687.50	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360122		16-JUL-15	PACIFIC GAS AND ELECTRIC COMPANY		21.91	21-JUL-15	21.91	Reconciled
360123		16-JUL-15	PACIFIC HYDROTECH CORPORATION		36,132.49	27-JUL-15	36,132.49	Reconciled
360124		16-JUL-15	PACIFIC HYDROTECH CORPORATION		1,901.71	21-JUL-15	1,901.71	Reconciled
360125		16-JUL-15	PARKHOUSE TIRE INC		237.60	21-JUL-15	237.60	Reconciled
360126		16-JUL-15	PARKWAY LAWNMOWER SHOP		28.81	21-JUL-15	28.81	Reconciled
360127		16-JUL-15	PRAXAIR DISTRIBUTION INC		340.16	21-JUL-15	340.16	Reconciled
360128		16-JUL-15	PREMIER PAVING INC		809.07	20-JUL-15	809.07	Reconciled
360129		16-JUL-15	RAINBOW DISPOSAL CO INC		325.21	22-JUL-15	325.21	Reconciled
360130		16-JUL-15	RAM AIR ENGINEERING INC		5,494.41	21-JUL-15	5,494.41	Reconciled
360131		16-JUL-15	RASSOLI, MARIELA		37.47			Negotiable
360132		16-JUL-15	RBF CONSULTING		1,292.98	20-JUL-15	1,292.98	Reconciled
360133		16-JUL-15	REACH EMPLOYEE ASSISTANCE INC		907.20	27-JUL-15	907.20	Reconciled
360134		16-JUL-15	RED WING SHOES		598.72	24-JUL-15	598.72	Reconciled
360135		16-JUL-15	RED, JAMES D		1,906.57	23-JUL-15	1,906.57	Reconciled
360136		16-JUL-15	RUPPERT, KERRI		79.71	21-JUL-15	79.71	Reconciled
360137		16-JUL-15	SANTA ANA BLUE PRINT		302.03	29-JUL-15	302.03	Reconciled
360138		16-JUL-15	SANTA MARGARITA FORD		201.93	20-JUL-15	201.93	Reconciled
360139		16-JUL-15	SANTIAGO AQUEDUCT COMMISSION		146.26	17-JUL-15	146.26	Reconciled
360140		16-JUL-15	SHAH, BRENDON		216.80	28-JUL-15	216.80	Reconciled
360141		16-JUL-15	SIGMA-ALDRICH INC		1,103.17	21-JUL-15	1,103.17	Reconciled
360142		16-JUL-15	SIRIUS COMPUTER SOLUTIONS INC		104,768.96	27-JUL-15	104,768.96	Reconciled
360143		16-JUL-15	SOUTHERN CALIFORNIA EDISON COMPANY		55,543.97	20-JUL-15	55,543.97	Reconciled
360144		16-JUL-15	SOUTHERN CALIFORNIA SECURITY CENTER, INC.		44.12	24-JUL-15	44.12	Reconciled
360145		16-JUL-15	SOUTHERN CALIFORNIA WATER COMMITTEE INC		5,000.00	20-JUL-15	5,000.00	Reconciled
360146		16-JUL-15	SOUTHERN COUNTIES LUBRICANTS LLC		3,756.12	21-JUL-15	3,756.12	Reconciled
360147		16-JUL-15	SPATIAL WAVE, INC.		9,200.00	21-JUL-15	9,200.00	Reconciled
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Payment Type: All								

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360148		16-JUL-15	STANDARD REGISTER COMPANY		4,498.44	20-JUL-15	4,498.44	Reconciled
360149		16-JUL-15	STERIS CORPORATION		4,675.87	21-JUL-15	4,675.87	Reconciled
360150		16-JUL-15	SUSAN A. SIROTA		4,195.00	21-JUL-15	4,195.00	Reconciled
360151		16-JUL-15	T.E. ROBERTS, INC		453.83	27-JUL-15	453.83	Reconciled
360152		16-JUL-15	TAN, YUHONG		33.64	22-JUL-15	33.64	Reconciled
360153		16-JUL-15	THE GAS COMPANY		647.07	24-JUL-15	647.07	Reconciled
360154		16-JUL-15	THOMAS HARDER & CO		4,690.00	27-JUL-15	4,690.00	Reconciled
360155		16-JUL-15	TRUCPARCO		3,289.81	28-JUL-15	3,289.81	Reconciled
360156		16-JUL-15	TRUGREEN LANDCARE		3,582.51	20-JUL-15	3,582.51	Reconciled
360157		16-JUL-15	TUSTIN CHAMBER OF COMMERCE		775.00	29-JUL-15	775.00	Reconciled
360158		16-JUL-15	U.S. HEALTHWORKS MEDICAL GROUP, P.C.		185.00	20-JUL-15	185.00	Reconciled
360159		16-JUL-15	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA		982.50	22-JUL-15	982.50	Reconciled
360160		16-JUL-15	UNITED PARCEL SERVICE INC		163.98	20-JUL-15	163.98	Reconciled
360161		16-JUL-15	VCS ENVIRONMENTAL		1,283.53	24-JUL-15	1,283.53	Reconciled
360162		16-JUL-15	VULCAN MATERIALS COMPANY		1,331.50	20-JUL-15	1,331.50	Reconciled
360163		16-JUL-15	VNR INTERNATIONAL, LLC		27.26	21-JUL-15	27.26	Reconciled
360164		16-JUL-15	WALTERS WHOLESALE ELECTRIC		2,503.03	21-JUL-15	2,503.03	Reconciled
360165		16-JUL-15	WALTON MOTORS & CONTROLS INC		2,237.37	20-JUL-15	2,237.37	Reconciled
360166		16-JUL-15	WANG, LIN		39.01			Negotiable
360167		16-JUL-15	WATER RESEARCH FOUNDATION		5,412.37	29-JUL-15	5,412.37	Reconciled

360168	16-JUL-15	WATERLINE TECHNOLOGIES INC		5,680.00	21-JUL-15	5,680.00	Reconciled
360169	16-JUL-15	WATERSMART SOFTWARE, INC		8,550.00	20-JUL-15	8,550.00	Reconciled
360170	16-JUL-15	WAXIE'S ENTERPRISES, INC		1,625.79	22-JUL-15	1,625.79	Reconciled
360171	16-JUL-15	WESTERN AV		5,097.84	20-JUL-15	5,097.84	Reconciled
360172	16-JUL-15	WIRELESS WATCHDOGS, LLC		688.00	28-JUL-15	688.00	Reconciled
360173	16-JUL-15	WYATT, CONSTANCE		753.03	23-JUL-15	753.03	Reconciled
360174	16-JUL-15	ZEE MEDICAL SERVICE CO		1,374.87	20-JUL-15	1,374.87	Reconciled
360175	16-JUL-15	Rutherford, Allan		71.00			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 13  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360176		16-JUL-15	Compton, Christine A		72.20	24-JUL-15	72.20	Reconciled
360177		16-JUL-15	Roney, Jenny Lauren		141.32	16-JUL-15	141.32	Reconciled
360178		16-JUL-15	Welch, Kelly A (Kellie)		57.73	23-JUL-15	57.73	Reconciled
360179		16-JUL-15	Bonkowski, Leslie A (Leslie)		271.38	20-JUL-15	271.38	Reconciled
360180		16-JUL-15	Matheis, Mary Aileen		720.28			Negotiable
360181		16-JUL-15	Hoffman, Michael S (Mike)		156.00			Negotiable
360182		16-JUL-15	Swan, Peer		194.90	27-JUL-15	194.90	Reconciled
360183		16-JUL-15	Bennett, Ray R (Ray)		21.77	22-JUL-15	21.77	Reconciled
360184		16-JUL-15	LaMar, Steven E		523.40	24-JUL-15	523.40	Reconciled
360185		16-JUL-15	Bonkowski, Thomas J (Thomas)		28.87	20-JUL-15	28.87	Reconciled
360186		20-JUL-15	PSB INTEGRATED MARKETING	LAKE FOREST SACRAMENTO	7,652.72	20-JUL-15	7,652.72	Reconciled
360187		20-JUL-15	CALDESAL		5,000.00			Negotiable
360188		23-JUL-15	Calderon, Alfonso		50.00			Negotiable
360189		23-JUL-15	McNulty, Amy K (Amy)		35.70			Negotiable
360190		23-JUL-15	Rios, Belisario		162.00	23-JUL-15	162.00	Reconciled
360191		23-JUL-15	Kessler, Christian L (Christian)		162.00	27-JUL-15	162.00	Reconciled
360192		23-JUL-15	Cariker, Cody J (Cody)		157.39			Negotiable
360193		23-JUL-15	McBride, Damien J		156.00			Negotiable
360194		23-JUL-15	Kanoff, Debbie G (Debbie)		310.75	24-JUL-15	310.75	Reconciled
360195		23-JUL-15	Rock, Douglas T (Douglas)		113.38	29-JUL-15	113.38	Reconciled
360196		23-JUL-15	Hankla, Jeremy		164.00			Negotiable
360197		23-JUL-15	Pfister, Ken D (Ken)		22.90			Negotiable
360198		23-JUL-15	Sinclair, Todd C (Todd)		165.00	24-JUL-15	165.00	Reconciled
360199		23-JUL-15	AAF INTERNATIONAL		1,251.34	27-JUL-15	1,251.34	Reconciled
360200		23-JUL-15	ACCUSTANDARD INC		35.17	28-JUL-15	35.17	Reconciled
360201		23-JUL-15	AIRGAS, INC.		67.65	27-JUL-15	67.65	Reconciled
360202		23-JUL-15	ALL AMERICAN SEWER TOOLS		4,833.03	27-JUL-15	4,833.03	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 14  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360203		23-JUL-15	AMERICAN CONSTRUCTION AND SUPPLY INC		22,019.10			Negotiable
360204		23-JUL-15	ANTHONY N. LARSEN		400.00			Negotiable
360205		23-JUL-15	AQUA BEN CORPORATION		33,838.56	29-JUL-15	33,838.56	Reconciled
360206		23-JUL-15	AT&T		5,804.70	29-JUL-15	5,804.70	Reconciled
360207		23-JUL-15	AT&T		25,487.09			Negotiable
360208		23-JUL-15	AT&T		48.30	27-JUL-15	48.30	Reconciled
360209		23-JUL-15	AUTOZONE PARTS, INC.		676.64	27-JUL-15	676.64	Reconciled
360210		23-JUL-15	AVISTA TECHNOLOGIES, INC		8,333.93	27-JUL-15	8,333.93	Reconciled
360211		23-JUL-15	BADGER METER INC		51,564.61			Negotiable
360212		23-JUL-15	BIOMAGIC INC		8,629.63	27-JUL-15	8,629.63	Reconciled
360213		23-JUL-15	BRENNTAG PACIFIC		1,381.50	24-JUL-15	1,381.50	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
360214		23-JUL-15	INC					
360215		23-JUL-15	BRITHINEE ELECTRIC		4,469.40	27-JUL-15	4,469.40	Reconciled
360216		23-JUL-15	BROOKFIELD HOMES		509.19			Negotiable
			BUSH & ASSOCIATES		9,176.00			Negotiable
			INC					
360217		23-JUL-15	C WELLS PIPELINE		2,347.14			Negotiable
			MATERIALS INC					
360218		23-JUL-15	CANON FINANCIAL		1,915.94	27-JUL-15	1,915.94	Reconciled
			SERVICES, INC					
360219		23-JUL-15	CANON SOLUTIONS		1,378.17	27-JUL-15	1,378.17	Reconciled
			AMERICA, INC.					
360220		23-JUL-15	CAROLLO ENGINEERS,		83,700.50			Negotiable
			INC					
360221		23-JUL-15	CDW GOVERNMENT LLC		1,904.00	27-JUL-15	1,904.00	Reconciled
360222		23-JUL-15	CEMEX, INC.		680.04	27-JUL-15	680.04	Reconciled
360223		23-JUL-15	CITY OF NEWPORT		1,215.75	28-JUL-15	1,215.75	Reconciled
			BEACH					
360224		23-JUL-15	CITY OF SANTA ANA		81.85	24-JUL-15	81.85	Reconciled
360225		23-JUL-15	CIVILSOURCE, INC.		17,003.00			Negotiable
360226		23-JUL-15	CLA-VAL COMPANY		481.90	27-JUL-15	481.90	Reconciled
360227		23-JUL-15	CLEAN ENERGY		1,437.02	27-JUL-15	1,437.02	Reconciled
360228		23-JUL-15	CLEARINGHOUSE		477.67	27-JUL-15	477.67	Reconciled
360229		23-JUL-15	CREW INC		708.62			Negotiable
360230		23-JUL-15	CROCKER & CROCKER		10,239.64			Negotiable
360231		23-JUL-15	D & G SIGNS		426.60			Negotiable
360232		23-JUL-15	DANGELO CO		22,446.85	29-JUL-15	22,446.85	Reconciled
360233		23-JUL-15	DATA CLEAN		830.00	28-JUL-15	830.00	Reconciled
			CORPORATION					
360234		23-JUL-15	DEE JASPAR &		17,283.69			Negotiable
			ASSOCIATES, INC.					

IRWD Ledger Payment Register For 01-JUL-15 To 31-JUL-15 Report Date: 30-JUL-2015 19:34  
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 15  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360235		23-JUL-15	DELL MARKETING LP		9,492.06	27-JUL-15	9,492.06	Reconciled
360236		23-JUL-15	DISCOVERY SCIENCE		17,903.16			Negotiable
			CENTER					
360237		23-JUL-15	DTSC		1,695.00	29-JUL-15	1,695.00	Reconciled
360238		23-JUL-15	DUNK, JAMES G		35.54			Negotiable
360239		23-JUL-15	ELITE EQUIPMENT,		76.40			Negotiable
			INC.					
360240		23-JUL-15	EMPLOYEE BENEFIT		1,060.00	28-JUL-15	1,060.00	Reconciled
			SPECIALIST, INC					
360241		23-JUL-15	ENDRESS AND HAUSER		7,936.34	27-JUL-15	7,936.34	Reconciled
			INC					
360242		23-JUL-15	FARRELL &		675.60	27-JUL-15	675.60	Reconciled
			ASSOCIATES					
360243		23-JUL-15	FIRE EXTINGUISHING		10,099.31			Negotiable
			SAFETY & SERVICE					
360244		23-JUL-15	FIRST CHOICE		22.75	29-JUL-15	22.75	Reconciled
			SERVICES					
360245		23-JUL-15	FISERV		289.00	24-JUL-15	289.00	Reconciled
360246		23-JUL-15	GANAHL LUMBER CO.		109.11	29-JUL-15	109.11	Reconciled
360247		23-JUL-15	GEORGE YARDLEY CO		2,029.80	28-JUL-15	2,029.80	Reconciled
			INC					
360248		23-JUL-15	GIFREHC		867.38			Negotiable
360249		23-JUL-15	GRAINGER		2,930.89	27-JUL-15	2,930.89	Reconciled
360250		23-JUL-15	GREGG OHLHAVER		1,002.24	27-JUL-15	1,002.24	Reconciled
360251		23-JUL-15	HACKETT PRINTING		2,096.28	28-JUL-15	2,096.28	Reconciled
360252		23-JUL-15	HADRONEX INC		8.00	27-JUL-15	8.00	Reconciled
360253		23-JUL-15	HARMSWORTH		1,365.00			Negotiable
			ASSOCIATES					
360254		23-JUL-15	HARRINGTON		690.00	27-JUL-15	690.00	Reconciled
			INDUSTRIAL					
			PLASTICS LLC					
360255		23-JUL-15	HARRIS, HARRIET		140.42			Negotiable
360256		23-JUL-15	HDR ENGINEERING		61,677.50			Negotiable
			INC					
360257		23-JUL-15	HELPMATES STAFFING		13,282.34	29-JUL-15	13,282.34	Reconciled
			SERVICES					
360258		23-JUL-15	HILL BROTHERS		5,682.45	27-JUL-15	5,682.45	Reconciled
			CHEMICAL COMPANY					
360259		23-JUL-15	HOME DEPOT USA INC		474.69	28-JUL-15	474.69	Reconciled
360260		23-JUL-15	IBM CORPORATION		49,196.24			Negotiable
360261		23-JUL-15	INDUSTRIAL METAL		38.24	27-JUL-15	38.24	Reconciled
			SUPPLY CO					
360262		23-JUL-15	INTERNATIONAL		70.81			Negotiable
			HOUSE OF PRAYER					
360263		23-JUL-15	IRVINE PIPE &		5,185.36	27-JUL-15	5,185.36	Reconciled
			SUPPLY INC					

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 16  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
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Payment Document : IRWD CHECK

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
360264	23-JUL-15	IRWD EMPLOYEE ASSOCIATION			730.00	24-JUL-15	730.00	Reconciled
360265	23-JUL-15	JCI JONES CHEMICALS INC			9,909.90	27-JUL-15	9,909.90	Reconciled
360266	23-JUL-15	KENNY THE PRINTER			2,465.27	27-JUL-15	2,465.27	Reconciled
360267	23-JUL-15	KIM, SOON TAE			3,650.00	27-JUL-15	3,650.00	Reconciled
360268	23-JUL-15	LAGUNA BEACH COUNTY WATER DISTRICT			4,057.35	29-JUL-15	4,057.35	Reconciled
360269	23-JUL-15	LANDCARE HOLDINGS, INC.			2,760.00	27-JUL-15	2,760.00	Reconciled
360270	23-JUL-15	LEIGHTON CONSULTING, INC.			242.00	27-JUL-15	242.00	Reconciled
360271	23-JUL-15	LENNAR HOMES			20.00	28-JUL-15	20.00	Reconciled
360272	23-JUL-15	LILLESTRAND LEADERSHIP CONSULTING, INC.			776.83			Negotiable
360273	23-JUL-15	LUBRICATION ENGINEERS, INC.			553.26	27-JUL-15	553.26	Reconciled
360274	23-JUL-15	MC FADDEEN-DALE INDUSTRIAL			522.84	28-JUL-15	522.84	Reconciled
360275	23-JUL-15	MC MASTER CARR SUPPLY CO			1,688.33			Negotiable
360276	23-JUL-15	NALCO CAL WATER, LLC			240.00	27-JUL-15	240.00	Reconciled
360277	23-JUL-15	NATIONAL READY MIXED CONCRETE CO.			477.08	27-JUL-15	477.08	Reconciled
360278	23-JUL-15	NEW RESOURCES GROUP INC			458.50	28-JUL-15	458.50	Reconciled
360279	23-JUL-15	OLIN CORPORATION			16,234.59			Negotiable
360280	23-JUL-15	ONESOURCE DISTRIBUTORS LLC			562.99	27-JUL-15	562.99	Reconciled
360281	23-JUL-15	ORANGE COUNTY AUTO PARTS CO			257.68	24-JUL-15	257.68	Reconciled
360282	23-JUL-15	ORANGE COUNTY VECTOR CONTROL DISTRICT			2,057.94	29-JUL-15	2,057.94	Reconciled
360283	23-JUL-15	ORLOFF, JACQUELINE			65.30			Negotiable
360284	23-JUL-15	OUTSOURCE TECHNICAL LLC			71,176.00	29-JUL-15	71,176.00	Reconciled
360285	23-JUL-15	PACIFIC COAST BOLT CORP			1,081.95	28-JUL-15	1,081.95	Reconciled
360286	23-JUL-15	PARKHOUSE TIRE INC			4,264.88			Negotiable
360287	23-JUL-15	PARKHOUSE TIRE INC			1,001.55	28-JUL-15	1,001.55	Reconciled
360288	23-JUL-15	PENTAIR VALVES & CONTROLS US LP			1,296.00	29-JUL-15	1,296.00	Reconciled

IRWD Ledger  
 BANK: Bank of America N.A. Branch : Los Angeles  
 Bank Account Currency: USD ( US Dollar )  
 Payment Type: All

Payment Register For 01-JUL-15 To 31-JUL-15  
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360289	23-JUL-15	PERS LONG TERM CARE			851.14	29-JUL-15	851.14	Reconciled
360290	23-JUL-15	PRAXAIR DISTRIBUTION INC			3,371.59	28-JUL-15	3,371.59	Reconciled
360291	23-JUL-15	PRO MOBILE AUTO DETAILING			250.00	27-JUL-15	250.00	Reconciled
360292	23-JUL-15	PSB INTEGRATED MARKETING			2,922.00	27-JUL-15	2,922.00	Reconciled
360293	23-JUL-15	PSB INTEGRATED MARKETING			19,642.77	23-JUL-15	19,642.77	Reconciled
360294	23-JUL-15	PURE EFFECT INC			1,424.80	28-JUL-15	1,424.80	Reconciled
360295	23-JUL-15	QASYMPHONY, INC.			2,280.00			Negotiable
360296	23-JUL-15	QUINCY COMPRESSOR LLC			2,345.29	28-JUL-15	2,345.29	Reconciled
360297	23-JUL-15	RAM AIR ENGINEERING INC			1,395.00	29-JUL-15	1,395.00	Reconciled
360298	23-JUL-15	RICHARD C SLADE & ASSOCIATES LLC			20,549.00			Negotiable
360299	23-JUL-15	RUST AUTOMATION & CONTROLS INC			6,309.91	27-JUL-15	6,309.91	Reconciled
360300	23-JUL-15	SADEGHI, MAHBOOBEH			2,323.58	27-JUL-15	2,323.58	Reconciled
360301	23-JUL-15	SAFETY-KLEEN SYSTEMS, INC			848.85	28-JUL-15	848.85	Reconciled
360302	23-JUL-15	SANTA MARGARITA FORD			362.37	27-JUL-15	362.37	Reconciled
360303	23-JUL-15	SECURTEC DISTRICT PATROL, INC.			1,600.00			Negotiable
360304	23-JUL-15	SERRANO WATER DISTRICT			37,279.95			Negotiable
360305	23-JUL-15	SHAMROCK SUPPLY CO INC			722.52	27-JUL-15	722.52	Reconciled
360306	23-JUL-15	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT			121.44			Negotiable
360307	23-JUL-15	SOUTH COAST WATER			2,519.00	27-JUL-15	2,519.00	Reconciled

360308	23-JUL-15	DISTRICT SOUTHERN CALIFORNIA EDISON COMPANY		380,218.31	27-JUL-15	380,218.31	Reconciled
360309	23-JUL-15	STANDARD AUTOMATION & CONTROL		183.88	28-JUL-15	183.88	Reconciled
360310	23-JUL-15	TESTAMERICA LABORATORIES, INC		436.80	27-JUL-15	436.80	Reconciled
360311	23-JUL-15	TETRA TECH, INC		48,272.00			Negotiable
360312	23-JUL-15	THE GAS COMPANY		1,973.04			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 18  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360313		23-JUL-15	THE IRVINE COMPANY LLC		1,866.95	27-JUL-15	1,866.95	Reconciled
360314		23-JUL-15	THOMPSON INDUSTRIAL SUPPLY		9,489.64			Negotiable
360315		23-JUL-15	TRIPAC MARKETING INC		889.01	28-JUL-15	889.01	Reconciled
360316		23-JUL-15	TROPICAL PLAZA NURSERY INC		28,588.28	29-JUL-15	28,588.28	Reconciled
360317		23-JUL-15	TRUCPARCO		3,294.28	28-JUL-15	3,294.28	Reconciled
360318		23-JUL-15	TRUGREEN LANDCARE		11,000.00	29-JUL-15	11,000.00	Reconciled
360319		23-JUL-15	U.S. HEALTHWORKS MEDICAL GROUP, P.C.		270.00	24-JUL-15	270.00	Reconciled
360320		23-JUL-15	USA BLUEBOOK		1,976.68	28-JUL-15	1,976.68	Reconciled
360321		23-JUL-15	VWR INTERNATIONAL, LLC		563.50	28-JUL-15	563.50	Reconciled
360322		23-JUL-15	WALTERS WHOLESALE ELECTRIC		2,902.78	29-JUL-15	2,902.78	Reconciled
360323		23-JUL-15	WATERSMART SOFTWARE, INC		7,500.00	27-JUL-15	7,500.00	Reconciled
360324		23-JUL-15	WECK LABORATORIES INC		3,075.00	28-JUL-15	3,075.00	Reconciled
360325		23-JUL-15	WEST AMERICA GRAPHICS		158.92	28-JUL-15	158.92	Reconciled
360326		23-JUL-15	WOODRUFF, SPRADLIN & SMART APC		127.50	27-JUL-15	127.50	Reconciled
360327		23-JUL-15	YP LLC		123.50	27-JUL-15	123.50	Reconciled
360328		23-JUL-15	PSB INTEGRATED MARKETING	LAKE FOREST	15,462.25	24-JUL-15	15,462.25	Reconciled
360329		27-JUL-15	DIRECTV INC	LOS ANGELES	224.79			Negotiable
360330		29-JUL-15	JCI JONES CHEMICALS INC	CINCINNATI	3,344.94			Negotiable
360331		30-JUL-15	Lal, Andre		172.85			Negotiable
360332		30-JUL-15	Perez, Cesar (Cesar)		375.00			Negotiable
360333		30-JUL-15	Hamer, James B (James)		156.00			Negotiable
360334		30-JUL-15	La, Jason (Jason)		60.00			Negotiable
360335		30-JUL-15	Hankla, Jeremy		167.00			Negotiable
360336		30-JUL-15	Zepeda, Jose		9.75			Negotiable
360337		30-JUL-15	Cortez, Malcolm A (Malcolm)		40.25			Negotiable
360338		30-JUL-15	Bray, Michael P (Michael)		59.04			Negotiable
360339		30-JUL-15	Lao, Richard S		45.33			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 19  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360340		30-JUL-15	Van Deusen, Scott A (Scott)		147.96			Negotiable
360341		30-JUL-15	Johnson, Susanne		63.39			Negotiable
360342		30-JUL-15	4IMPRINT, INC.		2,194.81			Negotiable
360343		30-JUL-15	ACCUZIP, INC.		1,424.04			Negotiable
360344		30-JUL-15	ACQUAZZINO, TONY		285.00			Negotiable
360345		30-JUL-15	AFLAC		314.54			Negotiable
360346		30-JUL-15	AFLAC		6,726.60			Negotiable
360347		30-JUL-15	AIRGAS, INC.		2,280.96			Negotiable
360348		30-JUL-15	ALPHA TRAFFIC SERVICES, INC.		920.00			Negotiable
360349		30-JUL-15	ALSTON & BIRD LLP		3,141.50			Negotiable
360350		30-JUL-15	AMERICAN TECHNOLOGIES, INC		12,673.74			Negotiable
360351		30-JUL-15	APPLIED INDUSTRIAL TECHNOLOGIES - CA		287.82			Negotiable

360352	30-JUL-15	LLC AQUA-METRIC SALES COMPANY	29,160.00	Negotiable
360353	30-JUL-15	ARCADIS U.S., INC.	6,630.00	Negotiable
360354	30-JUL-15	AT&T	5,173.14	Negotiable
360355	30-JUL-15	AT&T	1,439.85	Negotiable
360356	30-JUL-15	ATHENS SERVICES	977.25	Negotiable
360357	30-JUL-15	AVISTA TECHNOLOGIES, INC	8,324.74	Negotiable
360358	30-JUL-15	BATTERIES PLUS AND BATTERIES PLUS BULBS	370.47	Negotiable
360359	30-JUL-15	BERK, SUSAN	300.00	Negotiable
360360	30-JUL-15	BIGWIG MONSTER, LLC	3,750.00	Negotiable
360361	30-JUL-15	BIOMAGIC INC	3,361.79	Negotiable
360362	30-JUL-15	BLACK & VEATCH CORPORATION	298,692.25	Negotiable
360363	30-JUL-15	BRITHINEE ELECTRIC	10,455.01	Negotiable
360364	30-JUL-15	BURGESS, KEN	99.76	Negotiable
360365	30-JUL-15	BURLINGTON SAFETY LABORATORY OF CALIFORNIA INC	167.25	Negotiable
360366	30-JUL-15	BUSH & ASSOCIATES INC	3,884.00	Negotiable
360367	30-JUL-15	C WELLS PIPELINE MATERIALS INC	9,766.01	Negotiable
360368	30-JUL-15	CABELA'S MARKETING AND BRAND MANAGEMENT INC	54.82	Negotiable

IRWD Ledger  
 BANK: Bank of America N.A. Branch : Los Angeles  
 Bank Account Currency: USD ( US Dollar )  
 Payment Type: All

Payment Register For 01-JUL-15 To 31-JUL-15  
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 Display Supplier Address: No

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360369		30-JUL-15	CALIFORNIA BARRICADE INC		2,990.00			Negotiable
360370		30-JUL-15	CANON SOLUTIONS AMERICA, INC.		501.00			Negotiable
360371		30-JUL-15	CAPTIVE AUDIENCE MARKETING INC.		27.00			Negotiable
360372		30-JUL-15	CAROLLO ENGINEERS, INC		7,652.00			Negotiable
360373		30-JUL-15	CHIOU, MIRNG JANG		36.78			Negotiable
360374		30-JUL-15	COLONIAL LIFE & ACCIDENT INSURANCE CO.		1,136.96			Negotiable
360375		30-JUL-15	COMMERCIAL DOOR OF ORANGE COUNTY, INC.		2,263.00			Negotiable
360376		30-JUL-15	COUNTY OF ORANGE		26,265.00			Negotiable
360377		30-JUL-15	COX COMMUNICATIONS		3,408.56			Negotiable
360378		30-JUL-15	CREATIVE ALLIANCE GROUP LLC		4,564.41			Negotiable
360379		30-JUL-15	CREDENTIAL CHECK CORPORATION		596.32			Negotiable
360380		30-JUL-15	CSAC EXCESS INSURANCE AUTHORITY		367,427.00			Negotiable
360381		30-JUL-15	DMS FACILITY SERVICES, INC.		100.50			Negotiable
360382		30-JUL-15	DMS FACILITY SERVICES, INC.		16,380.00			Negotiable
360383		30-JUL-15	E.J. MEYER COMPANY, INC.		280,592.00			Negotiable
360384		30-JUL-15	E.J. MEYER COMPANY, INC.		14,768.00			Negotiable
360385		30-JUL-15	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.		12,100.00			Negotiable
360386		30-JUL-15	ENVIRONMENTAL SCIENCE ASSOCIATES		3,105.25			Negotiable
360387		30-JUL-15	EXECUTIVE LIGHTING & ELECTRIC		782.87			Negotiable
360388		30-JUL-15	FARRELL & ASSOCIATES		324.73			Negotiable
360389		30-JUL-15	FARWEST CORROSION CONTROL COMPANY		40,517.22			Negotiable
360390		30-JUL-15	FEDEX		445.51			Negotiable

IRWD Ledger  
 BANK: Bank of America N.A. Branch : Los Angeles  
 Bank Account Currency: USD ( US Dollar )  
 Payment Type: All

Payment Register For 01-JUL-15 To 31-JUL-15  
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 Display Supplier Address: No

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								

360391	30-JUL-15	FIDELITY SECURITY LIFE INSURANCE COMPANY	6,167.83	Negotiable
360392	30-JUL-15	FISHER SCIENTIFIC COMPANY LLC	2,176.94	Negotiable
360393	30-JUL-15	FOOTHILL/EASTERN TRANSPORTATION	112.40	Negotiable
360394	30-JUL-15	FRASCA, JOHNATHAN	49.88	Negotiable
360395	30-JUL-15	GM SAGER CONSTRUCTION CO, INC.	16,700.00	Negotiable
360396	30-JUL-15	GRAINGER	3,936.87	Negotiable
360397	30-JUL-15	GRAYBAR ELECTRIC COMPANY	3,139.50	Negotiable
360398	30-JUL-15	GRIFFIN DEWATERING CORPORATION	5,092.20	Negotiable
360399	30-JUL-15	H2O INNOVATION USA INC	3,299.40	Negotiable
360400	30-JUL-15	HAAKER EQUIPMENT COMPANY	2,433.67	Negotiable
360401	30-JUL-15	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY	132.24	Negotiable
360402	30-JUL-15	HDR ENGINEERING INC	14,604.56	Negotiable
360403	30-JUL-15	HELPMATES STAFFING SERVICES	21,982.68	Negotiable
360404	30-JUL-15	HENKELS AND MCCOY, INC	509.19	Negotiable
360405	30-JUL-15	HERNANDEZ, JONATHAN	35.12	Negotiable
360406	30-JUL-15	HILL BROTHERS CHEMICAL COMPANY	9,263.15	Negotiable
360407	30-JUL-15	HOME DEPOT USA INC	117.77	Negotiable
360408	30-JUL-15	HOME DEPOT USA INC	728.65	Negotiable
360409	30-JUL-15	IDENTICARD SYSTEMS WORLDWIDE	274.79	Negotiable
360410	30-JUL-15	IDEXX DISTRIBUTION, INC	1,098.04	Negotiable
360411	30-JUL-15	INDUSTRIAL METAL SUPPLY CO	296.31	Negotiable
360412	30-JUL-15	INFOSYS LIMITED	132,222.00	Negotiable
360413	30-JUL-15	IRELAND, INC.	4,212.00	Negotiable
360414	30-JUL-15	IRVINE PIPE & SUPPLY INC	2,058.26	Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 22  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360415		30-JUL-15	IRWD-PETTY CASH CUSTODIAN		1,385.12			Negotiable
360416		30-JUL-15	JACOBS, LOIS		349.50			Negotiable
360417		30-JUL-15	KENNY THE PRINTER		5,287.10			Negotiable
360418		30-JUL-15	KIM, JONG HO		25.98			Negotiable
360419		30-JUL-15	KLEINFELDER, INC.		14,613.62			Negotiable
360420		30-JUL-15	KPMG LLP		78,503.36			Negotiable
360421		30-JUL-15	L. G. SUPPLY COMPANY		522.29			Negotiable
360422		30-JUL-15	LA HABRA FENCE COMPANY INC		19,863.00			Negotiable
360423		30-JUL-15	LABELLE-MARVIN INC		2,607.50			Negotiable
360424		30-JUL-15	LANDCARE HOLDINGS, INC.		5,979.50			Negotiable
360425		30-JUL-15	LEIGHTON CONSULTING, INC.		712.40			Negotiable
360426		30-JUL-15	LI, SHENG		33.77			Negotiable
360427		30-JUL-15	LINKTURE CORP.		3,913.60			Negotiable
360428		30-JUL-15	LO, FRANK		481.04			Negotiable
360429		30-JUL-15	LU, ZHENGJIE		15.59			Negotiable
360430		30-JUL-15	LUBRICATION ENGINEERS, INC.		39.21			Negotiable
360431		30-JUL-15	MARVIN GARDENS LLC		2,593.70			Negotiable
360432		30-JUL-15	MEDORA CORPORATION		17,140.00			Negotiable
360433		30-JUL-15	MOBILE MODULAR MANAGEMENT CORPORATION		972.00			Negotiable
360434		30-JUL-15	MODERN WATER INC		1,085.81			Negotiable
360435		30-JUL-15	MUNICIPAL MAINTENANCE EQUIPMENT INC		445.64			Negotiable
360436		30-JUL-15	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		1,108,990.62			Negotiable
360437		30-JUL-15	MUTUAL PROPANE		167.24			Negotiable
360438		30-JUL-15	NELSON, LINDA		28.09			Negotiable
360439		30-JUL-15	NMG GEOTECHNICAL INC		1,411.40			Negotiable

360440	30-JUL-15	OCEAN BLUE ENVIRONMENTAL SERVICES INC		4,898.05	Negotiable
360441	30-JUL-15	OCTA		6,000.00	Negotiable
360442	30-JUL-15	OLIN CORPORATION		11,088.50	Negotiable
360443	30-JUL-15	ONESOURCE DISTRIBUTORS LLC		8,191.00	Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 23  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360444		30-JUL-15	ORANGE COUNTY AUTO PARTS CO		330.63			Negotiable
360445		30-JUL-15	PACIFIC PARTS & CONTROLS INC		719.24			Negotiable
360446		30-JUL-15	PACIFIC SALES		2,178.34			Negotiable
360447		30-JUL-15	PACIFIC TECHNICAL EQUIPMENT AND ENGINEERING, INC.		1,618.70			Negotiable
360448		30-JUL-15	PARKHOUSE TIRE INC		1,155.99			Negotiable
360449		30-JUL-15	PARKWAY LAWNMOWER SHOP		213.83			Negotiable
360450		30-JUL-15	PELICAN HEIGHTS ASSOCIATION		2,095.00			Negotiable
360451		30-JUL-15	POLLARDWATER.COM		348.72			Negotiable
360452		30-JUL-15	PRAXAIR		596.26			Negotiable
360453		30-JUL-15	DISTRIBUTION INC PRE-PAID LEGAL SERVICES INC		1,385.05			Negotiable
360454		30-JUL-15	PRIDEMARK CONTRACTORS INC		897.32			Negotiable
360455		30-JUL-15	PRUDENTIAL OVERALL SUPPLY		5,915.12			Negotiable
360456		30-JUL-15	PTI SAND & GRAVEL INC		1,047.08			Negotiable
360457		30-JUL-15	R & S SOIL PRODUCTS INC		842.40			Negotiable
360458		30-JUL-15	RICHARD C SLADE & ASSOCIATES LLC		18,494.00			Negotiable
360459		30-JUL-15	RITEWAY AUTO PAINT & BODYWORKS		3,928.84			Negotiable
360460		30-JUL-15	RMS ENGINEERING & DESIGN, INC.		640.00			Negotiable
360461		30-JUL-15	ROBERT HALF INTERNATIONAL, INC.		3,348.00			Negotiable
360462		30-JUL-15	SANTA ANA BLUE PRINT		939.46			Negotiable
360463		30-JUL-15	SANTA ANA WATERSHED PROJECT AUTHORITY		1,000.00			Negotiable
360464		30-JUL-15	SANTA MARGARITA FORD		1,188.53			Negotiable
360465		30-JUL-15	SCHORR, ANNE C		12.43			Negotiable
360466		30-JUL-15	SECURTEC DISTRICT PATROL, INC.		9,000.00			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 24  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360467		30-JUL-15	SHAMROCK SUPPLY CO INC		247.65			Negotiable
360468		30-JUL-15	SHERWIN WILLIAMS COMPANY		1,024.35			Negotiable
360469		30-JUL-15	SOUTH BAY FOUNDRY, INC		5,184.00			Negotiable
360470		30-JUL-15	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		5,282.15			Negotiable
360471		30-JUL-15	SOUTH COAST ANSWERING SERVICE		1,084.83			Negotiable
360472		30-JUL-15	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY		60,207.00			Negotiable
360473		30-JUL-15	SOUTHERN CALIFORNIA EDISON COMPANY		118,911.91			Negotiable
360474		30-JUL-15	SOUTHERN CALIFORNIA EDISON COMPANY		13,738.04			Negotiable
360475		30-JUL-15	SOUTHERN		224.50			Negotiable

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
			CALIFORNIA SECURITY CENTER, INC.					
360476	30-JUL-15		SPARKLETTS		281.08			Negotiable
360477	30-JUL-15		SPX CORP		1,354.36			Negotiable
360478	30-JUL-15		STANTEC CONSULTING SERVICES INC.		29,439.00			Negotiable
360479	30-JUL-15		STASIOR, MATTHEW		50.90			Negotiable
360480	30-JUL-15		Support Product Services, Inc.		1,016.40			Negotiable
360481	30-JUL-15		SYNAGRO-WWT, INC.		242,298.86			Negotiable
360482	30-JUL-15		TESTAMERICA LABORATORIES, INC		157.50			Negotiable
360483	30-JUL-15		THOMPSON INDUSTRIAL SUPPLY		960.12			Negotiable
360484	30-JUL-15		TRABUCO WOODS		397.11			Negotiable
360485	30-JUL-15		TRENCH PLATE RENTAL COMPANY		22,851.57			Negotiable
360486	30-JUL-15		TROPICAL PLAZA NURSERY INC		3,917.08			Negotiable
360487	30-JUL-15		TRUCPARCO		1,434.51			Negotiable
360488	30-JUL-15		TUTTLE-CLICK FORD LINCOLN		79,366.85			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 25  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
360489	30-JUL-15		U.S. HEALTHWORKS MEDICAL GROUP, P.C.		170.00			Negotiable
360490	30-JUL-15		UNITED PARCEL SERVICE INC		31.46			Negotiable
360491	30-JUL-15		UNITED SITE SERVICES OF CALIFORNIA INC		630.56			Negotiable
360492	30-JUL-15		URS CORPORATION		2,413.53			Negotiable
360493	30-JUL-15		US BANK NAT'L ASSOCIATION NORTH DAKOTA		58,106.60			Negotiable
360494	30-JUL-15		VA CONSULTING, INC		13,005.00			Negotiable
360495	30-JUL-15		VERIZON CALIFORNIA INC		617.82			Negotiable
360496	30-JUL-15		VERIZON WIRELESS SERVICES LLC		5,725.79			Negotiable
360497	30-JUL-15		VERTECH INDUSTRIAL SYSTEMS, LLC		8,563.58			Negotiable
360498	30-JUL-15		VWR INTERNATIONAL, LLC		1,453.72			Negotiable
360499	30-JUL-15		WALTERS WHOLESALE ELECTRIC		1,516.14			Negotiable
360500	30-JUL-15		WAXIE'S ENTERPRISES, INC		496.03			Negotiable
360501	30-JUL-15		WECK LABORATORIES INC		869.50			Negotiable
360502	30-JUL-15		WESTRIDGE APARTMENTS		1,325.96			Negotiable
Payment Document Subtotal:					8,814,775.72		4,781,408.73	

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
11060	06-JUL-15		BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	364.58			Negotiable
11061	06-JUL-15		BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	7,878.35			Negotiable
11062	06-JUL-15		SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	711.95			Negotiable
11063	06-JUL-15		US BANK NAT'L ASSOC N.DAKOTA	PO BOX 70870	1,590.45			Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 26  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
11064	06-JUL-15		BANK OF AMERICA	SAN FRANCISCO	1,294.54			Negotiable
11065	06-JUL-15		SUMITOMO MITSUI BANKING	NEW YORK	1,500,082.19			Negotiable

11066	06-JUL-15	CORPORATION SUMITOMO MITSUI BANKING	NEW YORK	67,979.07	Negotiable
11067	06-JUL-15	CORPORATION BANK OF AMERICA	SAN FRANCISCO	61,271.29	Negotiable
11068	06-JUL-15	US BANK NAT'L ASSOC N.DAKOTA	PO BOX 70870	79,065.59	Negotiable
11069	07-JUL-15	CALPERS	SACRAMENTO 1	375,274.16	Negotiable
11070	07-JUL-15	YORK INSURANCE SERVICES GROUP INC - CA	PAY	6,538.75	Negotiable
11071	10-JUL-15	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	9,648.43	Negotiable
11072	13-JUL-15	FILANC-BALFOUR BEATTY JV	WEST COVINA	3,648,957.96	Negotiable
11073	13-JUL-15	FILANC-BALFOUR BEATTY JV	ESR 211084000	405,439.77	Negotiable
11074	14-JUL-15	YORK INSURANCE SERVICES GROUP INC - CA	PAY	7,597.74	Negotiable
11075	15-JUL-15	PCL CONSTRUCTION, INC.	ACCT 6971821722	2,554,524.90	Negotiable
11076	15-JUL-15	PCL CONSTRUCTION, INC.	ESR 141511.1	283,836.10	Negotiable
11077	23-JUL-15	ACE-SOLUTIONS GROUP INC	PAY	847.75	Negotiable
11078	23-JUL-15	LIU, XUEDONG	PAY	13.40	Negotiable
11079	28-JUL-15	YORK INSURANCE SERVICES GROUP INC - CA	PAY	22,692.94	Negotiable
11080	28-JUL-15	YORK INSURANCE SERVICES GROUP INC - CA	PAY	22,022.34	Negotiable
11081	28-JUL-15	YORK INSURANCE SERVICES GROUP INC - CA	PAY	1,000.00	Negotiable
11082	28-JUL-15	CALPERS	SACRAMENTO	85,417.98	Negotiable
11083	28-JUL-15	INTERNAL REVENUE SERVICE	FRESNO	166,449.60	Negotiable

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 27  
 Bank Account Currency: USD ( US Dollar ) Payment Currency: USD ( US Dollar )  
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
11084		28-JUL-15	FRANCHISE TAX BOARD	SACRAMENTO	44,603.51			Negotiable
11085		28-JUL-15	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	10,148.20			Negotiable
11086		28-JUL-15	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	500.17			Negotiable
11087		28-JUL-15	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,246.76			Negotiable
11088		28-JUL-15	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	10,862.52			Negotiable
11089		28-JUL-15	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	99,344.06			Negotiable
11090		28-JUL-15	CALPERS	SACRAMENTO	4,926,104.00			Negotiable
11091		28-JUL-15	INTERNAL REVENUE SERVICE	FRESNO	161,911.85			Negotiable
11092		28-JUL-15	FRANCHISE TAX BOARD	SACRAMENTO	43,607.88			Negotiable
11093		28-JUL-15	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	9,797.80			Negotiable
11094		28-JUL-15	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	500.17			Negotiable
11095		28-JUL-15	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,074.26			Negotiable
11096		28-JUL-15	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	10,621.56			Negotiable
11097		28-JUL-15	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	97,427.23			Negotiable
11098		28-JUL-15	CALPERS	SACRAMENTO	85,105.94			Negotiable
11099		28-JUL-15	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	574,167.40			Negotiable
11100		28-JUL-15	SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	2,876.71			Negotiable
11101		28-JUL-15	U.S. BANK NATIONALPAY		540.33			Negotiable



Exhibit "E"

**IRWD Gov Code 53065.5 Disclosure Report**

Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.  
01-JUL-15 to 31-JUL-15

NAME	CHECK NO.	CHECK DATE	TRANSACTION	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Ahumada, Paul	359882	2-Jul-15	102.60	Other(Misc)	Safety shoes allowance
Bonkowski, Leslie	360179	16-Jul-15	271.38	Other(Misc)	Meeting supplies
Brunning, Tony	359888	9-Jul-15	300.00	Membership/Certification	Wastewater Treatment Plant Operator Grade III Certification
Chaney, Dave	359880	2-Jul-15	350.00	Other(Misc)	Wastewater Treatment Plant Operator Exam Fee
Hamer, James	360333	30-Jul-15	156.00	Membership/Certification	CWEA membership fee
Hankla, Jeremy	360196	23-Jul-15	164.00	Membership/Certification	CWEA membership fee
Hoffman, Mike	360181	16-Jul-15	156.00	Membership/Certification	CWEA membership fee
Inada, Thomas	359884	2-Jul-15	162.00	Other(Misc)	Safety shoes allowance
Kanoff, Debbie	360194	23-Jul-15	146.88	Other(Misc)	Meeting supplies
Kessler, Christian	360191	23-Jul-15	162.00	Other(Misc)	Safety shoes allowance
LaMar, Steve	360184	16-Jul-15	411.06	Lodging/Renaissance Hotel	Washington, DC., meeting with legislative representatives - 6/9/15
Matheis, Mary Aileen	360180	16-Jul-15	301.26	Lodging/Hotel Nikko	Calif. Water Law & Policy Conf., San Francisco, CA - 6/14/15
Matheis, Mary Aileen	360180	16-Jul-15	301.26	Lodging/Hotel Nikko	Calif. Water Law & Policy Conf., San Francisco, CA - 6/15/15
McBride, Damien	360193	23-Jul-15	156.00	Membership/Certification	CWEA membership fee
Nguyen, Sunny	359883	2-Jul-15	173.99	Other(Misc)	Safety shoes allowance
Nicholson, Darin	359891	9-Jul-15	188.99	Other(Misc)	Safety shoes allowance
Perez, Cesar	360332	30-Jul-15	156.00	Membership/Certification	CWEA membership fee
Perez, Cesar	360332	30-Jul-15	130.00	Membership/Certification	First Responder & Maintenance Tech III Certification
Rios, Belisario	360190	23-Jul-15	162.00	Other(Misc)	Safety shoes allowance
Sinclair, Todd	360198	23-Jul-15	165.00	Membership/Certification	Backflow Tester certification
Van Deusen, Scott	360340	30-Jul-15	147.96	Other(Misc)	Safety shoes allowance
Weghorst, Paul	359894	9-Jul-15	141.04	Other(Misc)	Operating supplies - Ipad Air 2 keyboard
<b>Total Amount:</b>			<b>\$ 4,405.02</b>		

August 24, 2015

Prepared by: C. Kessler/K. Lew

Submitted by: K. Burton *RKM*

Approved by: Paul Cook *[Signature]*

## CONSENT CALENDAR

### PLANNING AREA 51 HERITAGE FIELDS CAPITAL FACILITIES

#### SUMMARY:

Heritage Fields El Toro, LLC (Heritage Fields) is proceeding with development of Districts 3 and 4 within Planning Area (PA) 51 (Great Park), which includes the construction of streets, storm drains, domestic water, sewer, and recycled water improvements. As part of the development, Heritage Fields will construct IRWD capital facilities under a proposed Supplemental Reimbursement Agreement (SRA). Staff recommends that the Board:

- Authorize the General Manager to execute an SRA with Heritage Fields for PA 51 Districts 3, 4 and 5, Irvine Boulevard and Marine Way Capital Facilities, and
- Authorize the General Manager to approve Expenditure Authorizations with adjustments to splits within Improvement Districts (IDs) for Projects 11668, 30388, 11842, 31842, 11806 and 31806.

#### BACKGROUND:

Heritage Fields is moving forward with the District 3 and District 4 development within PA 51. District 3 is bisected by Marine Way and is bound by Barranca Parkway to the north and Alton Parkway to the southeast. District 4 is bound by Irvine Boulevard to the north, Cadence to the south, Bosque to the west and "Z" Street to the east. The project location map is shown as Exhibit "A". As part of this development, Heritage Fields will design and construct IRWD's domestic water, sewer, and recycled water capital improvements. The required IRWD capital facilities are documented in the PA 51 Sub-Area Master Plan Update, as prepared by RBF Consulting in September 2011.

The design and construction of the IRWD facilities will be performed under the terms of the Master Reimbursement Agreement between Heritage Fields and IRWD approved by the Board in August 2012, and as further defined in the SRA. The SRA, which covers all of the remaining capital facilities in Districts 3, 4 and 5, Irvine Boulevard and Marine Way, is attached as Exhibit "B" and has been reviewed by IRWD's legal counsel.

#### Marine Way Segment I Improvements:

The Marine Way Segment I Improvements consist of installing approximately 3,100 feet of 12-inch diameter domestic water pipeline and 3,000 feet of 12-inch recycled water pipeline within Marine Way, extending east from Ridge Valley. Heritage Fields retained RBF to prepare the Marine Way Segment I Improvement plans and it received bids from four contractors. Heritage Fields recommends awarding the construction contract to the lowest bidder, FYDAQ, for a bid amount of \$362,447.80 as shown in Exhibit "C". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, and field archeological / paleontological monitoring. Staff has reviewed the

consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Marine Way Segment I costs is shown below.

Design (RBF)	\$ 26,936.00
Design Change Order #1	\$ 8,700.00
Construction (FYDAQ)	\$362,447.80
Geotechnical Services (Engeo)	\$ 33,000.00
Construction Engineering/Surveying (RBF)	\$ 29,500.00
Field Archeo / Paleo Monitoring (LSA)	\$ 7,120.00
Heritage Fields Administration Fee (1%)	<u>\$ 3,624.48</u>
	\$471,328.28

Marine Way Segment II Improvements:

The Marine Way Segment II Improvements consist of installing approximately 1,600 feet of 12-inch diameter domestic water pipeline and 1,650 feet of 16-inch recycled water pipeline within Marine Way between Barranca Parkway and Alton Parkway. Heritage Fields retained Hunsaker & Associates to prepare the Marine Way Segment II Improvement plans. Heritage Fields received five bids and the low bid for the IRWD portion was from Leatherwood in the amount of \$267,439.31; however, the L&S bid in the amount of \$276,925.36 was selected because it is a part of the lowest bid for the overall project. The Bid Summary is shown in Exhibit "D". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, and field archeological / paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Marine Way Segment II Improvement costs is shown below.

Design (Hunsaker)	\$ 30,650.00
Construction (L&S)	\$276,925.36
Geotechnical Services (Engeo)	\$ 12,000.00
Construction Engineering/Surveying (Hunsaker)	\$ 14,350.00
Field Archeo / Paleo Monitoring (LSA)	\$ 5,920.00
Heritage Fields Administration Fee (1%)	<u>\$ 2,769.25</u>
	\$342,614.61

Alton Parkway Interceptor Sewer I Improvements:

The Alton Parkway Interceptor Sewer I Improvements consist of installing approximately 200 feet of 12-inch diameter domestic water pipeline, 2,500 feet of 18-inch diameter sewer pipeline, 200 feet of 10-inch diameter recycled water pipeline and 250 feet of 16-inch recycled water pipeline within Alton Parkway extending from Technology Drive to Muirlands Drive. Heritage Fields retained Hunsaker & Associates to prepare the Alton Parkway Interceptor Sewer I plans and it received bids from five contractors. Heritage Fields recommends awarding the construction contract to the lowest bidder, L&S, for a bid amount of \$1,341,913.95 as shown in Exhibit "E". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, and field archeological / paleontological monitoring. Staff has reviewed the consultant proposals and the construction

bids and found the amounts to be acceptable. A summary of the Alton Parkway Interceptor Sewer I Improvement costs is shown below.

Design (Hunsaker)	\$ 43,860.00
Construction (L&S)	\$1,341,913.95
Geotechnical Services (Engeo)	\$ 78,000.00
Construction Engineering/Surveying (Hunsaker)	\$ 34,150.00
Field Archeo / Paleo Monitoring (LSA)	\$ 10,720.00
Heritage Fields Administration Fee (1%)	<u>\$ 13,419.14</u>
	\$1,522,063.09

Alton Parkway Interceptor Sewer II Improvements:

The Alton Parkway Interceptor Sewer II Improvements consist of installing approximately 2,000 feet of 18-inch diameter sanitary sewer in Marine Way between Barranca Parkway and Alton Parkway and approximately 1,200 feet of 24-inch diameter sanitary sewer between Alton Parkway and the Interstate 5 Freeway. Heritage Fields retained Hunsaker to prepare the Alton Parkway Interceptor Sewer II Improvements plans and they received bids from four contractors. Heritage Fields recommends awarding the construction contract to the lowest bidder, FYDAQ, for a bid amount of \$1,207,498.00 as shown in Exhibit "F". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, and field archeological / paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Alton Parkway Interceptor Sewer II Improvement costs is shown below.

Design (Hunsaker)	\$ 60,950.00
Construction (FYDAQ)	\$1,207,498.00
Construction Change Order No.1	\$ 46,487.50
Construction Change Order No.2	\$ 13,500.00
Geotechnical Services (Engeo)	\$ 36,000.00
Construction Engineering/Surveying (Hunsaker)	\$ 40,250.00
Field Archeo/Paleo Monitoring (LSA)	\$ 9,520.00
Heritage Fields Administration Fee (1%)	<u>\$ 12,674.86</u>
	\$1,426,880.36

Cadence from Bosque to "Z" Street Improvements:

The Cadence from Bosque to "Z" Street Improvements (Cadence Improvement) consists of installing approximately 3,800 feet of 12-inch diameter sewer. Heritage Fields retained Hunsaker & Associates to prepare Cadence Improvement plans and they received bids from four contractors. Heritage Fields recommends awarding the construction contract to the lowest bidder, FYDAQ, with a bid amount of \$715,565.51 as shown in Exhibit "G". In addition, Heritage Fields has received consultant proposals for geotechnical services, surveying, and field archeological / paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Cadence

Improvement costs is shown as follows.

Design (Hunsaker)	\$ 75,500.00
Construction (FYDAQ)	\$715,565.51
Geotechnical Services (Engeo)	\$ 66,500.00
Construction Engineering/Surveying (Hunsaker)	\$ 35,100.00
Field Archeo / Paleo Monitoring (LSA)	\$ 14,560.00
Heritage Fields Administration Fee (1%)	<u>\$ 7,155.66</u>
	\$914,381.17

FISCAL IMPACTS:

Projects 11668 (4153), 30388 (4147), 11842 (6086), 31842 (6087), 11806 (5816), 21806 (5817), 31806 (5818), 21219 (6048), 21216 (6048) and 21213 (5535) are included in the FY 2015-16 Capital Budget. Expenditure Authorization approval for Projects 21213 (5535), 21806 (5817), 21219 (6048) and 21216 (6048) will be requested at the General Manager approval level. Expenditure Authorization approval for Projects 11668 (4153), 30388 (4147), 11842 (6086), 31842 (6087), 11806 (5816) and 31806 (5818) require Board approval because of adjustments to splits within IDs. In an effort to better manage budgets, staff is adjusting the ID splits within PA 51 to more accurately reflect the actual ID cost responsibilities. The revised ID splits are shown in Expenditure Authorizations as shown in Exhibit "H".

ENVIRONMENTAL COMPLIANCE:

Construction of capital domestic water, sewer, and recycled water facilities for the Great Park Development is subject to CEQA. In conformance with the California Code of Regulations Title 14, Chapter 3, Article 7 an Environmental Impact Report was certified by the City of Irvine, the lead agency on April 4, 2012 (SCH# 2002101020).

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on August 20, 2015.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A SUPPLEMENTAL REIMBURSEMENT AGREEMENT WITH HERITAGE FIELDS EL TORO LLC. FOR PLANNING AREA 51 DISTRICTS 3, 4 AND 5, IRVINE BOULEVARD AND MARINE WAY CAPITAL FACILITIES AND AUTHORIZE THE GENERAL MANAGER TO APPROVE EXPENDITURE AUTHORIZATIONS FOR PROJECTS 11668 (4153), 30388 (4147), 11842 (6086), 31842 (6087), 11806 (5816) AND 31806 (5818).

LIST OF EXHIBITS:

- Exhibit "A" – Location Map
- Exhibit "B" – Supplemental Reimbursement Agreement with Heritage Fields for PA 51 District 3, 4 and 5, Irvine Boulevard and Marine Way Capital Facilities
- Exhibit "C" – Bid Summary, Marine Way Segment I Improvements

Exhibit "D" – Bid Summary, Marine Way Segment II Improvements

Exhibit "E" – Bid Summary, Alton Parkway Interceptor Sewer I Improvements

Exhibit "F" – Bid Summary, Alton Parkway Interceptor Sewer II Improvements

Exhibit "G" – Bid Summary, Cadence from Bosque to "Z" Street Improvements

Exhibit "H" – Expenditure Authorizations

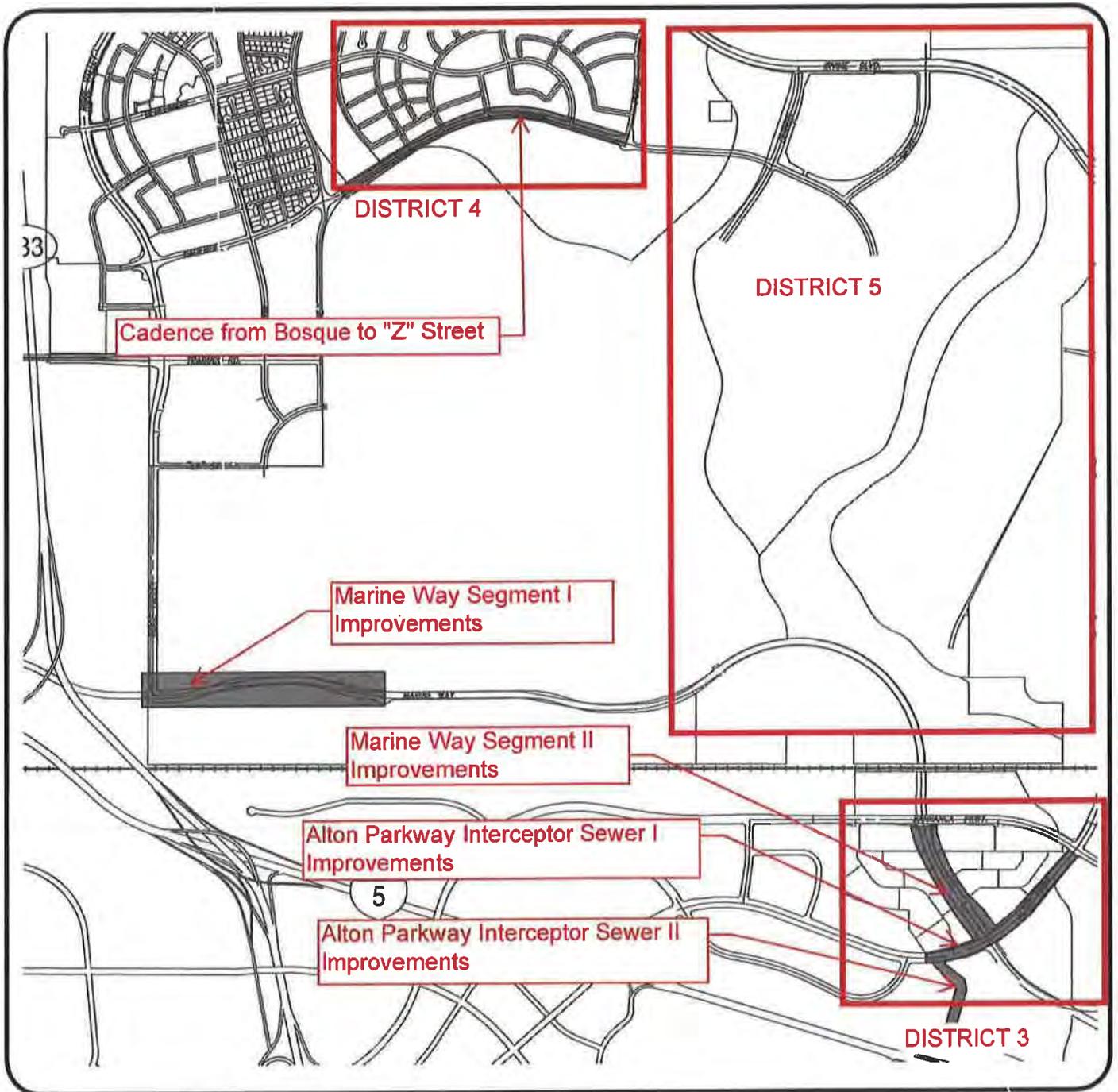


Exhibit A - Location Map

# EXHIBIT "B"

## EXHIBIT "A" to Reimbursement Agreement

### SUPPLEMENTAL REIMBURSEMENT AGREEMENT BY AND BETWEEN IRVINE RANCH WATER DISTRICT AND HERITAGE FIELDS EL TORO, LLC

This SUPPLEMENTAL REIMBURSEMENT AGREEMENT ("Agreement") is entered into as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between Irvine Ranch Water District, a California water district formed and existing pursuant to the California Water District Law of the State of California ("IRWD"), and Heritage Fields El Toro, LLC, a Delaware limited liability company ("COMPANY"). All capitalized terms used herein and not otherwise defined shall have the meanings given such terms in the Reimbursement Agreement.

WHEREAS, IRWD and COMPANY have previously entered into that certain Reimbursement Agreement dated \_\_\_\_\_ ("Reimbursement Agreement") respecting construction of Capital Facilities; and

WHEREAS, said Reimbursement Agreement made reference to the fact that certain supplemental agreements would be entered into by the parties regarding construction of Capital Facilities and reimbursement therefor consistent with the provisions of said Reimbursement Agreement; and

WHEREAS, the parties now wish to enter this Agreement regarding the construction of Capital Facilities described below, subject to all of the terms of the Reimbursement Agreement, except as provided herein.

NOW, THEREFORE, the parties agree, in consideration of the mutual promises and covenants hereinafter set forth, do agree as follows:

1. Except as provided herein, the parties hereby incorporate by reference all of the terms and conditions of the Reimbursement Agreement into this Agreement.

2. The name of the Project to which this Agreement pertains is: Planning Area 51, Great Park Neighborhoods, District 3, 4, 5, Irvine Boulevard, and Marine Way from the State Route 133 to Great Park Boulevard Domestic Water, Sewer, and Recycled Water Capital Improvements.

The Project is depicted on Exhibit 1 attached to this Agreement.

3. The Capital Facilities to be constructed pursuant to this Agreement are as follows: Approximately 12,800 linear feet of 12-inch domestic water, 12,800 linear feet of 12-inch to 24-

inch sewer, and 22,000 linear feet of 6-inch to 24-inch recycled water pipelines as shown in Exhibit 1.

4. The total costs for the Capital Facilities shall include, but not limited to, the actual costs for construction, surveying, compaction testing, permits, construction bonds, legal fees and an administration fee equal to one percent (1%) of the actual cost of construction (all such actual costs are collectively referred to as the "Costs"). The estimated amount of the Costs is \$12,000,000.

5. The following special terms apply to the construction of the Capital Facilities under this Agreement and supersede the provisions of the original Reimbursement Agreement referenced above: None.

6. In accordance with Section 10 of the Reimbursement Agreement, COMPANY is executing concurrently herewith an Assignment Agreement in the form of Exhibit 2, to be effective upon the Effective Date specified in the Assignment Agreement.

IN WITNESS WHEREOF, the parties have entered this Agreement as of the date set forth above.

IRVINE RANCH WATER DISTRICT

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

[SIGNATURES CONTINUED]

**HERITAGE FIELDS EL TORO, LLC,**  
a Delaware limited liability company

**By: Heritage Fields El Toro Sole Member LLC,**  
a Delaware limited liability company  
Its: Sole Member

**By: Heritage Fields LLC,**  
a Delaware limited liability company  
Its: Sole Member

**By: Lennar Heritage Fields, LLC,**  
a California limited liability company  
Its: Administrative Member

**By: Lennar Homes of California, Inc.,**  
a California corporation  
Its: Sole Member

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

**Print Name:** \_\_\_\_\_

**Print Title:** \_\_\_\_\_

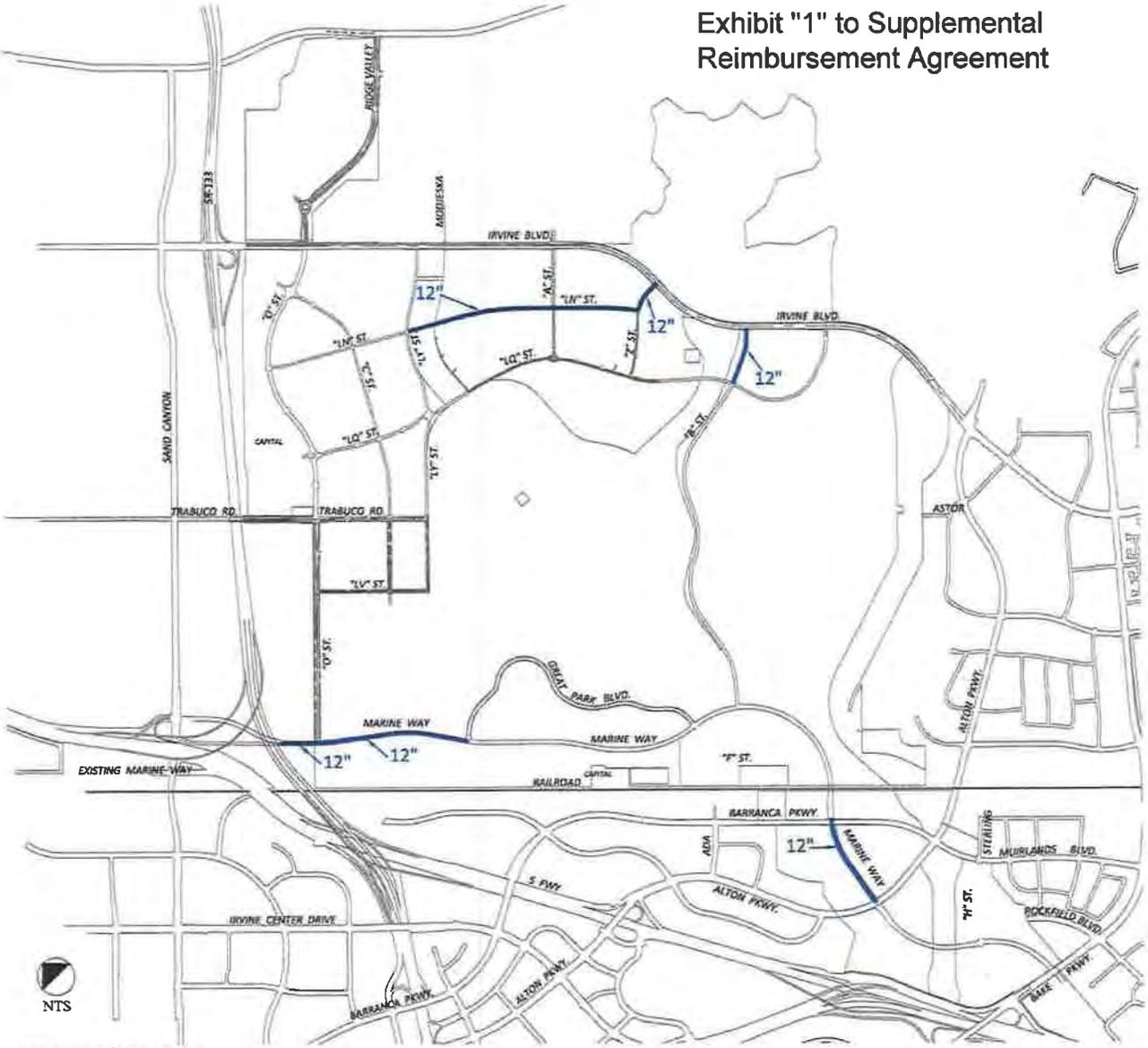
# Exhibit "1" to Supplemental Reimbursement Agreement



## CAPITAL DOMESTIC WATER

### LEGEND

 Capital Domestic Water



F:\0273\Engineering\04\_Projects\04\_Capital Improvements 2015\Capital Imp - DW.dwg

Prepared By:  Hunsaker & Associates Prepared For:  Great Park Neighborhoods

6000 4000 2000 0 1000 2000  
INCHES

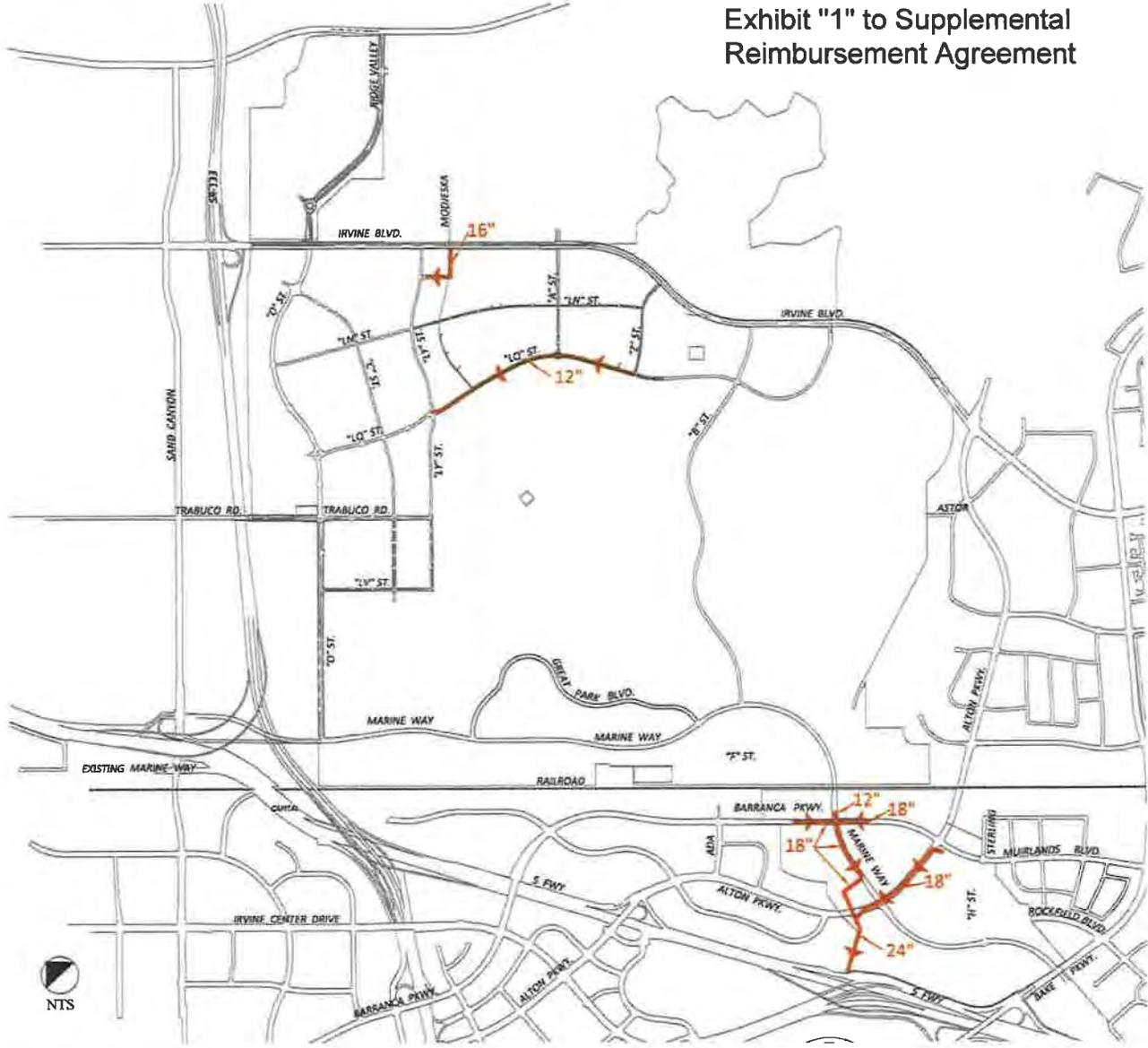
Exhibit "1" to Supplemental Reimbursement Agreement



CAPITAL SANITARY SEWER

LEGEND

- Capital Sewer
- ▶ Direction of Flow



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Prepared By: Hunsaker & Associates Prepared For: Great Park Neighborhoods

6000 4000 FEET 2000 0 1000 2000  
INCHES

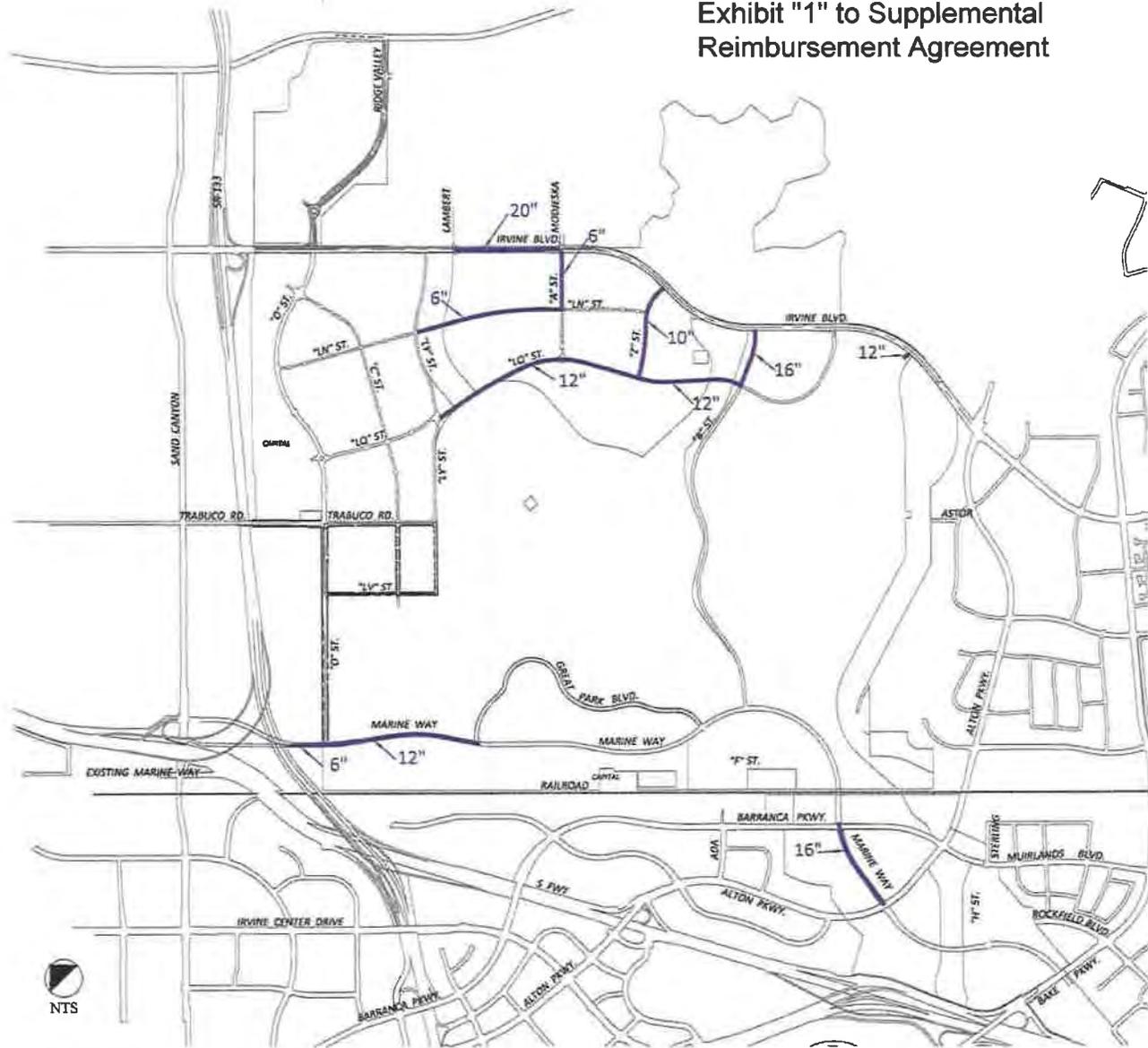
Exhibit "1" to Supplemental Reimbursement Agreement



CAPITAL RECYCLED WATER

LEGEND

— Capital Recycled Water



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Prepared By: Hunsaker & Associates  
 Prepared For: Great Park Neighborhoods

6000 4000 2000 0 1000 2000  
 FEET  
 INCHES

EXHIBIT "2"  
to  
Supplemental Reimbursement Agreement

Assignment Agreement

This Assignment Agreement is made as of \_\_\_\_\_, 20\_\_, by and between HERITAGE FIELDS EL TORO, LLC, a Delaware limited liability company ("Assignor"), to IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law of the State of California ("Assignee") based upon the following recitals:

A. Assignor has previously (or will, prior to the Effective Date hereof, have) entered into that certain Construction Contract to the Project and Capital Facilities identified in Schedule A hereto (the "Construction Contract").

B. Assignee desires to acquire (I) Assignor's right, title and interest in and to the Capital Facilities constructed under the Construction Contract, and (II) the warranty rights of Assignor as to the Capital Facilities under the Construction Contract, and Assignor desires to assign such rights to Assignee.

NOW, THEREFORE, in consideration of the foregoing, the covenants and agreements contained herein and other valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. ASSIGNMENT. Effective upon the date specified in Section 2 hereof (the "Effective Date"), Assignor assigns and transfers to Assignee all of Assignor's right, title, claim and interest in and to (a) the Capital Facilities constructed pursuant to the Construction Contract, and (b) the warranties and guarantees of contractor as to the Capital Facilities constructed pursuant to the Construction Contract. This Assignment is made by Assignor pursuant to the provisions of Section 10, entitled "Assignment of Interest", contained in that certain Reimbursement Agreement between Assignor and Assignee dated as of \_\_\_\_\_.

2. EFFECTIVE DATE. The Effective Date shall be the date of the filing of the Notice of Completion for the Construction Contract unless a different date is inserted in the following space: \_\_\_\_\_.

3. TRANSFER OF DOCUMENTATION. On or prior to the Effective Date, Assignor shall provide Assignee with a copy of the Construction Contract.

**IN WITNESS WHEREOF, Assignor has executed this Assignment Agreement as of the date first above written.**

**ASSIGNOR:**

**HERITAGE FIELDS EL TORO, LLC,  
a Delaware limited liability company**

**By: Heritage Fields El Toro Sole Member LLC,  
a Delaware limited liability company  
Its: Sole Member**

**By: Heritage Fields LLC,  
a Delaware limited liability company  
Its: Sole Member**

**By: Lennar Heritage Fields, LLC,  
a California limited liability company  
Its: Administrative Member**

**By: Lennar Homes of California, Inc.,  
a California corporation  
Its: Sole Member**

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

**Print Name: \_\_\_\_\_**

**Print Title: \_\_\_\_\_**

Schedule A  
to  
Assignment Agreement

This Schedule A to Assignment Agreement relates to the assignment of certain matters pursuant to the Supplemental Reimbursement Agreement between Assignor and Assignee dated \_\_\_\_\_ ("Supplemental Reimbursement Agreement").

Insert name of Project from Section 2 of Supplemental Reimbursement Agreement:  
Planning Area 51, Great Park Neighborhoods, District 3, 4, 5, Irvine Boulevard, and Marine Way from the State Route 133 to Great Park Boulevard Domestic Water, Sewer, and Recycled Water Capital Improvements.

Insert description of Capital Facilities from Section 3 of Supplemental Reimbursement Agreement: Approximately 12,800 linear feet of 12-inch domestic water, 12,800 linear feet of 12-inch to 24-inch sewer, and 22,000 linear feet of 6-inch to 24-inch recycled water pipelines.

Contractor's Name: \_\_\_\_\_

License No.: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Contact Person: \_\_\_\_\_

# EXHIBIT "C"

BD 09READ

**MARINE WAY STAGE 1 - WET UTILITY IMPROVEMENTS**  
From Ridge Valley Street to 3007 East  
COI Perm # 554779-MCE  
IRWD CODE #0028

Item	Description	Estimated Quantity	Unit	BROUZEK & EBT		FYDAG (LOW BID-CIP RW & DW)		LEATHERWOOD		L&S		KENNEDY	
				Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
<p><b>I. BASE CONTRACT-DOMESTIC &amp; RECYCLED WATER AND SEWER</b></p> <p><b>A. GENERAL</b></p>													
1.	MOBILIZATION (NOT TO EXCEED 2% OF CONTRACT PRICE (SECTIONS II, A-D)	1	LS	\$ 8,000.00	\$ 8,000.00	\$ 1,200.00	\$ 1,200.00	\$ 10,000.00	\$ 10,000.00	\$ 12,500.00	\$ 12,500.00	\$ 10,000.00	\$ 10,000.00
2.	DEVELOP CONSTRUCTION WATER (SECTIONS II, A-D)	1	LS	\$ 1,800.00	\$ 1,800.00	\$ 1,200.00	\$ 1,200.00	\$ 1,000.00	\$ 1,000.00	\$ 2,500.00	\$ 2,500.00	\$ 2,000.00	\$ 2,000.00
3.	STORM WATER POLLUTION PREVENTION PLAN & BMPs (SECTIONS II, A-D)	1	LS	\$ 1,600.00	\$ 1,600.00	\$ 1,200.00	\$ 1,200.00	\$ 1,000.00	\$ 1,000.00	\$ 2,000.00	\$ 2,000.00	\$ 4,000.00	\$ 4,000.00
4.	PAYMENT AND PERFORMANCE BONDS (SECTIONS II, A-D)	1	LS	\$ 6,400.00	\$ 6,400.00	\$ 5,420.00	\$ 5,420.00	\$ 7,320.00	\$ 7,320.00	\$ 9,600.00	\$ 9,600.00	\$ 11,000.00	\$ 11,000.00
5.	TRAFFIC CONTROL STREET SWEEPING (SECTIONS II, A-D)	1	LS	\$ 1,600.00	\$ 1,600.00	\$ 2,000.00	\$ 2,000.00	\$ 1,900.00	\$ 1,900.00	\$ 15,000.00	\$ 15,000.00	\$ 4,000.00	\$ 4,000.00
6.	EXTRACTION SYSTEM RAW WATER PROTECTION (MAINTENANCE) (SECTIONS II, A-D)	1	LS	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 2,400.00	\$ 500.00	\$ 500.00	\$ 11,500.00	\$ 11,500.00	\$ 10,000.00	\$ 10,000.00
<b>GENERAL SUBTOTAL (SECTION I-A)</b>					\$ 21,800.00		\$ 13,420.80		\$ 21,826.00		\$ 83,400.00		\$ 48,000.00
<b>II. DOMESTIC WATER IMPROVEMENTS</b>													
7.	REMOVE TEMP. FLUSH-OUT ASSEMBLY AND JOIN EXIST. 12" PVC DW LINE	1	EA	\$ 3,000.00	\$ 3,000.00	\$ 1,500.00	\$ 1,500.00	\$ 3,000.00	\$ 3,000.00	\$ 3,200.00	\$ 3,200.00	\$ 3,600.00	\$ 3,500.00
8.	INSTALL 4" PURPLE PVC AWWA C-900 (DR14) PER IRWD STD. W-17	-	LF	\$ 35.00	\$ -	\$ 38.00	\$ -	\$ 36.00	\$ -	\$ 40.00	\$ -	\$ 45.00	\$ -
9.	INSTALL 12" PURPLE PVC AWWA C-900 (DR14) PER IRWD STD. W-17	3,032	LF	\$ 48.00	\$ 138,440.00	\$ 40.00	\$ 121,280.00	\$ 47.00	\$ 142,504.00	\$ 80.00	\$ 161,920.00	\$ 55.00	\$ 168,780.00
10.	INSTALL 4" GV CL-150B (FE X PO) & VALVE BOX PER IRWD STD. W-22	-	EA	\$ 1,500.00	\$ -	\$ 1,453.00	\$ -	\$ 1,600.00	\$ -	\$ 1,430.00	\$ -	\$ 840.00	\$ -
11.	INSTALL 12" BV CL-150B (FE X FE) & VALVE BOX PER IRWD STD. W-22	1	EA	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 705.00	\$ 705.00	\$ 200.00	\$ 200.00	\$ 300.00	\$ 300.00
12.	INSTALL 4" DI ADAPTER (FE X PO)	15	EA	\$ 360.00	\$ 5,400.00	\$ 1,000.00	\$ 18,000.00	\$ 200.00	\$ 4,950.00	\$ 800.00	\$ 7,600.00	\$ 500.00	\$ 7,500.00
13.	INSTALL 12" DI ADAPTER (FE X PO)	1	EA	\$ 850.00	\$ 850.00	\$ 1,000.00	\$ 1,000.00	\$ 910.00	\$ 910.00	\$ 980.00	\$ 980.00	\$ 935.00	\$ 935.00
14.	INSTALL 12X12X4" DI TEE (FE X FE) & THRUST BLOCK PER IRWD STD. W-16	3	EA	\$ 900.00	\$ 2,700.00	\$ 1,000.00	\$ 3,000.00	\$ 750.00	\$ 2,250.00	\$ 860.00	\$ 2,580.00	\$ 925.00	\$ 2,715.00
15.	INSTALL 12X12X6" DI TEE (FE X FE) & THRUST BLOCK PER IRWD STD. W-16	2	EA	\$ 980.00	\$ 1,960.00	\$ 1,000.00	\$ 2,000.00	\$ 788.00	\$ 1,576.00	\$ 1,000.00	\$ 2,000.00	\$ 950.00	\$ 1,900.00
16.	INSTALL 12X12X8" DI TEE (FE X FE) & THRUST BLOCK PER IRWD STD. W-16	1	EA	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 965.00	\$ 965.00	\$ 1,060.00	\$ 1,060.00	\$ 1,100.00	\$ 1,100.00
17.	INSTALL 4" BLIND FLANGE PLUG & THRUST BLOCK PER IRWD STD. W-16	1	EA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18.	INSTALL TEMP. FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	2	EA	\$ 1,800.00	\$ 3,600.00	\$ 2,000.00	\$ 4,000.00	\$ 1,810.00	\$ 3,620.00	\$ 1,800.00	\$ 3,600.00	\$ 3,500.00	\$ 7,000.00
19.	INSTALL 1" AIR-VAC ASSEMBLY PER IRWD STD. DWG. W-8 (SHORT SIDE OF STREET)	1	EA	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,950.00	\$ 3,950.00	\$ 1,000.00	\$ 1,000.00
20.	INSTALL 1" AIR-VAC ASSEMBLY PER IRWD STD. DWG. W-8 (LONG SIDE OF STREET)	1	EA	\$ 6,400.00	\$ -	\$ 7,962.00	\$ -	\$ 7,260.00	\$ -	\$ 6,200.00	\$ -	\$ 6,000.00	\$ -
21.	INSTALL COMMERCIAL FIRE HYDRANT PER IRWD STD. DWG. W-8 (SHORT SIDE OF STREET)	1	EA	\$ 6,400.00	\$ -	\$ 9,162.00	\$ -	\$ 8,400.00	\$ -	\$ 7,300.00	\$ -	\$ 5,500.00	\$ -
22.	INSTALL COMMERCIAL FIRE HYDRANT PER IRWD STD. DWG. W-8 (LONG SIDE OF STREET)	1	EA	\$ 6,400.00	\$ -	\$ 9,162.00	\$ -	\$ 8,400.00	\$ -	\$ 7,300.00	\$ -	\$ 5,500.00	\$ -
<b>DOMESTIC WATER IMPROVEMENTS - SUBTOTAL (SECTION I-B)</b>					\$ 175,148.00		\$ 167,624.00		\$ 187,874.00		\$ 234,400.00		\$ 202,380.00
<b>III. RECYCLED WATER IMPROVEMENTS</b>													
23.	REMOVE BLIND FLANGE	2	EA	\$ 1,600.00	\$ 3,200.00	\$ 1,600.00	\$ 3,200.00	\$ 1,400.00	\$ 2,800.00	\$ 2,200.00	\$ 4,400.00	\$ 2,000.00	\$ 4,000.00
24.	REMOVE TEMP. FLUSH-OUT ASSEMBLY AND JOIN EXIST. 12" PVC RW LINE	1	EA	\$ 3,000.00	\$ 3,000.00	\$ 1,500.00	\$ 1,500.00	\$ 3,000.00	\$ 3,000.00	\$ 3,200.00	\$ 3,200.00	\$ 3,500.00	\$ 3,500.00
25.	INSTALL 4" PURPLE PVC AWWA C-900 PIPE (DR14) PER IRWD STD. W-17	-	LF	\$ 35.00	\$ -	\$ 30.00	\$ -	\$ 37.00	\$ -	\$ 28.00	\$ -	\$ 45.00	\$ -
26.	INSTALL 4" PURPLE PVC AWWA C-900 PIPE (DR14) PER IRWD STD. W-17	136	LF	\$ 38.00	\$ 5,168.00	\$ 32.00	\$ 4,352.00	\$ 34.00	\$ 4,624.00	\$ 20.00	\$ 2,720.00	\$ 48.00	\$ 6,528.00
27.	INSTALL 12" PURPLE PVC AWWA C-900 PIPE (DR14) PER IRWD STD. W-17	2,960	LF	\$ 48.00	\$ 134,160.00	\$ 45.00	\$ 134,160.00	\$ 48.00	\$ 137,088.00	\$ 80.00	\$ 198,880.00	\$ 55.00	\$ 165,920.00
28.	INSTALL 4" RW GV CL-150B (FE X PO) & VALVE BOX PER IRWD STD. W-22	-	EA	\$ 1,500.00	\$ -	\$ 1,444.00	\$ -	\$ 1,600.00	\$ -	\$ 1,430.00	\$ -	\$ 840.00	\$ -
29.	INSTALL 12" RW BV CL-150B (FE X FE) & VALVE BOX PER IRWD STD. W-22	1	EA	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 705.00	\$ 705.00	\$ 200.00	\$ 200.00	\$ 300.00	\$ 300.00
30.	INSTALL 4" DI ADAPTER (FE X PO)	8	EA	\$ 330.00	\$ 2,640.00	\$ 1,000.00	\$ 8,000.00	\$ 200.00	\$ 1,600.00	\$ 800.00	\$ 4,000.00	\$ 520.00	\$ 5,200.00
31.	INSTALL 12" DI ADAPTER (FE X PO)	1	EA	\$ 800.00	\$ 800.00	\$ 1,000.00	\$ 1,000.00	\$ 810.00	\$ 810.00	\$ 900.00	\$ 900.00	\$ 860.00	\$ 860.00
32.	INSTALL 12X12X4" DI TEE (FE X FE) & THRUST BLOCK PER IRWD STD. W-16	3	EA	\$ 900.00	\$ 2,700.00	\$ 1,000.00	\$ 3,000.00	\$ 750.00	\$ 2,250.00	\$ 860.00	\$ 2,580.00	\$ 925.00	\$ 2,715.00
33.	INSTALL 12X12X6" DI TEE (FE X FE) & THRUST BLOCK PER IRWD STD. W-16	2	EA	\$ 980.00	\$ 1,960.00	\$ 1,000.00	\$ 2,000.00	\$ 788.00	\$ 1,576.00	\$ 1,000.00	\$ 2,000.00	\$ 950.00	\$ 1,900.00
34.	INSTALL 12" DI 22.50 BEND (POXFE) AND THRUST BLOCK PER IRWD STD. W-16	1	EA	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 965.00	\$ 965.00	\$ 1,060.00	\$ 1,060.00	\$ 1,100.00	\$ 1,100.00
35.	INSTALL 12" DI 22.50 BEND (POXFE) AND THRUST BLOCK PER IRWD STD. W-16	1	EA	\$ 450.00	\$ 450.00	\$ 1,000.00	\$ 1,000.00	\$ 445.00	\$ 445.00	\$ 480.00	\$ 480.00	\$ 495.00	\$ 495.00
36.	INSTALL 12" DI 22.50 BEND (POXFE) AND THRUST BLOCK PER IRWD STD. W-16	1	EA	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,070.00	\$ 1,070.00	\$ 800.00	\$ 800.00	\$ 1,100.00	\$ 1,100.00
37.	INSTALL 12X8" DI (FE)XPO REDUCER	1	EA	\$ 730.00	\$ 730.00	\$ 1,000.00	\$ 1,000.00	\$ 740.00	\$ 740.00	\$ 500.00	\$ 500.00	\$ 710.00	\$ 710.00
38.	INSTALL 4" BLIND FLANGE PLUG & THRUST BLOCK PER IRWD STD. W-16	-	EA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39.	INSTALL TEMP. FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	2	EA	\$ 1,800.00	\$ 3,600.00	\$ 2,000.00	\$ 4,000.00	\$ 1,850.00	\$ 3,700.00	\$ 1,800.00	\$ 3,600.00	\$ 3,500.00	\$ 7,000.00
40.	INSTALL BLOW OFF ASSEMBLY PER IRWD STD. W-14	1	EA	\$ 7,000.00	\$ 7,000.00	\$ 6,300.00	\$ 6,300.00	\$ 11,700.00	\$ 11,700.00	\$ 7,500.00	\$ 7,500.00	\$ 3,210.00	\$ 3,210.00
41.	RELOCATE EXIST. 1" AIR & VACUUM RELEASE PER IRWD STD. W-11	1	EA	\$ 1,900.00	\$ 1,900.00	\$ 4,050.00	\$ 4,050.00	\$ 1,600.00	\$ 1,600.00	\$ 3,100.00	\$ 3,100.00	\$ 2,050.00	\$ 2,050.00
<b>RECYCLED WATER IMPROVEMENTS - SUBTOTAL (SECTION I-C)</b>					\$ 179,888.00		\$ 181,488.00		\$ 188,874.00		\$ 228,180.00		\$ 207,189.00
<b>TOTAL - DOMESTIC &amp; RECYCLED WATER CP IMPROVEMENTS (SECTIONS A-C), CAPITAL REIMBURSEMENT</b>					\$ 378,708.00		\$ 362,447.80		\$ 396,192.00		\$ 606,980.00		\$ 465,549.00



EXHIBIT "E"



Owner: Heritage Fields El Toro, LLC  
 Project: District 3 Wet Utilities IRWD CAP & NON-CAP CFD Improvements  
 Bid Date: February 25, 2015

ITEM NO.	DESCRIPTION	UNIT MEAS	QUAN	Engineer Estimate		J. & S. Construction Attn: Elton Welham Tel: 714.288.8642		Kennedy Pipeline Attn: David Chorak Tel: 949.390.8363		Leatherwood Attn: Bobby Kawai Tel: 714.593.6575		KEC Engineering Attn: Scott Pfeiffer Tel: 951.734.3010		FYDAQ Attn: Mike Kraft Tel: 714.412.3286	
				PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
1	Bonding requirements for IRWD CODE 6284 ALTON PARKWAY DOMESTIC WATER (CAP) IMPROVEMENTS	LB	1	844.85	844.85	1,549.08	1,549.08	2,603.38	2,603.38	1,286.19	1,286.19	910.28	910.28	1,019.12	1,019.12
<b>SUB-TOTAL, IRWD CODE 6284 ALTON PARKWAY DOMESTIC WATER (CAP) IMPROVEMENTS</b>				<b>844.85</b>		<b>1,549.08</b>		<b>2,603.38</b>		<b>1,286.19</b>		<b>910.28</b>		<b>1,019.12</b>	
2	Mobilization, Establish Construction Water (Not to Exceed 2% of Bid), Complete	LS	1	2,500.00	2,500.00	4,100.00	4,100.00	4,380.00	4,380.00	1,700.00	1,700.00	1,000.00	1,000.00	1,000.00	1,000.00
3	Furnish and install Traffic Control	LS	1	2,500.00	2,500.00	4,000.00	4,000.00	9,801.00	9,801.00	950.00	950.00	3,700.00	3,700.00	2,500.00	2,500.00
4	Furnish and install 12" PVC, C-600, DR 14, wrenching and bedding per IRWD Std. W-17 and all fittings, appurtenances and thrust blocks per IRWD Std. W-16 and W-19 and as shown on the plans	LF	180	165.00	31,180.00	180.00	34,020.00	430.00	81,720.00	315.00	40,635.00	150.00	20,300.00	275.00	51,030.00
5	Furnish and install 12" Butterfly Valve, Cl. 150B, Rgt, including valve box per IRWD Std. W-22	EA	4	4,500.00	18,000.00	4,800.00	19,200.00	5,000.00	20,000.00	3,950.00	15,800.00	5,000.00	20,000.00	4,440.00	17,760.00
6	Furnish and install 12" DI dual-inlet gate valve without block per IRWD Std. W-18 and W-19	EA	4	3,000.00	12,000.00	3,800.00	15,200.00	12,000.00	48,000.00	7,100.00	28,400.00	3,000.00	12,000.00	3,880.00	15,520.00
7	Furnish and install Temporary Flange-End Assembly per IRWD Std. W-12	EA	2	3,000.00	6,000.00	2,100.00	4,200.00	6,800.00	13,600.00	1,700.00	3,400.00	1,400.00	2,800.00	2,775.00	5,550.00
8	Raise Valve Can to Final Grade	EA	4	800.00	3,200.00	450.00	1,800.00	800.00	3,200.00	350.00	1,400.00	1,800.00	7,200.00	720.00	2,880.00
9	Remove, haul-off and dispose of interfering existing electrical conduit	LS	1	2,000.00	2,000.00	5,500.00	5,500.00	5,500.00	5,500.00	5,500.00	5,500.00	12,000.00	12,000.00	9,325.00	9,325.00
10	Remove, haul-off, dispose of, and replace existing AC Trench Paving	LS	1	11,200.00	11,200.00	10,000.00	10,000.00	12,500.00	12,500.00	13,000.00	13,000.00	12,000.00	12,000.00	5,540.00	5,540.00
11	Cold Plane, 10' and AC Cap Trench Repairs	LS	1	3,500.00	3,500.00	7,200.00	7,200.00	3,000.00	3,000.00	3,000.00	3,000.00	2,400.00	2,400.00	2,775.00	2,775.00
12	Slurry Seal Street	LS	1	2,500.00	2,500.00	3,200.00	3,200.00	2,800.00	2,800.00	600.00	600.00	1,600.00	1,600.00	3,996.00	3,996.00
13	Chlorinate and test pipeline	LS	1	1,500.00	1,500.00	3,500.00	3,500.00	11,300.00	11,300.00	1,300.00	1,300.00	1,300.00	1,300.00	3,996.00	3,996.00
<b>SUB-TOTAL, IMPROVEMENTS</b>				<b>84,488.00</b>		<b>165,020.00</b>		<b>176,201.00</b>		<b>88,836.00</b>		<b>88,780.00</b>		<b>119,141.00</b>	
<b>TOTAL, IRWD CODE 6284 ALTON PARKWAY DOMESTIC WATER (CAP) IMPROVEMENTS</b>				<b>85,332.85</b>		<b>166,569.08</b>		<b>177,804.38</b>		<b>89,101.19</b>		<b>89,668.28</b>		<b>120,136.12</b>	

ITEM NO.	DESCRIPTION	UNIT MEAS	QUAN	Engineer Estimate		J. & S. Construction Attn: Elton Welham Tel: 714.288.8642		Kennedy Pipeline Attn: David Chorak Tel: 949.390.8363		Leatherwood Attn: Bobby Kawai Tel: 714.593.6575		KEC Engineering Attn: Scott Pfeiffer Tel: 951.734.3010		FYDAQ Attn: Mike Kraft Tel: 714.412.3286	
				PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
1	Bonding requirements for IRWD CODE 6284 ALTON PARKWAY RECYCLED WATER (CAP) IMPROVEMENTS	LS	1	2,032.80	2,032.80	3,247.17	3,247.17	5,174.83	5,174.83	2,569.14	2,569.14	1,985.07	1,985.07	1,986.46	1,986.46
<b>SUB-TOTAL, IRWD CODE 6284 ALTON PARKWAY RECYCLED WATER (CAP) IMPROVEMENTS</b>				<b>2,032.80</b>		<b>3,247.17</b>		<b>5,174.83</b>		<b>2,569.14</b>		<b>1,985.07</b>		<b>1,986.46</b>	
2	Mobilization, Establish Construction Water (Not to Exceed 2% of Bid), Complete	LS	1	2,700.00	2,700.00	4,100.00	4,100.00	3,000.00	3,000.00	3,800.00	3,800.00	3,000.00	3,000.00	1,000.00	1,000.00
3	Furnish and install Traffic Control	LS	1	17,000.00	17,000.00	3,500.00	3,500.00	13,100.00	13,100.00	500.00	500.00	5,600.00	5,600.00	3,500.00	3,500.00
4	Furnish and install 10" PVC Purple Pipe, C-600, DR 18, wrenching and bedding per IRWD Std. W-17 and all fittings, appurtenances and thrust blocks per IRWD Std. W-16 and W-19 and as shown on the plans	LF	214	250.00	53,500.00	240.00	51,360.00	495.00	105,930.00	195.00	41,730.00	180.00	40,660.00	380.00	77,040.00
5	Furnish and install 10" PVC Purple Pipe, C-600, DR 18, wrenching and bedding per IRWD Std. W-17 and all fittings, appurtenances and thrust blocks per IRWD Std. W-16 and W-19 and as shown on the plans	LF	184	175.00	32,300.00	198.00	36,432.00	475.00	87,400.00	305.00	55,720.00	130.00	22,980.00	350.00	64,500.00
6	Furnish and install 10" DI dual-inlet gate valve without block per IRWD Std. W-18 and W-19	EA	2	6,000.00	12,000.00	5,800.00	11,600.00	5,800.00	11,600.00	5,400.00	10,800.00	6,000.00	10,000.00	10,000.00	
7	Furnish and install 10" RW Gate Valve, Cl. 150, FEA/E, including valve box per IRWD Std. W-22	EA	2	3,800.00	7,600.00	3,400.00	6,800.00	4,800.00	9,600.00	3,100.00	6,200.00	3,800.00	7,600.00	3,350.00	6,700.00
8	Furnish and install 10" DI, Cl. 150, Spool, FEA/E, wrenching and bedding per IRWD Std. W-17	LF	16	138.00	2,208.00	350.00	5,600.00	150.00	2,400.00	378.00	6,048.00	300.00	4,800.00	78.00	1,248.00
9	Furnish and install 10" Flex Transition Coupling w/3/8" S3 restraining bar/tee (between center steels length of 12") and join existing 10" AC Pipe IRWD Std. W-19	EA	3	1,700.00	5,100.00	5,600.00	16,800.00	1,800.00	5,400.00	6,500.00	19,500.00	2,000.00	6,000.00	4,000.00	12,000.00
10	Furnish and install 2" Air Valve Assembly, Gate 3 per IRWD Std. W-11	EA	1	4,000.00	4,000.00	4,150.00	4,150.00	7,400.00	7,400.00	7,400.00	7,400.00	11,500.00	7,700.00	4,996.00	4,996.00
11	Furnish and install 24" Steel Casing w/3/8" Anodes at each end per IRWD Std. W-21	LF	100	350.00	35,000.00	280.00	28,000.00	361.00	36,100.00	16,000.00	5,600.00	200.00	70,000.00	167.00	16,700.00
12	Remove, haul-off and dispose of existing 10" ACP (from nearest upstream and downstream joints)	LF	200	80.00	16,000.00	185.00	37,000.00	250.00	50,000.00	30.00	6,000.00	4,000.00	80,000.00	50.00	10,000.00
13	Furnish and install Temporary Flange-End Assembly per IRWD Std. W-12	EA	2	2,800.00	5,600.00	2,100.00	4,200.00	4,300.00	8,600.00	1,700.00	3,400.00	1,400.00	2,800.00	2,775.00	5,550.00
14	Remove, haul-off, dispose of, and replace existing AC Trench Paving	LS	1	39,472.00	39,472.00	19,500.00	19,500.00	10,500.00	10,500.00	11,200.00	11,200.00	2,300.00	2,300.00	4,700.00	4,700.00
15	Cold Plane, 10' and AC Cap Trench Repairs	LS	1	800.00	800.00	3,200.00	3,200.00	1,500.00	1,500.00	600.00	600.00	2,400.00	2,400.00	2,775.00	2,775.00
16	Slurry Seal Street	LS	1	2,000.00	2,000.00	2,500.00	2,500.00	2,340.00	2,340.00	500.00	500.00	1,400.00	1,400.00	3,996.00	3,996.00
17	Raise Valve Can to Final Grade	EA	4	800.00	3,200.00	450.00	1,800.00	800.00	3,200.00	350.00	1,400.00	1,800.00	7,200.00	720.00	2,880.00
18	Chlorinate and test pipeline	LS	1	3,000.00	3,000.00	2,500.00	2,500.00	3,000.00	3,000.00	1,000.00	1,000.00	2,000.00	2,000.00	3,996.00	3,996.00
<b>SUB-TOTAL, IMPROVEMENTS</b>				<b>283,290.00</b>		<b>220,142.00</b>		<b>348,253.00</b>		<b>180,269.00</b>		<b>183,640.00</b>		<b>212,848.00</b>	
<b>TOTAL, IRWD CODE 6284 ALTON PARKWAY RECYCLED WATER (CAP) IMPROVEMENTS</b>				<b>285,322.80</b>		<b>223,389.17</b>		<b>353,427.83</b>		<b>182,838.14</b>		<b>185,626.07</b>		<b>214,834.46</b>	

				Engineer Estimate		L.S. Construction Attn: Elton Wehlan Tel: 714.288.8642		Kennedy Plastic Attn: David Chonak Tel: 949.388.8383		Leatherwood Attn: Bobby Kawai Tel: 714.583.6575		K&C Engineering Attn: Scott Pfeiffer Tel: 951.754.3019		FYDAG Attn: Mike Kraft Tel: 714.912.3288	
ITEM NO.	IRWD CODE 6284 ALTON PARKWAY SANITARY SEWER (CAP) IMPROVEMENTS	UNIT MEAS	QUAN	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
1	Bidding requirements for IRWD CODE 6284 ALTON PARKWAY SANITARY SEWER (CAP) IMPROVEMENTS	LS	1	12,324.48	12,324.48	14,709.70	14,709.70	9,822.68	9,822.68	17,272.48	17,272.48	11,137.40	11,137.40	18,754.25	18,754.25
E	SUB-TOTAL, IRWD CODE 6284 ALTON PARKWAY SANITARY SEWER (CAP) IMPROVEMENTS				<b>12,324.48</b>		<b>14,709.70</b>		<b>9,822.68</b>		<b>17,272.48</b>		<b>11,137.40</b>		<b>18,754.25</b>
2	Reposition, Establish Connection Water (Net to Exceed 2% of Bid), Complete	LS	1	22,000.00	22,000.00	4,100.00	4,100.00	5,394.00	5,394.00	24,000.00	24,000.00	15,000.00	15,000.00	1,000.00	1,000.00
3	Furnish and install Traffic Control	LS	1	58,000.00	58,000.00	3,500.00	3,500.00	14,500.00	14,500.00	14,000.00	14,000.00	75,000.00	75,000.00	2,500.00	2,500.00
4	Furnish and install 18" PVC, C905, D18 Sewer Pipe whitewash pipe indicator tape, Trench per IRWD Std. S-6	LF	2,320	320.00	744,880.00	280.00	651,840.00	180.00	372,480.00	200.00	547,880.00	123.00	288,344.00	570.00	1,588,780.00
5	Construct 60" Diameter Manhole per IRWD Std. S-1	EA	8	8,000.00	64,000.00	10,500.00	84,000.00	5,681.00	45,448.00	8,000.00	64,000.00	8,800.00	70,400.00	8,325.00	66,600.00
6	Construct 60" Diameter Manhole sealed with Zetron or Sanson in accordance with IRWD Std. Spec Section 05600	EA	1	12,000.00	12,000.00	18,500.00	18,500.00	3,830.00	3,830.00	11,300.00	11,300.00	10,000.00	10,000.00	11,100.00	11,100.00
7	Jack and Bore 30" Steel Casing with Andex at each end per IRWD Std. S-7	LF	75	1,200.00	90,000.00	1,250.00	93,750.00	800.00	60,000.00	3,000.00	150,000.00	1,300.00	97,500.00	1,110.00	83,250.00
8	Remove temporary 6" Caisson and join existing sewer line	LS	1	1,200.00	1,200.00	1,500.00	1,500.00	2,730.00	2,730.00	2,500.00	2,500.00	730.00	730.00	2,775.00	2,775.00
9	Raise Manhole Frame and Cover to Final Grade	EA	8	700.00	5,600.00	400.00	3,200.00	500.00	4,000.00	550.00	4,400.00	1,100.00	8,800.00	850.00	6,800.00
10	Sawcut, remove, haul-off, dispose of, and replace existing AC Trench Paving	LS	1	219,888.00	219,888.00	171,056.00	171,056.00	102,000.00	102,000.00	202,000.00	202,000.00	140,000.00	140,000.00	89,500.00	89,500.00
11	Grid Pans, 10' and AC Cap Trench Repairs	LS	1	8,800.00	8,800.00	7,200.00	7,200.00	20,000.00	20,000.00	18,000.00	18,000.00	58,000.00	58,000.00	11,100.00	11,100.00
12	Slurry Seal Street	LS	1	3,200.00	3,200.00	3,200.00	3,200.00	14,000.00	14,000.00	14,000.00	14,000.00	23,000.00	23,000.00	18,000.00	18,000.00
13	Crest, Wayne ball, test and video pothole	LS	1	7,000.00	7,000.00	7,000.00	7,000.00	4,500.00	4,500.00	30,000.00	30,000.00	25,000.00	25,000.00	3,330.00	3,330.00
	SUB-TOTAL, IMPROVEMENTS				<b>1,232,448.00</b>		<b>997,248.00</b>		<b>847,682.00</b>		<b>1,211,830.00</b>		<b>1,085,874.00</b>		<b>1,867,480.00</b>
	TOTAL, IRWD CODE 6284 ALTON PARKWAY SANITARY SEWER (CAP) IMPROVEMENTS				<b>\$1,244,772.48</b>		<b>\$1,811,865.70</b>		<b>\$887,204.68</b>		<b>\$1,228,102.48</b>		<b>\$1,897,011.40</b>		<b>\$1,884,184.25</b>

EXHIBIT "F"

Bid Tabulations



Owner: Heritage Fields El Toro, LLC

Project: Planning Area 51 - Alton Interceptor Capital Sewer Improvements

Bid Date: January 29, 2015

ITEM NO.	I. CAPITAL PROJECT NO. 21216 - ALTON PARKWAY INTERCEPTOR SEWER RELOCATION (PHASE 1)	UNIT MEAS	QUAN	Engineer Estimate		FYDAQ Attn: Steve Beyer Tel: 714.447.9760		L&S Construction Attn: William Larkin Tel: 714.528.3232		Leatherwood Construction Attn: Michael Leatherwood Tel: 714.593.6575		Kennedy Pipeline Attn: David Chorak Tel: 949.380.6363	
				PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
1.	Bonding requirements for CAPITAL PROJECT NO. 21216	LS	1	14,939.51	14,939.51	13,516.00	13,516.00	24,600.00	24,600.00	20,855.00	20,855.00	29,800.00	29,800.00
<b>SUB-TOTAL, CAPITAL PROJECT NO. 21216 IMPROVEMENTS</b>				<b>14,939.51</b>	<b>14,939.51</b>	<b>13,516.00</b>	<b>13,516.00</b>	<b>24,600.00</b>	<b>24,600.00</b>	<b>20,855.00</b>	<b>20,855.00</b>	<b>29,800.00</b>	<b>29,800.00</b>
1.	Mobilization, Establish Construction Water (Not to Exceed 2% of Bid), Complete	LS	1	15,000.00	15,000.00	3,000.00	3,000.00	20,000.00	20,000.00	21,000.00	21,000.00	22,600.00	22,600.00
2.	Clearing & Demolition of Surface Improvements Including Plants, Fencing, Trash, Debris, Complete	LS	1	12,000.00	12,000.00	5,000.00	5,000.00	7,500.00	7,500.00	43,700.00	43,700.00	5,000.00	5,000.00
3.	Remove & Dispose of Existing Chain Link Fence & Sill Fence, Including Posts, Foundations, Green Fabric, Chain Link, Complete	LF	1,380	5.00	6,900.00	3.00	4,140.00	5.00	6,900.00	4.00	5,520.00	10.00	13,800.00
4.	Relocate Existing Temporary Irrigation Facilities (Farmer's Material) to North End of Easement Including All Pipes, Sprinklers, Fittings, etc., Complete	LS	1	8,000.00	8,000.00	5,000.00	5,000.00	10,500.00	10,500.00	2,500.00	2,500.00	8,500.00	8,500.00
5.	Protect Existing Drainage Ditch (West Edge of Easement) and Allow Drainage from Agricultural Field into Ditch at All Times Including Temporary Pipe, Ditches, Dischargers, Complete	LS	1	3,000.00	3,000.00	5,000.00	5,000.00	10,500.00	10,500.00	5,000.00	5,000.00	5,000.00	5,000.00
6.	Furnish and Install 24" PVC, C905 DR 18, Sewer Pipe with Indicator Tape Including Bedding & Backfill per IRWD Standard S-8, Complete	LF	1,145	250.00	286,250.00	201.00	230,145.00	345.00	395,025.00	300.00	343,500.00	350.00	400,750.00
7.	Furnish and Install 18" PVC, C805 DR 18, Sewer Pipe with Indicator Tape Including Bedding & Backfill per IRWD Standard S-8, Complete	LF	80	200.00	16,000.00	170.00	13,600.00	245.00	22,050.00	250.00	22,500.00	331.00	29,790.00
8.	Furnish and Install 18" PVC, C905 DR 18, Sewer Pipe per IRWD Standard S-6 with Indicator Tape Inside 30" Casing Including Skids, Straps, Blocking, Complete	LF	270	150.00	40,500.00	50.00	13,500.00	92.00	24,840.00	125.00	33,750.00	325.00	87,750.00
9.	Furnish and Install 84" Diameter Manhole with Modified Base per Detail 2 on Sheet 3, Zebtron or Sancon Casing, Including 1 Adjustment, Complete	EA	1	35,000.00	35,000.00	27,000.00	27,000.00	30,000.00	30,000.00	41,400.00	41,400.00	35,000.00	35,000.00
10.	Join Existing 33" VCP with an 84" Sewer Manhole Including, Control of Existing Sewage, Modified Base per Detail 2 on Sheet 3, Manhole Channel per Detail 1 on Sheet 5, Including 1 Adjustment, Complete	EA	1	45,000.00	45,000.00	30,000.00	30,000.00	56,000.00	56,000.00	100,000.00	100,000.00	30,650.00	30,650.00
11.	Furnish and Install 72" Diameter Manhole with Modified Base per Detail 2 on Sheet 3, Including 1 Adjustment	EA	4	18,000.00	72,000.00	13,500.00	54,000.00	18,000.00	72,000.00	25,700.00	102,800.00	19,400.00	77,600.00
12.	Jack & Bore 30" Steel Casing w/90 lb. Anodes at each end per IRWD Std. S-7 including Bore & Raising Pits, Shoring, Deadman, Material to Fill Void Between Pipe & Casing, Complete	LF	254	800.00	211,200.00	730.00	192,720.00	866.00	228,824.00	850.00	224,400.00	1,000.00	279,840.00
13.	Install Casing Test Station per IRWD Standard CP-3, Complete	EA	2	3,000.00	6,000.00	2,000.00	4,000.00	3,000.00	6,000.00	2,450.00	4,900.00	2,800.00	5,600.00
14.	Furnish and Install 6" Temporary / Terminal Cleanout, Including One Adjustment per IRWD Std. S-5, Complete	EA	2	3,500.00	7,000.00	3,500.00	7,000.00	1,500.00	3,000.00	3,550.00	7,100.00	4,000.00	8,000.00
15.	Rough & Fine Grade Access Road, W=14' Including Scarifying to a Depth of 8", at least 2% Over Optimum Soil Compacted to 95%, per Detail 1 on Sheet 3, Complete	SF	20,678	1.25	25,847.50	1.50	31,017.00	1.20	24,813.60	2.00	41,356.00	3.00	62,034.00
16.	Furnish and Install 2" x 12" Redwood Headers (both sides) Including Redwood Stakes, Complete	LF	2,796	12.00	33,552.00	13.50	39,043.00	12.00	33,192.00	12.00	33,192.00	3.00	8,298.00
17.	Furnish and Install Crushed Aggregate Base / Crush Miscellaneous Base, Depth plus 14" Including Fine Grading, Compaction to 95%, Complete	SF	20,678	2.00	41,356.00	1.50	31,017.00	1.50	31,017.00	1.50	31,017.00	3.00	62,034.00
18.	Construct Temporary 24" Brick & Mortar Seal, Complete	EA	1	1,250.00	1,250.00	1,500.00	1,500.00	850.00	850.00	500.00	500.00	500.00	500.00
19.	Replace Sill Fence Along Top of Ditch Including All Wooden Stakes, Fabric, etc., Complete	LF	1,380	10.00	13,800.00	5.00	6,900.00	10.00	13,800.00	2.50	3,450.00	10.00	13,800.00
<b>SUB-TOTAL, ALTON INTERCEPTOR SEWER IMPROVEMENTS</b>				<b>881,295.50</b>	<b>881,295.50</b>	<b>695,282.00</b>	<b>695,282.00</b>	<b>988,411.60</b>	<b>988,411.60</b>	<b>1,067,686.00</b>	<b>1,067,686.00</b>	<b>1,167,676.00</b>	<b>1,167,676.00</b>

ITEM NO.	DESCRIPTION	UNIT MEAS	QUAN
<b>II. CAPITAL PROJECT NO. 21219 - MARINE WAY (FROM ALTON TO BARRANGA PARKWAY) 18" SEWER</b>			
1.	Mobilization, Establish Construction Water (Not to Exceed 2% of Bid), Complete	LS	1
2.	Remove Existing 6" Cleanout & Join Existing 18" PVC at Sta. 3+19.00, Complete	LS	1
3.	Furnish and Install 18" PVC, C905 DR 18 Sewer Pipe with Indicator Tape per IRWD Std. S-6 Including Bedding & Backfill, Complete	LF	1,953
4.	Furnish and Install 8" PVC, SDR 35, Sewer Pipe with Indicator Tape per IRWD Std. S-1 Including Bedding & Backfill, Complete (NON CAPITAL)	LF	0
5.	Furnish and Install 6" PVC, C900 DR 14, Sewer Pipe per IRWD Std. S-3 with Indicator Tape Including Bedding & Backfill, Complete	LF	41
6.	Furnish and Install 72" Diameter Manhole per IRWD Std. S-1 with Modified Base per Detail on Sheet 2, Zebtron or Sancon Coating, Complete	EA	5
7.	Furnish and Install 60" Diameter Manhole per IRWD Std. S-1 with Modified Base per Detail on Sheet 2, Zebtron or Sancon Coating, Complete	EA	1
8.	Furnish and Install 30" Steel Casing Including with 60 lb Anodes at each end per IRWD Std. S-7. Included Material to Fill Void Between Pipe & Casing, Complete	LF	240
9.	Furnish and Install Casing Test Station Including, 60 lbs. Anodes Wire, Welding, Connections, Handle Hole, Adjustment, Complete	EA	2
10.	Furnish and Install 6" Temporary / Terminal Cleanout per IRWD Standard S-5, including One Adjustment,	EA	3
<b>SUB-TOTAL, MARINE WAY SEWER IMPROVEMENTS.....</b>			
<b>TOTAL, IRWD CODE 6278 AND 6376 CAPITAL IMPROVEMENTS</b>			

Engineer Estimate		FYDAQ Attr: Steve Beyer Tel: 714.447.9760		L&S Construction Attr: William Larkin Tel: 714.528.3232		Leatherwood Construction Attr: Michael Leatherwood Tel: 714.593.6575		Kennedy Pipeline Attr: David Chorak Tel: 949.390.8363			
1		1		1		1		1			
PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT		
10,000.00	10,000.00	3,000.00	3,000.00	12,000.00	12,000.00	12,000.00	12,000.00	16,000.00	16,000.00		
2,500.00	2,500.00	2,000.00	2,000.00	3,800.00	3,800.00	3,500.00	3,500.00	5,500.00	5,500.00		
200.00	390,600.00	170.00	332,010.00	230.00	449,190.00	180.00	351,540.00	280.00	546,840.00		
0.00	0.00	145.00	0.00	145.00	0.00	220.00	0.00	250.00	0.00		
155.00	6,355.00	170.00	6,970.00	160.00	6,580.00	210.00	8,810.00	240.00	9,840.00		
18,000.00	90,000.00	13,500.00	67,500.00	17,000.00	85,000.00	20,500.00	102,500.00	24,610.00	123,050.00		
13,000.00	13,000.00	9,500.00	9,500.00	12,000.00	12,000.00	13,550.00	13,550.00	20,010.00	20,010.00		
300.00	72,000.00	278.00	66,720.00	250.00	60,000.00	330.00	79,200.00	300.00	72,000.00		
2,500.00	5,000.00	2,000.00	4,000.00	3,500.00	7,000.00	2,500.00	5,000.00	2,800.00	5,600.00		
2,500.00	5,000.00	3,500.00	7,000.00	1,250.00	2,500.00	2,200.00	4,400.00	4,000.00	8,000.00		
<b>SUB-TOTAL, MARINE WAY SEWER IMPROVEMENTS.....</b>		<b>594,455.00</b>		<b>498,700.00</b>		<b>638,050.00</b>		<b>690,300.00</b>		<b>808,840.00</b>	
<b>TOTAL, IRWD CODE 6278 AND 6376 CAPITAL IMPROVEMENTS</b>		<b>1,490,680.01</b>		<b>1,207,485.00</b>		<b>1,661,061.80</b>		<b>1,668,740.00</b>		<b>1,934,209.00</b>	

# EXHIBIT "G"

## Bid Tabulations



**Owner: Heritage Fields El Toro, LLC**

**Project: D4 CADENCE (Bosque to B) CAP Sanitary Sewer Improvements**

**Bid Date: Thursday March 5, 2015**

ITEM NO.	E IRWD CODE 6196 - CADENCE FROM BOSQUE TO "Z" STREET SS (CAPITAL IMPROVEMENTS)	UNIT MEAS	QUAN	Engineer Estimate		FYDAQ Attn: Steve Beyer Tel: 714.447.9760		Leatherwood Attn: Bobby Kawai Tel: 714.593.6575		KEC Attn: Leslie Card Tel: 951.734.3010		L&S Construction Attn: Elton Welham Tel: 714.528.3232	
				1		1		1		1		1	
				PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
1	Mobilization. (Not to Exceed 2% of Bid)	LS	1	17,000.00	17,000.00	500.00	500.00	22,000.00	22,000.00	5,000.00	5,000.00	18,000.00	18,000.00
2	Furnish & Install 12" P V.C C900, DR 14 Sewer Pipe With Sewer Indicator Tape, Trench Per IRWD Std. S-6	LF	3,791	125.00	473,875.00	98.00	371,518.00	150.00	568,650.00	185.00	701,335.00	241.00	913,531.00
3	Furnish & Install 24" Steel Casing With 60LB Anodes at Each End Per IRWD Std. S-7	LF	294	600.00	176,400.00	200.00	58,800.00	145.00	42,630.00	405.00	119,070.00	250.00	73,500.00
4	Construct 72" DIA Manhole Per IRWD Std. S-1 W/Modified Base Per Detail 1 on Sheet 15	EA	17	9,000.00	153,000.00	13,000.00	221,000.00	21,500.00	365,500.00	16,000.00	272,000.00	24,500.00	416,500.00
5	Construct 60" DIA Manhole Per IRWD Std. S-1 W/Modified Base Per Detail 2 on Sheet 15	EA	2	6,500.00	13,000.00	7,000.00	14,000.00	12,850.00	25,700.00	13,000.00	26,000.00	13,500.00	27,000.00
6	Furnish & Install Casing Test Station Per IRWD Std. CP-3	EA	5	1,500.00	7,500.00	2,000.00	10,000.00	2,100.00	10,500.00	5,500.00	27,500.00	3,000.00	15,000.00
7	Furnish & Install 6" PVC, SDR 35, Sewer Lateral Per IRWD Std. S-3	EA	1	1,800.00	1,800.00	1,700.00	1,700.00	5,000.00	5,000.00	7,500.00	7,500.00	3,600.00	3,600.00
8	Furnish & Install 6" Terminal Cleanout Per IRWD Std. S-5	EA	1	1,200.00	1,200.00	2,000.00	2,000.00	1,250.00	1,250.00	6,500.00	6,500.00	1,250.00	1,250.00
9	Remove Temporary 6" Terminal Cleanout & Join Existing Sewer Line	EA	1	800.00	800.00	1,500.00	1,500.00	5,100.00	5,100.00	1,600.00	1,600.00	5,000.00	5,000.00
10	Coal Manholes With Zetron or Sancoz, In Accordance with IRWD Std. Spec Section 09950	EA	5	4,500.00	22,500.00	2,500.00	12,500.00	9,500.00	47,500.00	5,800.00	29,000.00	7,800.00	39,000.00
11	Pressure test and Video Sewer Pipe	LF	3,791	2.00	7,582.00	2.00	7,582.00	5.00	18,955.00	7.50	28,432.50	2.00	7,582.00
12	Raise MH to Grade	EA	19	550.00	10,450.00	450.00	8,550.00	500.00	9,500.00	1,100.00	20,900.00	550.00	10,450.00
13	Bonding requirements for IRWD CODE 6196 - CADENCE FROM BOSQUE TO "Z" STREET SS (CAPITAL IMPROVEMENTS)	LS	1	4,500.00	4,500.00	5,915.51	5,915.51	7,500.00	7,500.00	7,750.00	7,750.00	8,500.00	8,500.00
<b>SUB-TOTAL, IMPROVEMENTS.....</b>				<b>889,607.00</b>	<b>889,607.00</b>	<b>716,885.51</b>	<b>716,885.51</b>	<b>1,116,285.00</b>	<b>1,116,285.00</b>	<b>1,267,987.50</b>	<b>1,267,987.50</b>	<b>1,639,013.00</b>	<b>1,639,013.00</b>



# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

**Project Name:** PA51 MARINE WAY RW ZNB  
**EPMS Project No:** 30388    **EA No:** 1  
**Oracle Project No:** 4147  
**Project Manager:** LEW, KELLY  
**Project Engineer:** KESSLER, CHRISTIAN  
**Request Date:** July 7, 2015

**ID Split:** Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
212	87.4	BONDS YET TO BE SOLD**
253	12.6	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$365,200
<b>Total EA Requests:</b>	<b>\$365,200</b>
Previously Approved Budget:	\$365,200
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$365,200</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	20,000	0	20,000	0	20,000	20,000	11/12	3/14
ENGINEERING DESIGN - OUTSIDE	25,000	0	25,000	0	25,000	25,000	11/12	3/14
DESIGN STAFF FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	11/12	3/14
ENGINEERING - CA&I IRWD	25,000	0	25,000	0	25,000	25,000	2/15	7/16
ENGINEERING - CA&I OUTSIDE	40,000	0	40,000	20,000	20,000	40,000	2/15	7/16
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	2/15	7/16
CONSTRUCTION	210,000	0	210,000	(20,000)	230,000	210,000	2/15	7/16
LEGAL	2,000	0	2,000	0	2,000	2,000	11/12	7/16
Contingency - 10.00% Subtotal	\$33,200	\$0	\$33,200	\$0	\$33,200	\$33,200		
<b>Subtotal (Direct Costs)</b>	<b>\$365,200</b>	<b>\$0</b>	<b>\$365,200</b>	<b>\$0</b>	<b>\$365,200</b>	<b>\$365,200</b>		
Estimated G/A - 185.00% of direct labor*	\$101,900	\$0	\$101,900	\$0	\$101,900	\$101,900		
<b>Total</b>	<b>\$467,100</b>	<b>\$0</b>	<b>\$467,100</b>	<b>\$0</b>	<b>\$467,100</b>	<b>\$467,100</b>		
Direct Labor	\$55,000	\$0	\$55,000	\$0	\$55,000	\$55,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: \_\_\_\_\_

Department Director: \_\_\_\_\_

Finance: \_\_\_\_\_

Board/General Manager: \_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$477,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

**Project Name:** PA51 MARINE WAY FROM ALTON TO BARRANCA 12" DW ZN 3  
**EPMS Project No:** 11842    **EA No:** 1  
**Oracle Project No:** 6086  
**Project Manager:** LEW, KELLY  
**Project Engineer:** KESSLER, CHRISTIAN  
**Request Date:** July 7, 2015

**ID Split:** Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	20.9	BONDS YET TO BE SOLD**
153	79.1	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$238,700
<b>Total EA Requests:</b>	<b>\$238,700</b>
Previously Approved Budget:	\$238,700
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$238,700</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	10,000	0	10,000	0	10,000	10,000	1/15	6/15
ENGINEERING DESIGN - OUTSIDE	30,000	0	30,000	0	30,000	30,000	1/15	6/15
DESIGN STAFF FIELD SUPPORT	6,000	0	6,000	0	6,000	6,000	1/15	6/15
ENGINEERING - CA&I IRWD	12,000	0	12,000	0	12,000	12,000	7/15	6/16
ENGINEERING - CA&I OUTSIDE	20,000	0	20,000	0	20,000	20,000	7/15	6/16
CONSTRUCTION FIELD SUPPORT	6,000	0	6,000	0	6,000	6,000	7/15	6/16
CONSTRUCTION	130,000	0	130,000	0	130,000	130,000	7/15	6/16
LEGAL	3,000	0	3,000	0	3,000	3,000	1/15	6/16
Contingency - 10.00% Subtotal	\$21,700	\$0	\$21,700	\$0	\$21,700	\$21,700		
<b>Subtotal (Direct Costs)</b>	<b>\$238,700</b>	<b>\$0</b>	<b>\$238,700</b>	<b>\$0</b>	<b>\$238,700</b>	<b>\$238,700</b>		
Estimated G/A - 185.00% of direct labor*	\$62,900	\$0	\$62,900	\$0	\$62,900	\$62,900		
<b>Total</b>	<b>\$301,600</b>	<b>\$0</b>	<b>\$301,600</b>	<b>\$0</b>	<b>\$301,600</b>	<b>\$301,600</b>		
Direct Labor	\$34,000	\$0	\$34,000	\$0	\$34,000	\$34,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

*Christian Kessler* 8/3/15

Department Director:

*Rainier Bunker* 8/5/15

Finance:

Board/General Manager:

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$308,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

**Project Name:** PA51 MARINE WAY, ALTON TO BARRANCA 16" RW ZN B  
**EPMS Project No:** 31842    **EA No:** 1  
**Oracle Project No:** 6087  
**Project Manager:** LEW, KELLY  
**Project Engineer:** KESSLER, CHRISTIAN  
**Request Date:** July 7, 2015

**ID Split:** Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
212	87.4	BONDS YET TO BE SOLD**
253	12.6	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$281,600
<b>Total EA Requests:</b>	<b>\$281,600</b>
Previously Approved Budget:	\$281,600
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$281,600</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	13,000	0	13,000	0	13,000	13,000	1/15	6/15
ENGINEERING DESIGN - OUTSIDE	35,000	0	35,000	0	35,000	35,000	1/15	6/15
DESIGN STAFF FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	1/15	6/15
ENGINEERING - CA&I IRWD	15,000	0	15,000	0	15,000	15,000	7/15	6/16
ENGINEERING - CA&I OUTSIDE	25,000	0	25,000	0	25,000	25,000	7/15	6/16
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	7/15	6/16
CONSTRUCTION	155,000	0	155,000	0	155,000	155,000	7/15	6/16
LEGAL	3,000	0	3,000	0	3,000	3,000	2/16	6/16
Contingency - 10.00% Subtotal	\$25,600	\$0	\$25,600	\$0	\$25,600	\$25,600		
<b>Subtotal (Direct Costs)</b>	<b>\$281,600</b>	<b>\$0</b>	<b>\$281,600</b>	<b>\$0</b>	<b>\$281,600</b>	<b>\$281,600</b>		
Estimated G/A - 185.00% of direct labor*	\$70,500	\$0	\$70,500	\$0	\$70,500	\$70,500		
<b>Total</b>	<b>\$352,100</b>	<b>\$0</b>	<b>\$352,100</b>	<b>\$0</b>	<b>\$352,100</b>	<b>\$352,100</b>		
Direct Labor	\$38,000	\$0	\$38,000	\$0	\$38,000	\$38,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

Christa Vesely      8/3/15

Department Director:

Kevin J. Buntan      8/5/15

Finance:

\_\_\_\_\_

Board/General Manager:

\_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$360,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

**Project Name:** PA51 ALTON, TECHNOLOGY TO MUIRLANDS 12" DW  
**EPMS Project No:** 11806    **EA No:** 1  
**Oracle Project No:** 5816  
**Project Manager:** LEW, KELLY  
**Project Engineer:** KESSLER, CHRISTIAN  
**Request Date:** July 7, 2015

**ID Split:** Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
112	20.9	BONDS YET TO BE SOLD**
153	79.1	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$177,100
<b>Total EA Requests:</b>	<b>\$177,100</b>
Previously Approved Budget:	\$177,100
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$177,100</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	8,000	0	8,000	0	8,000	8,000	9/14	6/15
ENGINEERING DESIGN - OUTSIDE	7,000	0	7,000	0	7,000	7,000	9/14	6/15
DESIGN STAFF FIELD SUPPORT	4,000	0	4,000	0	4,000	4,000	9/14	6/15
ENGINEERING - CA&I IRWD	10,000	0	10,000	0	10,000	10,000	7/15	12/16
ENGINEERING - CA&I OUTSIDE	15,000	0	15,000	0	15,000	15,000	7/15	12/16
CONSTRUCTION FIELD SUPPORT	4,000	0	4,000	0	4,000	4,000	7/15	12/16
CONSTRUCTION	110,000	0	110,000	0	110,000	110,000	7/15	12/16
LEGAL	3,000	0	3,000	0	3,000	3,000	9/14	12/16
Contingency - 10.00% Subtotal	\$16,100	\$0	\$16,100	\$0	\$16,100	\$16,100		
<b>Subtotal (Direct Costs)</b>	<b>\$177,100</b>	<b>\$0</b>	<b>\$177,100</b>	<b>\$0</b>	<b>\$177,100</b>	<b>\$177,100</b>		
Estimated G/A - 185.00% of direct labor*	\$48,100	\$0	\$48,100	\$0	\$48,100	\$48,100		
<b>Total</b>	<b>\$225,200</b>	<b>\$0</b>	<b>\$225,200</b>	<b>\$0</b>	<b>\$225,200</b>	<b>\$225,200</b>		
Direct Labor	\$26,000	\$0	\$26,000	\$0	\$26,000	\$26,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

*Christy Vessels*

8/3/15

Department Director:

*John F. Bunker*

8/5/15

Finance:

Board/General Manager:

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$230,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. No intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

**Project Name:** PA51 ALTON, TECHNOLOGY TO MUIRLANDS 16" RW  
**EPMS Project No:** 31806 **EA No:** 1  
**Oracle Project No:** 5818  
**Project Manager:** LEW, KELLY  
**Project Engineer:** KESSLER, CHRISTIAN  
**Request Date:** July 7, 2015

**ID Split:** Miscellaneous

**Improvement District (ID) Allocations**

ID No.	Allocation %	Source of Funds
212	87.4	BONDS YET TO BE SOLD**
253	12.6	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

**Summary of Direct Cost Authorizations**

Previously Approved EA Requests:	\$0
This Request:	\$344,300
<b>Total EA Requests:</b>	<b>\$344,300</b>
Previously Approved Budget:	\$344,300
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$344,300</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	7,000	0	7,000	(5,000)	12,000	7,000	9/14	6/15
ENGINEERING DESIGN - OUTSIDE	15,000	0	15,000	0	15,000	15,000	9/14	6/15
DESIGN STAFF FIELD SUPPORT	4,000	0	4,000	0	4,000	4,000	9/14	9/15
ENGINEERING - CA&I IRWD	20,000	0	20,000	0	20,000	20,000	7/15	12/16
ENGINEERING - CA&I OUTSIDE	30,000	0	30,000	0	30,000	30,000	7/15	12/16
CONSTRUCTION FIELD SUPPORT	4,000	0	4,000	0	4,000	4,000	7/15	12/16
CONSTRUCTION	230,000	0	230,000	5,000	225,000	230,000	7/15	12/16
LEGAL	3,000	0	3,000	0	3,000	3,000	9/14	12/16
Contingency - 10.00% Subtotal	\$31,300	\$0	\$31,300	\$0	\$31,300	\$31,300		
<b>Subtotal (Direct Costs)</b>	<b>\$344,300</b>	<b>\$0</b>	<b>\$344,300</b>	<b>\$0</b>	<b>\$344,300</b>	<b>\$344,300</b>		
Estimated G/A - 185.00% of direct labor*	\$64,800	\$0	\$64,800	(\$9,200)	\$74,000	\$64,800		
<b>Total</b>	<b>\$409,100</b>	<b>\$0</b>	<b>\$409,100</b>	<b>(\$9,200)</b>	<b>\$418,300</b>	<b>\$409,100</b>		
Direct Labor	\$35,000	\$0	\$35,000	(\$5,000)	\$40,000	\$35,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

*Christy Ueber*

*8/3/15*

Department Director:

*Kevin J. Burt*

*8/5/15*

Finance:

Board/General Manager:

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$418,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150

August 24, 2015

Prepared by: A. Murphy / M. Cortez

Submitted by: K. Burton *RKM*

Approved by: Paul Cook *[Signature]*

## CONSENT CALENDAR

### SAN JOAQUIN MARSH IMPROVEMENTS CONSULTANT SELECTION

#### SUMMARY:

The San Joaquin Marsh Improvements project will mitigate the effects of reduced San Diego Creek flows due to the Peters Canyon Channel Water Capture and Reuse Pipeline project as well as improve overall San Joaquin Marsh operations. Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement with Stantec in the amount of \$178,000 for the San Joaquin Marsh Improvements, Project 11878.

#### BACKGROUND:

The San Joaquin Marsh is a natural treatment system facility composed of 11 interconnected ponds that provide freshwater wetland habitat and water quality treatment functions including nutrient removal. This project will construct miscellaneous improvements in the Marsh to increase water recirculation and to improve operations by adding flow meters, a weir structure and automating a strainer. A diagram of the San Joaquin Marsh and the proposed improvements is attached as Exhibit "A".

#### San Joaquin Marsh Recirculation Improvements:

The Peters Canyon Channel Water Capture and Reuse Pipeline will collect and transport nuisance groundwater and surface water flows with high nitrate and selenium concentrations that discharge into Peters Canyon Wash to the Orange County Sanitation District for treatment and reuse. This project is expected to reduce the average stream flow in the lower San Diego Creek channel by approximately 19 percent.

In 2014, IRWD retained CH2M to complete the Peters Canyon Water Capture and Reuse Pipeline – San Joaquin Marsh Mitigation Recirculation Option Preliminary Design Report (PDR) to increase the recirculation of water within the Marsh to mitigate the flow reduction in the San Diego Creek. The PDR recommended the following improvements:

- Adding a variable frequency drive (VFD) to one of the existing pumps in the San Diego Creek Pump Station;
- Replacing the existing flow control valve on the Marsh Pump Station discharge line with a pressure sustaining valve;
- Installing a flow modulating valve on the pipeline that supplies Pond A from the Marsh Pump Station discharge pipeline; and
- Installing a flow meter on the connection to Pond A.

After reviewing the final PDR, staff expanded the scope of the design to include the replacement of both pumps in the San Diego Creek Pump Station with VFD pumps and the replacement of

the existing motor control center (MCC). This will provide pumping redundancy and ensure sufficient room in the MCC panel to accommodate the new VFDs.

#### Operational Improvements:

In addition to the recirculation improvements covered in CH2M's PDR, staff requested several additional improvements including: 1) Construction of a new weir structure at a low point in the Marsh near Campus Drive to prevent flooding of the bike lane and single car lane on Campus Drive during flood irrigation events that raise water levels in the lower Marsh to simulate natural flooding events; 2) Automation of an existing manually operated 12-inch basket strainer located on the pipeline feeding the upper Marsh (the existing strainer needs to be manually backwashed once a day); and 3) Installation of flow monitoring equipment at North Carlson Pond inflow, Middle Stream inflow, North Michelson Pond inflow, Linear Pond inflow, Middle Carlson Weir Structure inflow, and the Michelson Water Recycling Plant groundwater discharge point.

#### Consultant Selection Process:

Staff issued a Request for Proposal for the design of the Marsh recirculation improvements and the operational improvements to four consultants including AKM, Michael Baker International, CH2M and Stantec. CH2M, Stantec, and AKM submitted proposals for the project, with Michael Baker International declining to submit a proposal. The design scope includes preliminary and final design of the modifications including verification of the items contained in the initial PDR. Staff evaluated and ranked the proposals, as shown in Exhibit "B", and selected Stantec as the most qualified team based on the strength of their proposal and their extensive engineering experience with similar projects. Their proposal also demonstrated careful consideration of all relevant design parameters. Stantec's proposed cost of \$178,000 with 1,203 work hours provides the District with a better value compared to the second ranked consultant, CH2M, who proposed \$188,745 with 1,056 work hours. Stantec's proposal is provided as Exhibit "C".

#### FISCAL IMPACTS:

The San Joaquin Marsh Improvements, Project 11878 (6168) is included in the FY 2015-16 Capital Budget. The existing budget is sufficient to fund the design of the project.

#### ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, the appropriate environmental document will be prepared when "meaningful information" becomes available.

#### COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on August 20, 2015.

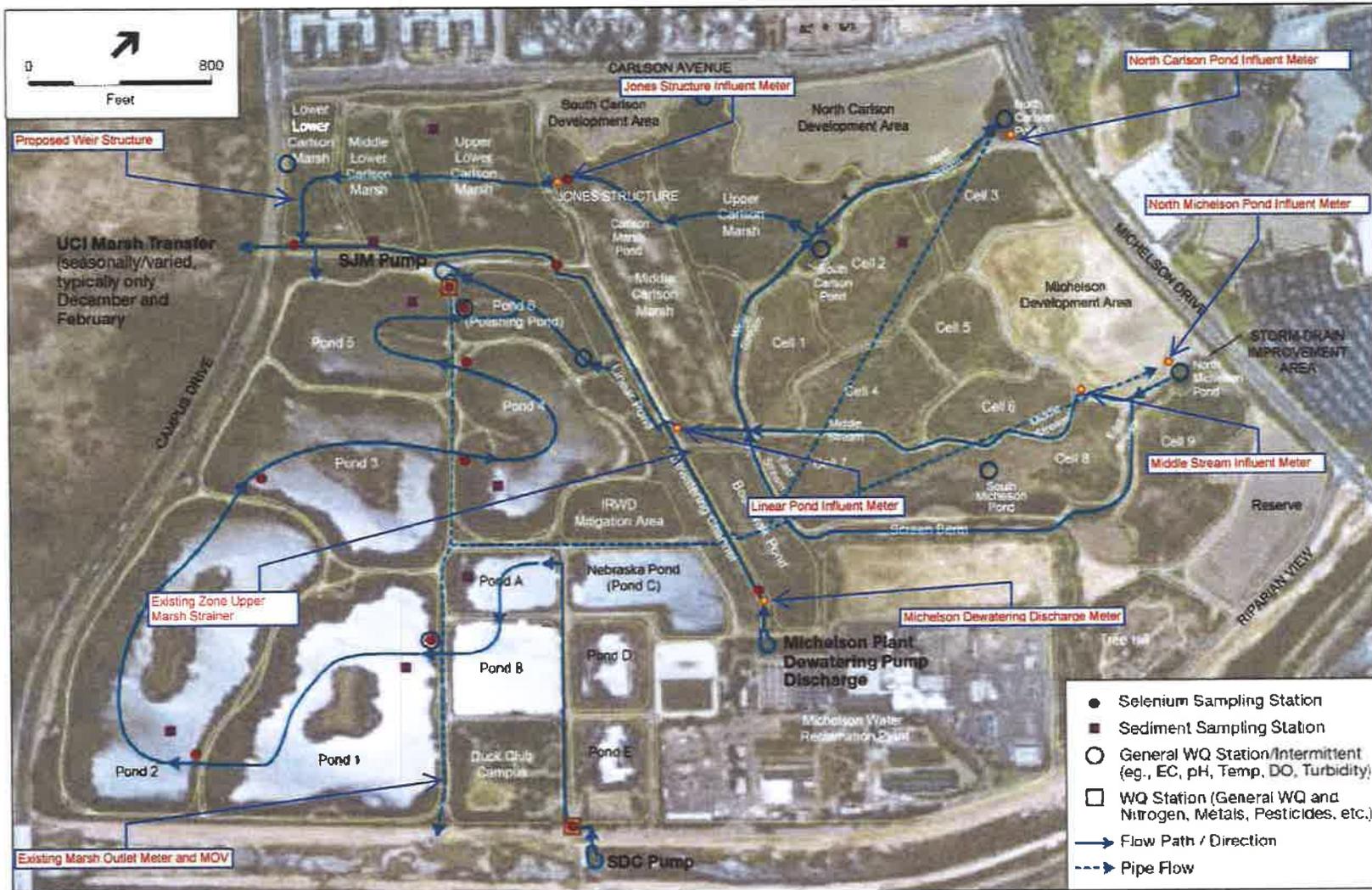
RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH STANTEC IN THE AMOUNT OF \$178,000 FOR THE SAN JOAQUIN MARSH IMPROVEMENTS, PROJECT 11878 (6168).

LIST OF EXHIBITS:

- Exhibit "A" – Site Location Map
- Exhibit "B" – Consultant Selection Matrix
- Exhibit "C" – Stantec Consulting Proposal

# EXHIBIT "A"



Source: Figure 7 from RDTS by ESA, 2014

FIGURE 2-1  
San Joaquin Marsh Circulation Map

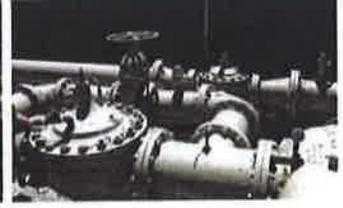
**EXHIBIT "B"**  
**San Joaquin Marsh Improvements Project 11878**  
**Consultant Selection Matrix**

	Weights	CH2M Hill	Stantec	AKM
<b>TECHNICAL APPROACH</b>	60%			
*Project Approach	40%	2	1	3
*Scope of Work	30%	2	1	3
*Man Hour Estimates	30%	2	1	3
Weighted Score (Technical Approach)		2.00	1.00	3.00
<b>EXPERIENCE</b>	40%			
*Firm/Team	20%	2	1	3
*Project Manager	40%	2	1	3
*Project Engineer	20%	2	1	3
*Project Engineer 2 - Elec	20%	2	1	3
Weighted Score (Experience)		2.00	1.00	3.00
Project Manager		Yrs	Yrs	Yrs
Project Engineer				
QC/QA				
Surveying/ Mapping				
Mechanical				
Electrical				
Potholing				
		Kathleen Higgins	Robert Reid	Zeki Kayiran
		Carmen Quan	Nancy Baker	Gary Hobson
		Quingshan Wang	Doug Johnson	John Loague
		Rosell Surveying	Ray Mansur	Kelsoe and Associates
		Nathan Summerville	Bob Seeman	Steve Patterson
		Lan Lai	Marty Armenta	
		Bordreau Pipeline Co.		
<b>COMBINED WEIGHTED SCORE</b>		2.00	1.00	3.00
		Man-hours	Man-hours	Man-hours
Task 1 Preliminary Design Report		295	270	477
Task 2 Final Design		761	933	3,545
<b>TOTAL DESIGN HOURS</b>		1,056	1,203	4,022
Sheet Count		20	43	56
General		4	4	12
Site/Piping		4	5	16
Mechanical		5	7	12
Electrical		5	19	11
Instrumentation		2	8	5
<b>TOTAL SHEETS</b>		20	43	56
FD HRS/SHT		38	22	63
PDR Meetings		3	3	3
Review Meetings		2	4	3
<b>Total Meetigs</b>		5	7	6
<b>FEE</b>				
PDR		\$67,129	\$43,780	\$59,482
Final Design		\$121,616	\$134,220	\$517,209
<b>Grand Total- PDR &amp; Design</b>		<b>\$188,745</b>	<b>\$178,000</b>	<b>\$576,691</b>
Number of Drawings		20 dwgs	43 dwgs	56 dwgs
Final Design Unit Prices (\$/dwg)		\$6,081	\$3,121.40	\$9,236
Professional Liability Insurance				
General Liability Insurance				
<b>FORCED RANKINGS:</b>				
1 - First				
2 - Second				
3 - Third				



# Proposal to Provide Professional Engineering Design Services for San Joaquin Marsh Improvements Project

July 28, 2015



Design with community in mind





38 Technology Drive, Suite 100  
Irvine, CA 92618  
P: (949) 923-6000  
F: (949) 923-6121

July 28, 2015

### Attention

Engineering Department  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, California 92618  
Attention: Malcolm A. Cortez, P.E.

### Reference

Proposal to Provide Professional Engineering Design Services for San Joaquin Marsh Improvements Project

Dear Malcolm:

*Knowledge of the Study Area... Proven results... Experienced project manager... Expert staff...*

These are just a few reasons why our team is the best fit for your project. You need a firm that understands your San Joaquin Marsh system and its needs, and can collaborate with you and your staff to complete an analysis that will enable you to make well informed decisions regarding improvements for today and also prepare you for the future. This is where our team can help.

*Knowledge of the Study Area*— Our proposed team is comprised of individuals who have been providing engineering design services within marshes, wetlands and recharge basins throughout southern California, including the San Joaquin Marsh. Our team prepared the design drawings for the existing weir structure near Campus Drive. This experience will allow us to quickly identify and resolve potential issues.

*Proven results*— Our deliverables have been proven to be of highest quality and use as design tools and construction documents. Our key staff has successfully completed many final design projects with you and your staff in the past 25 years. We know your needs and we know how to successfully complete your projects.

*Experienced project manager*— Our assigned Project Manager, **Robert Reid, PE** was the principal-in-charge of our Carlson Marsh project 12 years ago and the Project Manager for the just completed Michelson Lift Station Relocation Project. He has managed final design projects for more than 20 years.

*Expert staff*— Every single staff member assigned to this project has experience working together on projects. Our Mechanical Task Leader, **Bob Seeman, PE** has over 40 years of design experience including several of IRWD's existing pump stations and several pumping facilities designed to transfer water between basins. Our Civil Task Leader, **Kevin Brandt, PE** has provided design services for more than 10 basins projects, with many requiring weirs, including the Carlson Marsh. Our Electrical Task Leader, **Marty Armenta, PE, RCDD, LEED AP** has provided electrical and controls design for many pump station facilities designed by our Irvine team. Our team has worked together on countless projects over the past 15 years and has a long history of working with you and your staff to complete preliminary and final designs.

We offer a team that can become a seamless extension of your staff. We successfully worked on near identical projects and can do the same for you. If you should have any questions or need any additional information, please contact me at (949) 923-6037, or via email at [robert.reid@stantec.com](mailto:robert.reid@stantec.com).

Sincerely,

**STANTEC CONSULTING SERVICES INC.**

Robert Reid, PE  
Project Manager

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SCOPE OF WORK



# WELCOME TO THE SAN JOAQUIN WILDLIFE SANCTUARY

## SANCTUARY RULES:

- OPEN DAWN TO DUSK
- NO BICYCLES OR MOTOR VEHICLES
- NO HORSES, DOGS OR PETS
- NO ALCOHOLIC BEVERAGES
- NO FIREARMS
- DON'T RELEASE ANY ANIMALS
- NO HUNTING OR FISHING

## PLEASE REMEMBER TO:

- STAY ON TRAILS
- CARRY OUT TRASH
- PROTECT THE HABITAT
- LISTEN FOR BIRDS
- LOOK FOR WILDFLOWERS
- TAKE PHOTOGRAPHS
- TAKE ONLY MEMORIES
- LEAVE ONLY FOOTPRINTS

FOR MORE INFORMATION, CALL IRVINE RANCH WATER DISTRICT (916) 452-5300

## A. Project Understanding and Scope of Work

### Background

Irvine Ranch Water District (IRWD), in coordination with other agencies, is planning to construct the Peters Canyon Channel Water Capture and Reuse Pipeline to protect and maintain local water quality. The proposed pipeline project will collect and transport nuisance groundwater and surface water flows containing high nitrate and selenium concentrations presently discharged into the Peters Canyon Wash, to the Orange County Sanitation District (OCS) for treatment and reuse. This project is anticipated to have a direct impact to IRWD's San Joaquin Marsh's (Marsh) operation. The project will reduce the stream flow into the lower Creek channel that feeds into the Marsh by approximately 19 percent.

The Marsh is a natural treatment system facility located between Michelson Drive, Carlson Drive, Campus Drive, and the San Diego Creek. The Marsh is made up of 11 interconnected ponds that provides freshwater wetland habitat and water quality treatment functions along with nutrient removal. The District pumps an average of 3.3 million gallons of water per day (MGD) from San Diego Creek through the San Diego Creek Pump Station into the Marsh wetlands.

To address the reduction in water supply to the Marsh, the District is evaluating the design and infrastructure requirements necessary to increase the recirculation of water within the Marsh that resulted in the Peters Canyon Water Capture and Reuse Pipeline - San Joaquin Marsh Mitigation Recirculation Option Preliminary Design Report (PDR). The PDR recommended the following improvements:



**A strong start is key to a successful project. We have already met with several key agency staff, initiated the research effort, and developed an initial work plan in an effort to generate positive momentum moving into this project.**

### San Diego Creek Pump Station Improvements

Water is currently being pumped from the San Diego Creek into the Marsh via the San Diego Creek Pump Station (Creek Pump Station). The existing two pumps in the station are centrifugal pumps, originally installed each having a capacity of approximately 4,200 gpm at 40 feet of total dynamic head (TDH). Past modifications to Pump 1 included trimming its impellor about 2 inches reducing the capacity of Pump 1 to approximately 3,200 gpm at 40 feet of TDH. Both pumps are powered by 75 horsepower motors turning at 1,200 rpm. The PDR recommended adding a variable frequency drive (VFD) on Pump I to allow the pump station to operate at lower capacity to match the reduced creek flows which are expected to be 19% less.

The District has expanded on this recommendation to extend the design to include replacement of both pumps, installation of VFDs at both pumps, and replacement of the MCC. These additional items will ensure pumping redundancy and a MCC that will have sufficient room and cooling to accommodate the VFDs. Preparation of the preliminary design for these proposed improvements should validate the recommendations of the initial PDR while incorporating the additional scope items added by the District.

### Marsh Recirculation

The Marsh is currently operated over a wide range of flows depending on operational needs. The initial PDR described the current system requirement for multiple flow scenarios where the Creek Pump Station delivers flow to Pond A while the Marsh Pump Station delivers flows to the Upper Marsh and/or the Creek. In addition, the PDR provided requirements for future pumping scenarios where a portion of the flow from the Marsh Pump Station would be recirculated to Pond A to mitigate reduced flow from the Creek Pump Station.

The PDR recommendations for the marsh recirculation included: (1) replacing the existing flow control valve on the Marsh Pump Station discharge line with a pressure sustaining valve to maintain a system pressure of 50 psi; (2) installing a flow modulating valve on the pipeline that supplies Pond A from the Marsh Pump Station discharge pipeline; and (3) installing flow meters on the connection to Pond A and the connections in the Upper Marsh to monitor the distribution of flow between the Upper Marsh, Pond A, and the Creek. The marsh recirculation improvements' final design will incorporate the recommendations presented in the PDR.

### Additional Marsh Improvements

The District's Marsh Operations group has requested several modifications be made to improve the operation of the Marsh that was not addressed in the initial PDR:

- Constructing a weir structure at a low point in the marsh berm adjacent to Campus Drive to prevent water inundation of the bike lane and shoulder of the road during flood irrigation events of the Marsh, i.e. Marsh Operations raises water levels in the lower marsh to simulate natural flooding events. Since the low point also serves to allow surface runoff from Campus Drive into the marsh during rain events, the weir structure should be removable. Surveying will be needed in the preliminary design phase to determine the existing elevations of the low point and adjacent topography to determine the required elevation of the proposed weir structure and associated grading to tie-in the weir structure with existing ground elevations.
- Install either a motorized actuator on the 12-inch Upper Marsh manually operated basket strainer located on the 12-inch pipeline feeding the upper marsh or install a new actuated strainer at the Marsh Pump Station. The existing strainer needs to be flushed manually daily. The closest existing power source required for this type of facility is approximately 1,500 feet away at the Marsh Pump Station. Due to the distance from existing power sources, it may be more cost effective to add a strainer at the Marsh Pump Station as an alternative to providing power to the existing Upper Marsh strainer. The most cost effective solution needs to be identified and recommended to solve this issue.
- Install equipment to meter flows at the following locations: North Carlson Pond inflow, Middle Stream inflow, North Michelson Pond inflow, Linear Pond inflow, Jones Structure inflow, and the Michelson Water Recycling Plant groundwater discharge point. Flows incurring at the North Carlson Pond, Middle Stream, Michelson Water Recycling Plant groundwater discharge, and the North Michelson Pond locations are full pipe flow conditions, while the Linear Pond and Jones structure inflows are open channel flow. All meters should be battery operated and have wireless data transmission. Magnetic meters are preferred for full pipe flow locations; sewer type flow meters could be used for locations with open channel flow. The appropriate location and metering technology for each site will be determined and recommended.

Additionally, all improvements related to mitigating the reduced Creek flow's recirculation within the Marsh will be presented as separate bid items in order that they can be reimbursed through the member agencies participating in the Peters Canyon Channel Water Capture and Reuse Pipeline project.

### Key Considerations

There are several key issues that we have identified in our review that will be critical to address very early in the project to maximize the project success. Brief descriptions of these considerations are shown in **Figure 1**. The key issues can be grouped into the following improvement categories:

- Creek Pump Station Improvements
- Marsh Recirculation
- Additional Marsh Operations

#### Creek Pump Station Improvements

Improvements to the San Diego Creek Pump Station are two fold and may be contingent on whether the existing Motor Control Center cabinets have the capacity to house two VFD units together with the new pump controls. Conversations with the District have indicated that it does not want to expand the footprint of the existing MCC or does not want to install additional conduits between the pump station and the MCC. In as much as the Creek Pump Station is critical to the marsh's circulation, the pump and MCC replacements will need to be coordinated to ensure that at least one of the pumps is maintained in operation at all times.

It is our understanding that there are two existing 4-inch conduits between the pump station structure and the MCC. Replacement of the two existing submersible pumps and the age of the existing wiring will probably necessitate the removal of the existing wiring and cabling within these two conduits. Special attention will be required during the design and placement of the new wiring and cabling to ensure that all necessary steps are planned for and taken to keep the pump station operational.



Having managed the Carlson Marsh regrade and reestablishment of year-round flow conditions, our task leader, Kevin Brandt, understands the design criteria and District goals for this overall improvement.

### *Marsh Recirculation*

The Peters Canyon Channel Water Capture and Reuse Pipeline-San Joaquin Marsh Mitigation Recirculation Option PDR outlined the concerns and basis for design of the marsh improvements. In developing the design requirements for the Creek Pump Station, focus will need to be directed towards the two periods of pumping durations that occur, between winter and summer modes. Improvements have been recommended which include the installation of flow control devices and meters to maintain pressures and monitor flows to the Upper Marsh, Pond A and the San Diego Creek.

During Creek Pump Station modifications, the installation of the flow meter and motor actuated flow modulating valve will need to be incorporated into the construction sequencing. In the same vicinity, the PDR recommended a pressure sustaining valve be installed to provide the necessary backpressure for the Marsh Pump Station and to supply flows to Pond A and the Upper Marsh. Coordination of these installations and the Creek Pump Station improvements will be critical in reducing the impacts to the Marsh at this location.

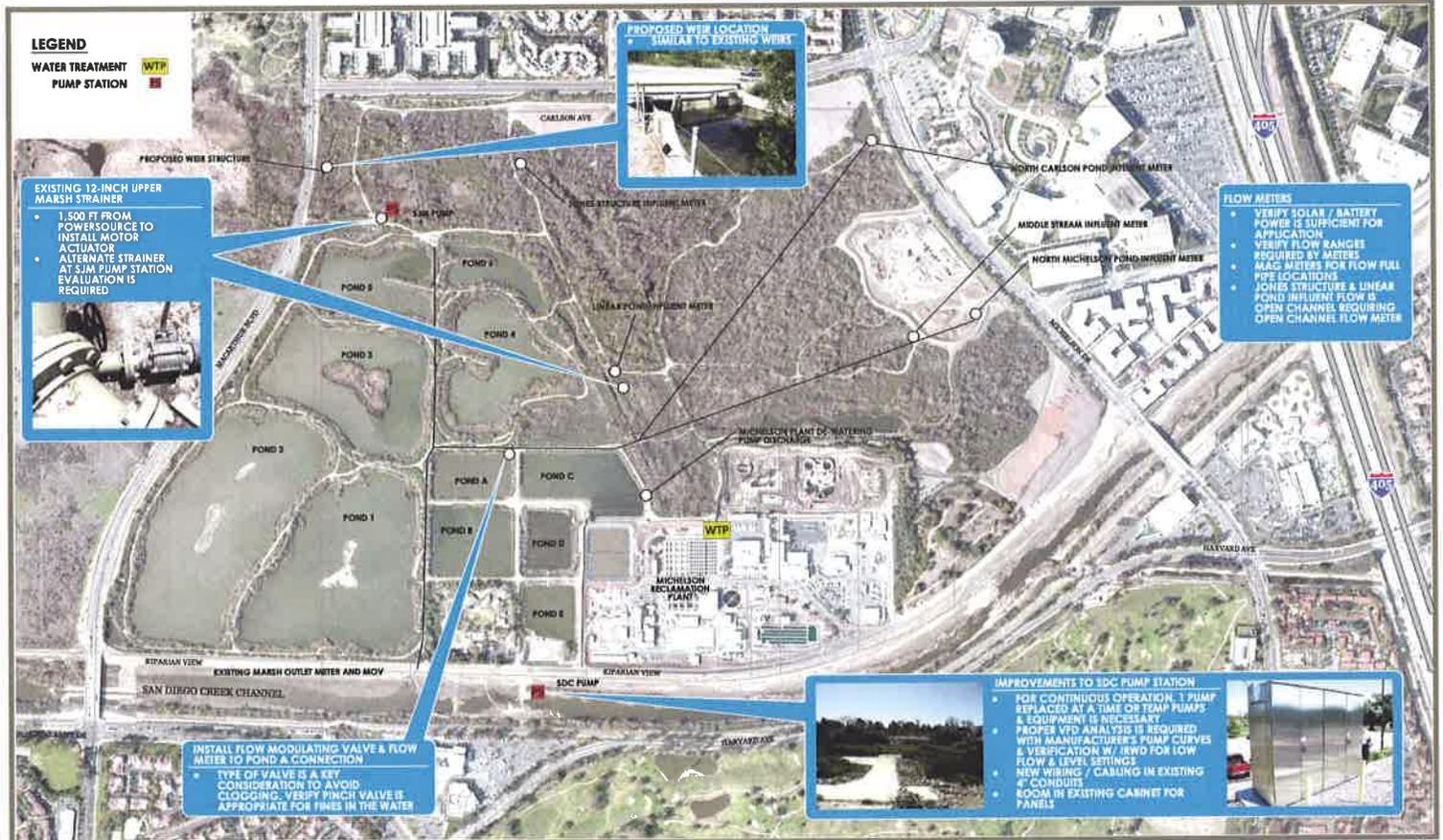
### *Additional Marsh Operations*

The RFP presented three modifications, not identified in the PDR, to the current operations within the Marsh. The first concerned a low point along the marsh berm adjacent to Campus Drive. To prevent the flooding of Campus Drive by Marsh Operations during flood irrigation events, a removable weir was recommended. This would allow the flooding event to occur without inundating Campus Drive. To accomplish this, the existing conditions would need to be surveyed to obtain an accurate site condition. The low area would be regraded on the marsh side to an elevation above the flood irrigation event. A removable weir structure would be constructed at the low point and left open during normal periods. The grading and weir construction will be designed to minimize disruption of the native vegetation in the area.

The second modification deals with making the Upper Marsh strainer operations automated at either its current location or at the Marsh Pump Station. Currently, an operator needs to manually open a backflush valve on a daily basis to clear the strainer. The concerns surrounding this modification are that the nearest power source to the existing strainer location is at the Marsh Pump Station, 1,500 feet away, and to determine if the existing pump station piping has sufficient space to install a motorized actuated strainer. The existing Hellan strainer appears to be a Type DH strainer, which can easily be converted to automatic mode. The obvious choice would be to relocate the existing Hellan strainer to the Marsh Pump Station site.

The third modification involves installing metering equipment at six (6) inflow locations around the Marsh. These locations are at the North Carlson Pond, the Middle Stream, the North Michelson Pond, the Linear Pond, the Jones Structure, and the Michelson Water Recycling Plant groundwater discharge point. Four of these locations will incorporate magmeters into their piping systems, while the remaining two locations will be monitored using ultrasonic measuring devices to record open channel conditions. It is our understanding that the District wants to monitor these inflows through a SCADA system. The primary issue will be providing electrical service to the remote locations with minimal disruption to the native vegetation.

Almost all of the sites are remote and located in dense vegetation. Providing power to the locations for SCADA communications will be very difficult.



San Joaquin Marsh Improvements  
 Design Considerations  
 Figure 1

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**IRVINE RANCH WATER DISTRICT**



## Scope of Work

The overall project scope of work will accomplish the following tasks:

- Preliminary design
- Final design, including preparation of construction plans, specifications, and estimates
- Surveying services
- Bid period support

### Task 1: Preliminary Design

#### A. Technical Memorandum

Stantec will prepare a Technical Memorandum that summarizes the findings and recommendations developed during the Preliminary Design phase. The scope of work for the Preliminary Design will encompass the following tasks:

- *Background Information*  
We will conduct collection and review of all available background information, such as record and as-built plans, the initial PDR, and supporting documents. Previous recommendations of the initial PDR will be verified. Preliminary designs on the scope items added by the District will be performed.
- *Site Reconnaissance*  
Stantec will undertake a pre-design site reconnaissance of existing structures to verify as-built condition. We will provide a field survey of the existing ground elevations for the proposed weir structure near campus drive.
- *Conceptual Layout*  
Stantec will prepare conceptual layouts of all proposed improvements, including improvements at the Creek Pump Station and MCC, marsh recirculation modifications, and the operational modifications.
- *Electrical and Instrumentation*  
We will evaluate the existing electrical and instrumentation systems relevant to the proposed Creek Pump Station improvements, flow control valves, and automated strainer in regards to the proposed improvements. Recommendations will be provided for any required improvements.
- *Project Schedule*  
We will prepare a preliminary project design and construction schedule, identifying any long lead items that may be required for the project.
- *Engineer's Estimate*  
We will prepare an engineer's opinion of probable construction cost with each submittal.

#### B. Meetings

The project will require a total of (3) meetings: (1) kick-off meeting, (1) site visit and (1) draft and final submittal meeting. Stantec will prepare meeting agendas and minutes with action items.

#### C. CEQA Documentation

The District will complete and file any required CEQA documentation for the project. Stantec will assist and provide information to the District in the preparation of the document.

#### D. Permits

We will identify any permits that will be necessary to perform the upgrades at the Creek Pump Station.

#### E. Deliverables

Stantec will provide (10) copies of a draft and final preliminary design technical memorandum for the proposed Marsh modifications.

### Task 2: Final Design

#### A. Construction Drawings

Stantec will design and prepare civil, mechanical, electrical, and other drawings needed for the construction of the San Joaquin Marsh modifications. The set of drawings will include but is not limited to the following:

- Title and general sheets
- Construction notes
- Site plan
- Civil plans
- Mechanical plans
- Electrical and instrumentation for any equipment replacement or construction
- Details

#### B. Drawing Standards

We will prepare the detailed construction drawings in the latest version of AutoCAD using the District's title block to be provided prior to design. Each plan sheet will conform to the District's standard 24-inch x 36-inch sheet layout. The final AutoCAD electronic files will be submitted to the District on a compact disc. Final construction drawings will be submitted to the District as single full-sized PDF files on a separate compact disc.

### C. Project Manual

We will prepare a Project Manual utilizing the District's standard format. An original set of bidding documents in 8-1/2 inch x 11-inch format will be furnished. Stantec will submit computer files of the Project Manual to the District in the latest version of Microsoft Word on compact disc. The Project Manual will also be submitted in a single PDF file on a separate compact disc.

### D. Final Design Deliverables

- *75% Submittal*  
Stantec will submit eight (8) copies of the 75% submittal to the District for review and comment. This submittal will include a draft set of plans for the entire project. Plans for the 75% submittal will clearly show layouts of each component of the design, such as civil, mechanical, electrical, and detail sheets. The 75% submittal will also include all sections of the Project Manual as well as draft sections of the technical specifications. The General Provisions sections of the Project Manual will not be included. An engineer's estimate of probable construction cost will also be submitted with this submittal.
- *99% Submittal*  
Stantec will submit eight (8) copies of the 99% (pre-final plans) for review and comment. The plans for the 99% submittal will clearly show the layouts of each component of the design, such as architectural, structural, mechanical, electrical/instrumentation, and detail sheets. The 99% submittal will address and incorporate any District staff comments into the 75% submittal, as well as any comments received at the 75% plan preview meeting. The 99% submittal will include all sections of the Project Manual including draft technical specification sections. The General Provisions sections will not be included in this submittal. The engineer's estimate of probable construction cost will also be updated for this submittal.
- *100% Submittal*  
Stantec will submit eight (8) copies of the 100% final plan will be submitted to the District for final review, comments and approval. This submittal will contain a final complete set of plans for the entire project. Plans for the 100% submittal will clearly show layouts of each component of the design such as civil, structural, electrical/instrumentation, and detail sheets. The final submittal will address and incorporate any District staff comments from the 99% submittal, as well as comments received during the 99% plan preview meeting, if any. The 100% submittal will include all sections of the Project Manual including the technical specification sections and the General Provisions. The engineer's estimate of probable construction cost will be updated for this submittal.
- *Plan Approval*  
We will submit an original stamped and signed reproducible set of mylar plans, a bond paper set of final plans, and an original signed Project Manual for District signatures. We will attend a meeting with the District's staff for the purpose of obtaining signatures and explain the project and answer questions. An updated final Engineer's estimate will be submitted with the final plans and Project Manual.
- *Project Meetings*  
Stantec will conduct and attend project review meetings, including the preparation of meeting minutes, with District staff and other project team members. It is our understanding that there will be the following meetings: a kick-off meeting, one meeting to preview the 75% plan, one meeting to preview the 99% plan, and one meeting to review the final 100% plan submittal, with the District. A total of four (4) have been budgeted for this task.
- *Project Schedule*  
We will prepare and submit a project schedule for the construction project with each of the draft design submittals and final design submittal that reflects coordination items, date of completed plans, critical path issues, District review times, and shop drawing approval, manufacturing and delivery anticipated dates.
- *Permits*  
Stantec will identify all required permits and controlling agencies, if any. Permit identification will include any required fees and anticipated permit processing times. We will prepare and apply for all permits identified. Payment of all permit fees will be the responsibility of the District.
- *Liquidated Damages Calculations*  
Stantec will assist the District, utilizing the District's standard liquidated damage calculation form, in calculating the liquidated damages value for the construction project, should the contract time be exceeded.
- *Construction Cost Estimate*  
We will provide an itemized estimate of the probable construction costs for the draft submittals. The construction cost estimate will be updated for each submittal and for the final submittal.
- *Bid Period Assistance*  
During the bidding period, Stantec will assist the District by providing information and clarification of bid documents to prospective bidders and will prepare up to two (2) addenda for all prospective bidders, if so requested by the District.

PROJECT TEAM

PROJECT TEAM

## B. Project Team

### Organizational Chart



Recognizing the unique needs of the District's water treatment improvements, we have identified specialists in pump station design and recirculation improvements. The organization chart above identifies each team member's role, followed by team member resumes on the following pages.

**Project Management.** Our philosophy is that a project manager's best approach for managing a successful and productive team is through effective leadership, instilling a motivational, communication-based approach, and promoting teamwork through dependable alliances.

These combined processes incite coworkers to eagerly perform their tasks and responsibilities, ensuring project goals and objectives are met or exceeded. In support of this corporate philosophy, we have formal internal project management manuals dedicated to the "how to" for carrying out assignments. These ensure adherence to QA/QC procedures and enable roles, resource allocation, organizational issues, and conflict resolution to be managed effectively.

Proposed project manager **Robert Reid, PE**, has successfully completed numerous pump station, pipeline, and flow system maintenance projects. He will successfully execute the project by taking a proactive role, coordinating all aspects of the project and subconsultants, providing deliverables on schedule, facilitating communications with the District, and providing advisory services as needed. He will be the focal point for internal and external communication and facilitation, and will serve as a link between the District, subconsultants, and team members. He will be responsible for appropriating, assigning, and directing the required resources to complete the project.

At Stantec, we use an intranet system called StanNet, which includes Oracle, allowing the project manager to review project financials on a weekly basis, as well as monitor the labor charges to each project. The system allows details to be tracked on a project basis. This system tracks work in progress, billing data, and Earned Value Analysis (EVA). The EVA is updated each week along with the other data as labor and other direct expenses are charged to the project. This allows the project manager to monitor budgets, staff utilizations, and even sheds light onto scope creep issues or scheduling concerns.

Communication and coordination among the core team members will be seamless and routine on a daily basis. Our weekly staffing meetings are used to discuss projects status, workloads, and deadlines with the appropriate staff in attendance. We will include the subconsultants, as well as other staff outside our local office, in bi-weekly project meetings or monthly project meetings depending on the project's phase and relativity to the current work performed.

As-needed staff résumés are immediately available upon your request.



**With a combined 205 years of experience, Robert and our proposed key personnel have the local strength, knowledge, and relationships to meet your requirements.**

## Time Commitment Schedule

Each of our proposed team members is available throughout the design and construction phases of this project. We will supplement our team with our depth of local and global resources to respond to project needs. A time commitment percentage is identified for each of our team members in the following table. This availability is based on current assignments; we will be 100 percent available for this project when called upon.

Team Member	Role	% Time
Robert Reid, PE	Project Manager	35%
Doug Johnson, PE	Principal-in-Charge	5%
Bob Seeman, PE	Task Leader - Mechanical	40%
Kevin Brandt, PE	Task Leader - Marsh Flow Control	25%
Nancy Baker, PE	Project Engineer	50%
Marty Armenta, PE, RCDD, LEED AP	Electrical and Instrumentation & Controls	25%
Ray Mansur, PLS	Survey	15%
Welsh Structures, Inc.*	Structural	N/A
Ninyo & Moore*	Geotechnical	N/A

\*Subconsultant



Our team has the background knowledge to execute this project efficiently and will commit the necessary resources to ensure a successful project.



## Doug Johnson PE

**Principal-in-Charge / QA/QC**

### Registrations

Professional Engineer #C047447,  
State of California

### Education

BS, Civil Engineering, California Polytechnic  
State University, San Luis Obispo, California,  
1988

### Key Qualifications

-  More than 27 years of experience
-  Served as principal-in-charge for more than 10 marsh/basin projects
-  Currently overseeing civil engineering services for IRWD's Natural Treatment System (NTS) stormwater quality basin

He has more than 27 years of professional engineering experience on a wide range of public infrastructure related projects. He is a hands-on project principal with expertise ranging from project initiation and alternatives analysis to construction support and project close out services. Doug consistently and successfully assists his clients in achieving their objectives by developing creative and cost-effective solutions to address the project specific needs.

### Select Project Experience Highlighting Doug's Familiarity with This Type of Project

Project / Role	Responsibilities	Relevance
<b>Turner Basin Recharge Improvements (Principal-in-Charge)</b> Ontario, California	<ul style="list-style-type: none"> <li>• Oversaw design efforts to reestablish the Deer Creek Turnout connection to Basin 8 and construction of pipeline and control structures</li> </ul>	<ul style="list-style-type: none"> <li>✓ Basin improvements</li> </ul>
<b>La Palma Recharge Basin (Principal-in-Charge)</b> Anaheim, California	<ul style="list-style-type: none"> <li>• Oversaw civil and mechanical design, including survey and mapping services, grading plan and site improvement plans, pipeline improvement plans, dewatering pump system design, electrical and SCADA design services and plans, structural engineering services, bidding and construction support services</li> </ul>	<ul style="list-style-type: none"> <li>✓ Basin improvements</li> <li>✓ Mechanical design</li> <li>✓ Electrical and instrumentation evaluation and drawings</li> </ul>
<b>Miraloma Recharge Basin (Principal-in-Charge)</b> Anaheim, California	<ul style="list-style-type: none"> <li>• Involved in the initial design concept for an 11-acre groundwater recharge basin</li> <li>• Oversaw demolition, excavation and hauling, construction of water supply pipelines with appurtenances for flow control and metering, a pump station, SCADA integration, site and landscape improvements</li> </ul>	<ul style="list-style-type: none"> <li>✓ Flow control and metering</li> <li>✓ Removable weir structure</li> <li>✓ Pump station design and improvements</li> <li>✓ Pressure maintenance improvements</li> <li>✓ Electrical integration</li> </ul>
<b>Burris Basin and Lincoln Basin Configuration Project (Principal-in-Charge)</b> Santa Ana, California	<ul style="list-style-type: none"> <li>• Oversaw over-excavation plans to replace impermeable materials with permeable sand and gravel</li> <li>• Oversaw design of delivery channel to convey flows around recharge area and included a concrete lined chute at terminus</li> <li>• Provided technical consultation to proposed grading design</li> <li>• Assisted with preparation of project specifications</li> </ul>	<ul style="list-style-type: none"> <li>✓ Flow control</li> <li>✓ Concrete-lined chute design to convey low-level water flow</li> </ul>



# Robert Reid PE, CPA

## Project Manager

### Registrations

Professional Engineer #C049624,  
State of California  
Certified Public Accountant #52171E,  
State of California

### Education

MBA, Business, University of Michigan,  
Ann Arbor, Michigan  
BS, Mechanical Engineering,  
University of Michigan, 1984

### Years of Experience

27

### Key Qualifications

-  More than 25 years of IRWD experience
-  Managed more than 30 pump stations
-  Oversaw all phases of water resources projects

Robert has managed all phases of water resource projects, including providing conceptual planning, feasibility studies, facility design, and construction management; evaluating numerous water distribution and wastewater collection systems; and developing facility plans to meet projected needs. These plans have involved major infrastructure projects related to water transmission, treatment and storage facilities, and wastewater collection facilities. He has managed design teams and construction inspectors for a wide array of projects, including water reservoirs, water booster pump stations, pressure-reducing stations, water and wastewater flow monitoring stations, wastewater lift stations, force mains, and pipelines. While Robert's water resources experience runs deep, his familiarity with your staff and the local regulatory agencies makes him a highly qualified project manager for this project.

### Select Project Experience Highlighting Robert's Familiarity with This Type of Project

Project / Role	Responsibilities	Relevance
<b>Civic Center Park Pump Station and Well (Project Manager)</b> Palm Desert, California	<ul style="list-style-type: none"> <li>• Managed design of a 1,000 gpm irrigation pump station and deep well replacement</li> <li>• Oversaw replacement of an existing inadequate pump station and to satisfy increased water demands for the park's landscape systems</li> <li>• Design of a partially buried masonry structure containing (3) 500-gpm vertical turbine pumps with variable frequency drives (VFD), an inline automatic filter system, a flow meter, an isolated control room housing associated electrical, SCADA and irrigation controls, HVAC and ventilation system</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ Flow meters</li> <li>✓ Electrical integration</li> <li>✓ VFD design</li> </ul>
<b>Orchard Hills and Portola Springs Pump Station (Project Manager)</b> Irvine, California	<ul style="list-style-type: none"> <li>• Managed design of two separate pump station facilities</li> <li>• Oversaw preparation of a preliminary design report (PDR) and construction plans and specifications, including pumps, piping and valving systems, surge control tanks, a temporary VFD control system, flow meters, dual-electrical/telemetry control room, yard piping, ventilation systems</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ PDR review</li> <li>✓ VFD design</li> <li>✓ Electrical integration</li> </ul>
<b>Shadow Lake Development Pump Station and Reservoir (Project Manager)</b> Indio, California	<ul style="list-style-type: none"> <li>• Managed preliminary and final design, construction support, and construction observation for a booster pump station to provide domestic water and fire supply</li> <li>• Oversaw design of (3) vertical turbine pumps, a 3,000-gallon surge protection tank, a 125 kW emergency standby generator, chlorination facilities, masonry block buildings</li> <li>• Oversaw design of 1,000 gpm fire pump with 75 hp motors, (2) 180 gpm vertical turbine booster pumps with (15) hp motors</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> </ul>



## Bob Seeman PE

### Task Leader - Mechanical

#### Registrations

Professional Engineer #21646, State of California

#### Education

BS, Civil Engineering, University of Southern California, Los Angeles, California, 1968

#### Key Qualifications

-  More than 47 years of water resources engineering experience
-  More than 35 years of IRWD experience
-  Engineered more than 25 reservoirs, 75 pumping facilities, and 140 miles of pipeline

Bob has been planning, engineering, designing, and providing construction management services for water, wastewater, and water resource systems for more than 47 years. His completed projects total more than 140 miles of pipeline, over 75 pumping facilities, and 25 reservoirs. Bob's experience includes preparing water, wastewater, and drainage master plans; preparing feasibility and water supply studies; developing site grading plans; preparing detailed water, wastewater, reclaimed water, and drainage plans and specifications for pipelines, wells, reservoirs, and pumping station facilities; developing environmental impact reports; and providing construction management services.

#### Select Project Experience Highlighting Bob's Familiarity with This Type of Project

Project / Role	Responsibilities	Relevance
<b>Marywood Pump Station (Project Manager)</b> Orange, California	<ul style="list-style-type: none"> <li>• Performed a siting feasibility study to identify and evaluate potential relocation sites for a 46-year-old pump station</li> <li>• Prepared a preliminary design report (PDR); construction plans, specifications, and cost estimates for the relocated station which includes a dual 1,500 gpm pump system</li> <li>• Provided construction support services, including assistance with bidding, reviewing shop drawings, preparing as-builts, and providing site certifications</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ Electrical integration</li> <li>✓ Improved maintenance</li> </ul>
<b>Northwood Zone A to B (75-1) Pump Station (Project Engineer)</b> Irvine, California	<ul style="list-style-type: none"> <li>• Prepared design and specifications for Zone B Pump Station at Rattlesnake Complex</li> <li>• Designed pump stations to include four 75-hp motor pumps and vertical turbine with 32' deep cans</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ IRWD experience</li> </ul>
<b>Carbon Canyon Wastewater Reclamation Facility (CCWRF) Recycled Water Pump Station Expansion (Project Engineer)</b> Chino, California	<ul style="list-style-type: none"> <li>• Prepared a hydraulic analysis of the recycled water system to determine optimum sizing</li> <li>• Designed an emergency overflow line at the chlorine contact basin</li> <li>• Increased pump station's total capacity to 10,340 gpm</li> <li>• Designed pump station motor and bypass</li> <li>• Designed sampling station relocation</li> </ul>	<ul style="list-style-type: none"> <li>✓ Magmeter installation</li> <li>✓ Flow meters</li> <li>✓ Total pump station capacity of over 10,000 gpm</li> </ul>
<b>Orchard Hills Zone 3-5 Domestic Water and Zone A-C Recycled Water Pump Stations (Project Manager/Design Engineer)</b> Irvine, California	<ul style="list-style-type: none"> <li>• Designed two pump stations that provide water to the Orchard Hills development</li> <li>• Zone 3-5 facilities have a pump capacity of 3,000 gpm</li> <li>• Zone A to C pump stations have a pump capacity of 6,000 gpm</li> <li>• Designed three hydropneumatic surge tanks to handle suction and discharge surge pressures</li> <li>• Prepared preliminary design report (PDR) and construction plans and specifications</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ IRWD experience</li> </ul>



## Kevin Brandt PE

### Task Leader - Marsh Flow Control

#### Registrations

Professional Engineer #54873,  
State of California

#### Education

BS, Civil Engineering, University of Southern  
California, Los Angeles, California, 1968

#### Key Qualifications

-  More than 26 years of water resources engineering experience
-  More than 12 years of IRWD experience
-  Managed IRWD's Carlson Marsh regrade, including betterments of year-round flow conditions

Kevin has 26 years of experience managing the design and construction of both municipal and private projects. His project background includes the management of multiple drainage-related design projects, such as regional flood control basins; groundwater recharge basins; master-planned storm drain infrastructure improvements; and roadway, bridge, and trail improvements and rehabilitations. Kevin's wide range of expertise includes design engineering, preparation of construction documents, construction support services, and resource agency permitting. He has strong relationships with numerous agencies in southern California, including the Orange County Water District, Metropolitan Water District of Southern California, Inland Empire Utilities Agency, Orange County Flood Control District, and San Bernardino County Flood Control District.

#### Select Project Experience Highlighting Kevin's Familiarity with This Type of Project

Project / Role	Responsibilities	Relevance
<b>Carlson Marsh Regrade Project</b> <b>(Project Manager)</b> Irvine, California	<ul style="list-style-type: none"> <li>• Re-established year-round flow conditions, restoration of riparian habitat, promotion of vector control, provisions for storm flow protection, and water spreading activities through structural improvements</li> <li>• Assisted with depiction of existing fauna to be preserved, as well as removal of invasive vegetation</li> <li>• Managed excavation and grading within low-flow marsh areas</li> <li>• Oversaw repairs and modifications to existing structures and construction/alteration of berms, diversion structures,</li> </ul>	<ul style="list-style-type: none"> <li>✓ Location of equipment to meter flow</li> <li>✓ Pump station design</li> <li>✓ Electrical integration</li> <li>✓ Maintenance improvements</li> <li>✓ Structural improvements</li> <li>✓ Removable weir structure</li> <li>✓ IRWD experience</li> </ul>
<b>Miraloma Recharge Basin</b> <b>(Project Manager)</b> Anaheim, California	<ul style="list-style-type: none"> <li>• Managed all engineering and construction support services</li> <li>• Prepared a preliminary design report (PDR) and plans specifications, and estimates</li> <li>• Recommended an alternative that provided a balance of cost savings and functionality through reduced pipeline lengths and a basin configuration that accounted for a future lowering of the basin floor</li> <li>• Oversaw demolition of existing industrial warehouse facilities, basin grading/export, CMU perimeter wall, irrigation and landscape, 36-inch and 42-inch CML&amp;C steel pipelines, vaults, flow meter, motorized valves, basin dewatering pump station and electrical, instrumentation and</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design and improvements</li> <li>✓ Pressure maintenance improvements</li> <li>✓ Flow control and metering</li> <li>✓ Removable weir structure</li> <li>✓ Electrical and instrumentation integration</li> <li>✓ Motorized valves</li> </ul>
<b>La Palma Recharge Basin</b> <b>(Project Manager)</b> Anaheim, California	<ul style="list-style-type: none"> <li>• Managed civil and mechanical design, including survey and mapping services, grading plan and site improvement plans, pipeline improvement plans, dewatering pump system design, electrical and SCADA design services and plans, structural engineering services, bidding and construction support services</li> </ul>	<ul style="list-style-type: none"> <li>✓ Basin improvements</li> <li>✓ Mechanical design</li> <li>✓ Electrical and instrumentation evaluation and drawings</li> </ul>



## Nancy Baker PE

### Design Engineer

#### Registrations

Professional Engineer #41550, State of California

#### Education

BS, Civil Engineering, California State University, Long Beach

#### Key Qualifications

-  More than 30 years of water resources engineering
-  Led designs for over 30 water resources projects
-  Has successfully managed more than 10 pump station projects

Nancy has more than 30 years of experience in the Water Industry and Civil Engineering fields in both private and public sectors. She has extensive knowledge in developing water and sewer master plans, as well as managing construction for large diameter transmission mains, pumping stations, water storage reservoirs and small capacity wastewater treatment plants. Her expertise includes complete design and construction for sewage lift stations, pressure reducing stations, and water reclamation projects.

#### Select Project Experience Highlighting Nancy's Familiarity with This Type of Project

Project / Role	Responsibilities	Relevance
<b>Valley Crest Booster Pump Station and Reservoir (Project Manager / Project Engineer)</b> Apple Valley, California	<ul style="list-style-type: none"> <li>• Managed and engineered the design of 0.60 MG steel tank reservoir and pump station</li> <li>• Designed three (3) vertical turbine pumps with electric motors ranging from 10 to 40 hp, flow metering, piping, instrumentation and controls, motor control center, electrical equipment</li> <li>• Designed earthen berm to screen the pump station from view of an off-site building and on-site detention basin for retention of on-site water</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ Flow metering</li> <li>✓ Instrumentation and controls</li> <li>✓ Berm design</li> </ul>
<b>Perham Plant Pump Station Improvements (Project Manager)</b> Culver City, California	<ul style="list-style-type: none"> <li>• Managed upgrade designs, including replacement of existing pump station with two (2) 150 gpm pumps and one (1) 1,500 gpm pump with variable speed drive, temporary booster pump station to provide system water during construction, a natural gas emergency generator of new MCC, PLC and SCADA system and reconstruction of the driveway</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ Variable speed drives</li> <li>✓ Motor control center (MCC)</li> <li>✓ Electrical integration</li> </ul>
<b>Walnut Park Mutual Water Company Booster Pump Station and Reservoirs (Project Engineer/ Construction Manager)</b> Walnut Park, California	<ul style="list-style-type: none"> <li>• Engineered and managed construction of a 2.3 MG steel tank reservoir, 0.86 MG steel tank reservoir, and a 4,700 gpm pump station</li> <li>• Designed three (3) 1,200 gpm vertical turbine pumps and 60 hp electric motors, and one (1) 500 gpm vertical turbine pump and 25 hp electric motor to replace various existing pumps at the operations building/reservoir site</li> <li>• Designed piping, building, instrumentation and controls, electrical equipment to maintain existing pump station until new pump station was completed</li> <li>• Reviewed shop drawings for compliance with technical specifications</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pump station design</li> <li>✓ Variable speed drives</li> <li>✓ Instrumentation and controls</li> <li>✓ Electrical integration</li> </ul>



## Marty Armenta PE

### Electrical Lead

#### Registrations

Professional Engineer #E16438, State of California

#### Education

BS, Electrical Engineering, University of Arizona, Tucson, Arizona, 1989

#### Key Qualifications

-  *More than 25 years of electrical engineering experience*
-  *Has led electrical design services for more than 35 water resources projects*

Marty brings more than 25 years of electrical engineering and project management experience to a project team. His expertise include the design of medium voltage (2.4kV - 46kV) power distribution, low voltage (120V - 600V) power distribution, exterior area lighting, street lighting, interior lighting, grounding, traffic signals, lightning protection, fire alarm, telecommunications, access control, closed circuit television, integrated security, intercom, public address, distributed control systems, and PLC/HMI control systems for design-build, CMAR, and conventional delivery projects.

Marty is directly involved in all aspects of design, including the preparation of specifications and cost estimates. His Registered Communications Distribution Designer (RCDD) credential is the most widely recognized credential for knowledge and experience in telecommunications system design. Marty has provided electrical engineering services for the following projects:

- Turner Basin Recharge Improvements, Chino, California (Engineer of Record)
- Carbon Canyon Pump Station Expansion, Chino, California (Engineer of Record)
- Siesta Key Master Pumping Station, Sarasota, Florida, California (Engineer of Record)



## Ray Mansur PLS

### Survey

#### Registrations

Professional Land Surveyor #7185, State of California

#### Education

BS, Engineering Technology, Construction, California State Polytechnic University, Pomona, Pomona, California, 1990

#### Key Qualifications

-  *More than 25 years of surveying and mapping experience*
-  *Extensive experience in managing reservoir construction staking and topographic design surveys*
-  *IRWD experience*

Ray manages a talented staff of professionals on projects of varying magnitude and complexity, ranging from transportation projects to residential properties, commercial and industrial site developments, and master-planned communities. His experience includes right-of-way engineering, geodetic control, tentative and final subdivision mapping, preparing ALTA/ACSM land title surveys, and construction surveys. He has extensive knowledge of GPS-related applications, field data collection, and boundary retracement. Ray also has a high degree of technical expertise to field operations and instrumental in enhancing and streamlining many field procedures that have contributed to increased productivity and efficiency. Ray has provided successful surveying services for the following projects:

- River Trails Recharge Basin, Anaheim, California (Survey Manager)
- Upland Basin Expansion (Project Surveyor)
- Chino Basin Storm Water, Recharge and Imported Water Recharge Facilities Improvements, San Bernardino, California (Survey Manager)
- Orange County Sanitation District On-Call Surveying Services, Orange County, California (Principal)
- Inland Empire Utilities Agency On-Call Design Surveying Services, Riverside, California (Principal)

## Welsh Structures, Inc.

(SUBCONSULTANT)

### Structural

Welsh Structures, Inc. (WSI) was founded in 2009 by **Stephanie Welsh**. Stephanie has over 30 years of structural engineering experience and is licensed as a Structural Engineer in eight (8) States (CA, CO, AZ, AR, NM, OR, OK & UT). Stephanie received her Bachelor of Science degree in Engineering from the University of California at Irvine.

As principal-in-charge, Stephanie oversees the design development, confirms that all project schedules are met on time and that cost-efficient systems are chosen for each project. She performs a hands-on role in the design and performs quality assurance review of all project deliverables. Stephanie is also recognized as an expert in the design of school facilities after specializing in this type of project for over 25 years.

Designing and detailing structural framing systems for new and existing buildings and structures is the principal focus of our practice. WSI collaborates with architects, mechanical engineers, civil engineers, landscape architects, steel fabricators and contractors, to propose, study, and develop structural framing system alternatives for each project. Their integrated approach to developing the optimal structure considers not only material quantities, but also project economic, functional, and aesthetic needs, all at a competitive rate.

By engaging the owner, client, and design team members early in the design process, the appropriate delivery strategy can be determined, saving the owner time and money. WSI has used many different design delivery strategies and understand which ones suit specific project needs. For Design-Bid-Build, Design-Build, Integrated Project Delivery or a hybrid, our design professionals can identify the advantages and disadvantages associated with each delivery process and guide the selection of the suitable choice.

WSI is also a certified MBE and WBE Structural engineering firm. We have also been awarded consulting plan checker contracts with both the Division of the State Architect (DSA) Los Angeles and San Diego.

WSI recently completed construction projects for Grossmont USD and Anaheim City Schools and have just finished the permit phase for new buildings at four (4) existing Glendale Unified.

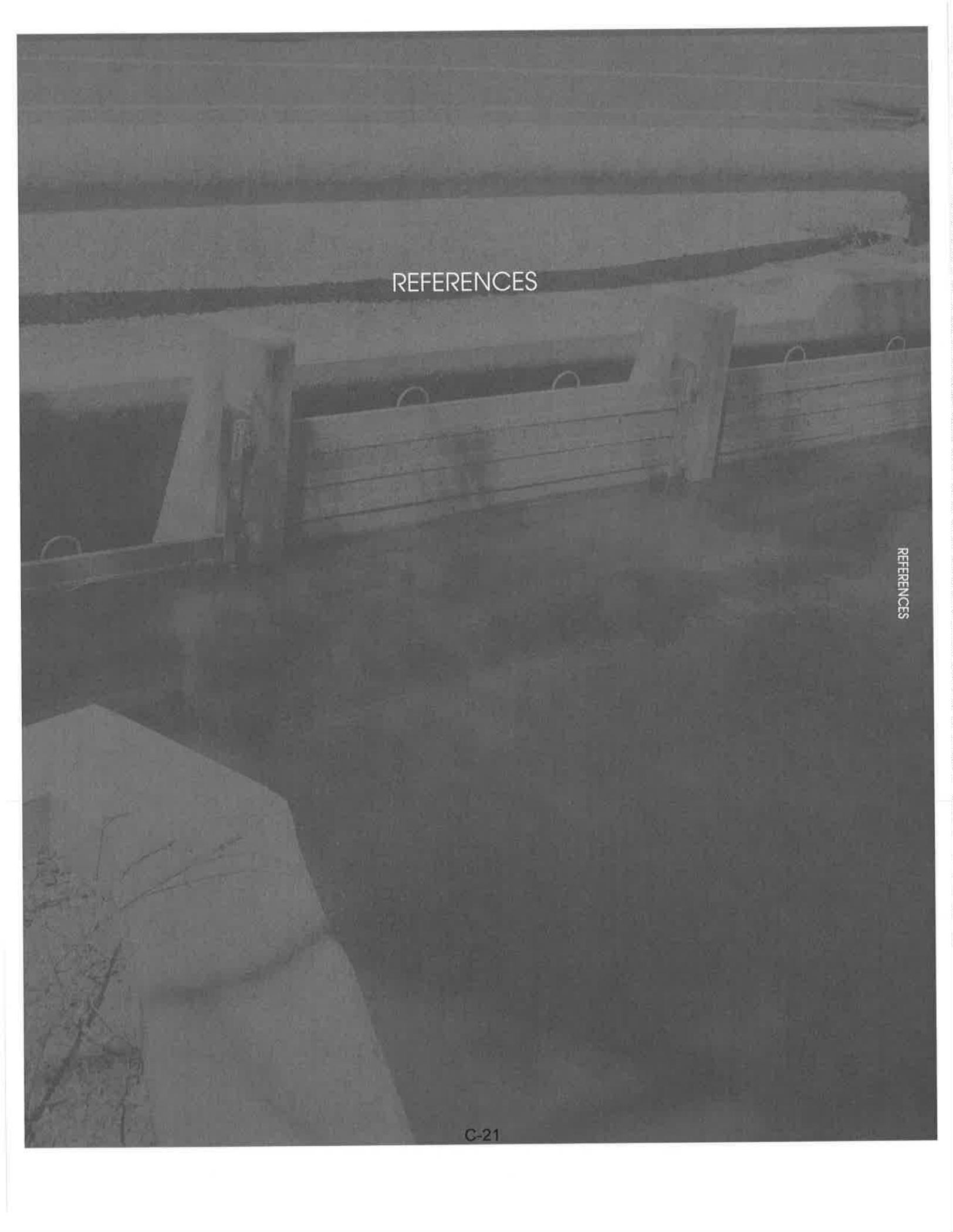
## Ninyo & Moore

(SUBCONSULTANT)

### Geotechnical

For more than 10 years, we have worked closely with Ninyo & Moore on multiple water distribution projects in Southern California. They will lead the project's geotechnical services where needed — performing site reconnaissance for surface conditions, subsurface exploration, and laboratory testing. If applicable, they will present their findings and construction recommendations in a geotechnical report.

**Michael Puff, PG, CEG** has extensive experience conducting geologic and geotechnical field evaluations, as well as performing project administration and management. His expertise includes detailed logging of large- and small-diameter borings and trenches, and geologic evaluation/ mapping. Michael provides technical support to staff-level engineers, geologists, and field technicians.



REFERENCES

REFERENCES

## C. References

The projects below highlight a sample of our team's extensive experience, knowledge, and demonstrated quality of service for pump station improvements, recirculation, and flow maintenance. Our experience on local projects gives us the advantage of understanding the planning, engineering, and operational challenges unique to the area. The measure of our success on these projects is best described directly by our clients. We encourage you to contact the references outlined below to discuss how our practical, experienced approach will benefit your project.

### Carlson Marsh — Irvine, California



**Completion date:** 2005  
**Contact:** Eric Akiyoshi, Associate,  
 Irvine Ranch Water District  
**Phone number:** (949) 453-5552  
**E-mail:** akiyoshi@irwd.com

**Relevance to your project:**

- Proposed location for meter flow equipment installation
- Structural improvements
- Removable weir structure
- Electrical integration
- IRWD experience

This 60-acre wetland site located in the southwest portion of the San Joaquin Marsh Enhancement Plan area is owned and operated by the Irvine Ranch Water District.

Primary goals established for the Carlson Marsh Project include reestablishing year-round flow conditions, removal of invasive vegetation, restoration of riparian habitat, promotion of vector control, and provisions for storm flow protection and water spreading activities through structural improvements. Stantec worked closely with a biological subconsultant, assisting with depiction of existing fauna to be preserved and invasive species removals. Proposed activities included excavation and grading within low-flow areas of the marsh; repairs and modifications to existing structures; and construction/alteration of berms, diversion structures, culverts, and weirs throughout the Carlson Marsh.

### Michelson Sewer Lift Station — Irvine, California

To accommodate the further development of the Park Place area in Irvine, IRWD required a lift station relocation. It varied significantly from the existing station, as it was constructed to OCSD's 1990 design criteria. We designed the station to current IRWD design standards. After reviewing and analyzing 12 months of hourly and daily flow, as well as researching proposed land used and ultimate flow rates, we concluded that the existing lift station is significantly oversized to serve the ultimate needs of the drainage area.

The lift station is equipped with two duty pumps to provide a flow rate of 1,500 gpm. Both pumps were provided with smaller impellers to provide a peak flow of 900 gpm to better match the required near-term peak flow rate. Both pumps are equipped with "Delta" impellers to reduce ragging. The lift station is also equipped with a "Cutter" pump with a flow capacity of 1,500 gpm. This "Cutter" pump is used to assist in frequent cleaning of the wet well. The operators adjust to the position of the slide gate before the wet well to create flow along a concrete ramp within the wet well while the "Cutter" pump is manually operated. This turbulent condition significantly aids in the wet well maintenance.

All three pump motors are equipped with VFD, and housed in an air-conditioned electrical room. A diesel power emergency generator is housed in a sound-attenuated building. The wet well and force main are equipped with odor control equipment. The ventilation is constructed in conformance with NFPA-820.



**Completion date:** 2015  
**Contact:** Richard Mori, Principal Engineer, Irvine  
 Ranch Water District  
**Phone number:** (949) 453-5571  
**E-mail:** rmori@irwd.com

**Relevance to your project:**

- Pump station design
- VFD installation
- Flow improvement
- Maintenance improvement

## Carbon Canyon Wastewater Reclamation Facility (CCWRF) Recycled Water Pump Station Expansion — Irvine, California



**Completion date:** 2011

**Contact:** Adham Almasri, Senior Engineer, Inland Empire Utilities Agency

**Phone number:** (909) 993-1462

**E-mail:** aalmasri@ieua.org

### Relevance to your project:

- ★ Pump station design
- ★ Magmeter installation
- ★ Flow metering
- ★ Over 10,000 gpm total pump station capacity

This provides IEUA with a pump station with a total capacity of 10,340 gpm. The design also included the required upgrades to the pump station electrical systems, replacement of the existing pump station control system to meet IEUA's new standards, addition of new flow meters, and yard piping. Additional plant upgrades included a new splitter box and emergency overflow line at the chlorine contact basin, a new emergency overflow structure at the tertiary filter splitter box, and a new compliance structure.

Stantec was selected to upgrade the IEUA's existing CCWRF recycled water pump station. The existing pump station consisted of four 2,000- gpm vertical turbine pumps, three duty and one standby for a total capacity of 6,000 gpm. Each pump had a design point of 300 feet TDH and a 200-hp electric motor with a VFD drive.

IEUA's goal was to increase the capacity of the existing recycled water pump station to maximize the amount available treated recycled water that can be pumped from the CCRWF into the Agency's 930 pressure zone. Stantec produced a hydraulic analysis of the Agency's recycled water system consisting of the 1050 Zone, 930 Zone, 930 Zone Reservoir, 800 Zone, RP-1 South Zone Recycled Water Pump Station, RP-5 Recycled Water Pump Station, and the CCWRF Recycled Water Pump Station to determine the optimum sizing for the CCWRF Recycled Water Pump Station.

As a result of the analysis, Stantec recommended that the existing pumps be replaced with five pumps of equal capacity, with four duty pumps, and one standby pump. Each pump to have a design flow of 2,585 gpm at a total dynamic head (TDH) of 342 feet and a 300- hp motor.

## La Palma Recharge Basin — Anaheim, California

We are helping redevelop a former industrial site into a new groundwater recharge basin that will provide an extra 30 million gallons of recycled water per day to the local groundwater supply.

To allow for quick draining to the split basin, we installed a 6,400 gallon per minute pump station located adjacent to the inlet structure for the basin. The pumps and motor control center are housed in a multi-room masonry block structure. The pump station pumps back into the GWRS supply pipeline, transfers storage between basins, and discharges into an adjacent channel during emergency situations.

We performed civil, structural, mechanical, survey and mapping services, electrical, and SCADA design services. In addition, our landscape architects incorporated native trees, shrubs, groundcover, and a three-foot setback around the basin's northern, eastern, and southern boundaries to enhance the site's appearance. We also integrated a drip system along the basin's perimeter that provides cost-efficient irrigation for the landscaping.

We worked closely with the city of Anaheim, Orange County Water District, Orange County Public Works Department, and subconsultants to successfully design this project. We are currently providing construction support services for the basin, which is on track for completion in June 2016.

**Completion date:** 2014-Ongoing

**Contact:** Ben Smith, Orange County Water District

**Phone number:** (714) 378-3211

**E-mail:** bsmith@ocwd.com

### Relevance to your project:

- ★ Pump station design
- ★ Structural design
- ★ Electrical integration
- ★ Groundwater transport and discharge

## Miraloma Recharge Basin — Anaheim, California



**Completion date:** 2012

**Contact:** Chris Olsen, Principal Engineer,  
Orange County Water District

**Phone number:** (714) 378-3232

**E-mail:** colsen@ocwd.com

### Relevance to your project:

- Pipeline design
- Magmeter installation
- Flow control
- Electrical integration
- Maintenance improvements



The basin now yields the highest measured percolation rates among OCWD's 21 basins due to favorable geology and ultra-pure groundwater replenishment system water.

When the Orange County Water District (OCWD) identified the need for a new percolation basin, they enlisted our expertise. Built on a 13.2-acre former industrial site in Anaheim, the Miraloma Recharge Basin is a vital addition to OCWD's groundwater management system that allows the percolation of up to an additional 10,000 acre-feet of water—enough for 50,000 people. Prior to construction, thousands of acre-feet of water were lost every year due to the region's insufficient recharge capacity.

Our engineering and construction support services included preparing a preliminary design report and plans, specifications, and estimates. The selected alternative provides a balance of cost savings and functionality through reduced pipeline lengths and a basin configuration that allows for a future lowering of the basin floor. The project required demolition, excavation and hauling, construction of water supply pipelines with appurtenances for flow control and metering, a pump station, integration with OCWD's supervisory control and data acquisition (SCADA) system, site improvements to facilitate operations and maintenance, as well as landscape improvements.

As of 2012, the state-of-the-art basin is OCWD's newest recharge facility. It is devoted to water from the groundwater replenishment system, the world's largest advanced wastewater purification system for indirect potable reuse. The basin is designed to accept either Santa Ana River water or Groundwater Replenishment System water.

## Turner Basin Recharge Improvements — Ontario, California

The Inland Empire Utilities Agency, Chino Basin Watermaster, Chino Basin Water Conservation District, and San Bernardino County Flood Control District, implemented the Chino Basin Groundwater Recharge Program (CBGRP) to help increase the annual stormwater recharge, imported water, and recycled water.

As part of the CBGRP, Turner Basins consists of four separate basins; Basins 1 and 2 receive water from Cucamonga Creek Channel through a Stantec-designed rubber dam and a drop inlet in Deer Creek Channel, and Basins 3 and 4 receive water from the same drop inlet in Deer Creek Channel. Additional existing basins, Basin 5 and 8, are located on the east side of Archibald Avenue, and have not been in service since the channel's construction in 1980. We helped IEUA re-establish the Deer Creek Turnout connection to Basin 8 and construct related pipelines and control structures.

We maximized the amount of recharge water and installed a higher hydraulic head, enabling IEUA to store more water in additional basins. Our efforts enhanced high nutrient water flow and overall water supply reliability and groundwater quality for years to come.



**Completion date:** 2015

**Contact:** Joel Ignacio, PE, Senior Engineer  
Inland Empire Utilities Agency

**Phone number:** (909) 993-1913

**E-mail:** jignacio@ieua.org

### Relevance to your project:

- Pipeline design
- Flow improvements
- Recharge improvements

## Marywood Pump Station — Orange, California



**Completion date:** 2012

**Contact:** Sonny Tran, Senior Civil Engineer,  
Water Division, City of Orange

**Phone number:** (714) 288-2475

**E-mail:** [stran@cityoforange.org](mailto:stran@cityoforange.org)

*Relevance to your project:*

- Pump station design
- Electrical integration
- PDR preparation
- Maintenance improvement

The City of Orange (City) was concerned about the reliability of its 46-year-old Marywood Pump Station (station); we performed a siting feasibility study to identify and evaluate potential sites for a relocated station. Ten sites were identified, investigated, and ranked. Based on our analysis, we recommended a site within a slope adjacent to Villa Real Drive.

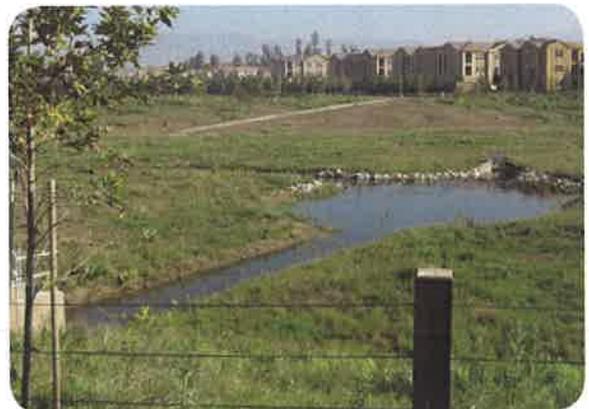
We prepared a Preliminary Design Report (PDR), performed geotechnical investigations and site survey, and prepared construction plans, specifications, and cost estimates for the relocated station. The station includes a dual 1,500 gallons per minute (gpm) pump system within a CMU/retaining wall roofed structure, an emergency generator within an open enclosure, landscaping, an irrigation system, and electrical/SCADA systems.

During final design, the City incorporated an emergency generator into the pump station. We re-evaluated the site to develop the most efficient layout to include the generator. With an additional easement, the challenges included construction within a slope, the narrowness of the site, and overhead power lines. We placed retaining walls to allow the structures to be infused into the slope and used an open emergency generator enclosure to allow for easier maintenance. The final layout included a parking area strip along the front of the pump station.

## Planning Area 40 Natural Treatment System (NTS) Basin — Irvine, California

Our landscape construction documents and construction support of the Cypress Village Planned Community's Natural Treatment System (NTS) Basin played a significant role in the overall functionality and aesthetically appropriate result of this unique 570-acre water treatment system. This basin, which is located directly adjacent to one of the community parks, serves multiple functions. Its major role may be the water quality element, however it also buffers the neighborhood from the interstate highway and is designed to provide a refuge point for local and transitory birds. Our team incorporated these functions into the landscape design.

Irvine Ranch Water District (IRWD) will ultimately assume responsibility for the project; however, we worked closely with IRWD staff to help ensure the project would accurately perform as a water treatment system, be visually pleasing to the public, and easily maintainable. We collaborated closely with IRWD's staff to develop the first-ever professionally designed irrigation system that would treat the riparian portion of the wetlands. It is now used as a model for new natural treatment systems.



**Completion date:** 2012

**Contact:** Matt Land, Assistant Construction  
Manager, Irvine Company

**Phone number:** (949) 633-8662

**E-mail:** [mlland@irvinecompany.com](mailto:mlland@irvinecompany.com)

*Relevance to your project:*

- Pump station design
- Removable weir structure
- IRWD experience

## Orchard Hills (Zones A to C) and Portola Springs (Zones 3 to 5) Booster Pump Stations — Irvine, California



**Completion date:** 2007

**Contact:** Malcolm Cortez, Principal Engineer,  
Irvine Ranch Water District

**Phone number:** (949) 453-5565

**E-mail:** cortez@irwd.com

### Relevance to your project:

- Pump station design
- Pipeline design
- Valve design
- Discharge maintenance
- Electrical integration
- VFD installation
- Flow metering
- PDR preparation
- IRWD experience

We provided preliminary/final design and construction management services to construct a dual booster pump station complex located on a site near IRWD's Rattlesnake Complex.

The new pump station complex contains separate domestic water and reclaimed water booster pumping stations to serve the Portola Springs and Orchard Hills developments.

Three hydropneumatic surge tanks are located onsite to manage both suction and discharge surge pressures. We prepared a preliminary design report (PDR), construction plans and specifications for both pump stations, and designed pumps, piping and valving systems, surge control tanks, a temporary VFD control system for the Zones 3 through 5 BPS to handle interim demand conditions, flow meters, dual electrical/telemetry control room, yard piping, and ventilation systems.



## Bee Canyon Pump Station Relocation — Irvine, California

IRWD operated a pump station for many years that pumped their Zone A (330 feet) recycled water and 500 vertical feet through a 5,000-linear-foot pipeline, to fill a 0.1-MG steel tank that is owned and operated by the County of Orange Waste and Recycling. The tank is continually used during Bee Canyon Landfill's 10-hour day.

To accommodate future Stonegate Village development, the pump station needed to be relocated. We evaluated several potential sites and concluded that the optimum location was adjacent to Bee Canyon Access Road, north of Portola Parkway. The suction HGL changed to Zone C (640 feet) due to a new connection to the recently converted Zone C pipeline in Portola Parkway. We relocated approximately 400 linear feet of the pump station suction piping into the existing road. Since a portion of the pump station's existing discharge piping would become the suction piping, we installed new suction and discharge laterals.

The new pump station delivers a design flow rate of 750 GPM. It also is equipped with a stand-by pump, 250-gallon surge tank, and telemetry system. In addition, we constructed a bioswale to mitigate for a new paved access road.



**Completion date:** 2013

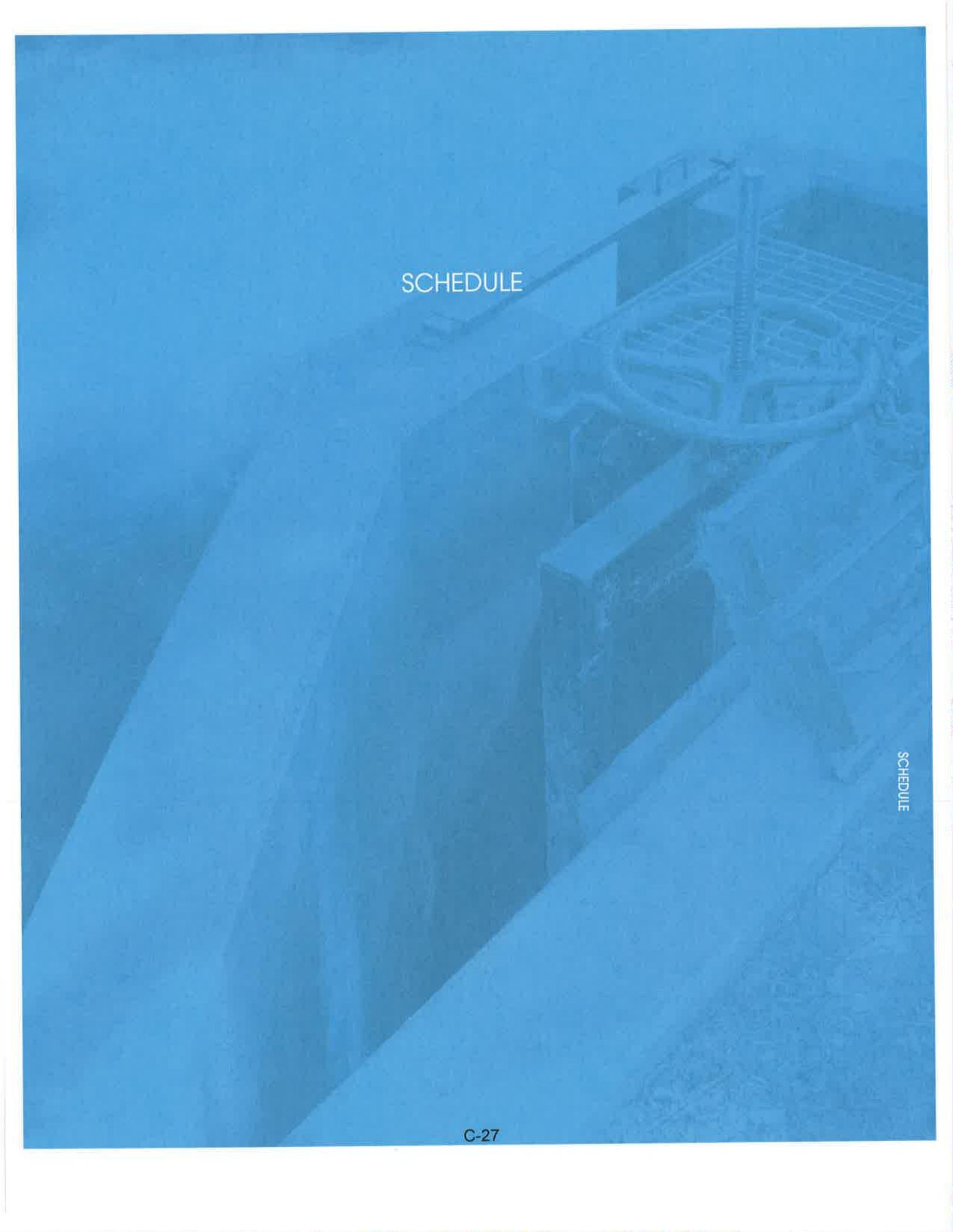
**Contact:** Malcolm Cortez, Principal Engineer,  
Irvine Ranch Water District

**Phone number:** (979) 453-5565

**E-mail:** cortez@irwd.com

### Relevance to your project:

- Pump station design and relocation
- Discharge improvement
- IRWD experience



SCHEDULE

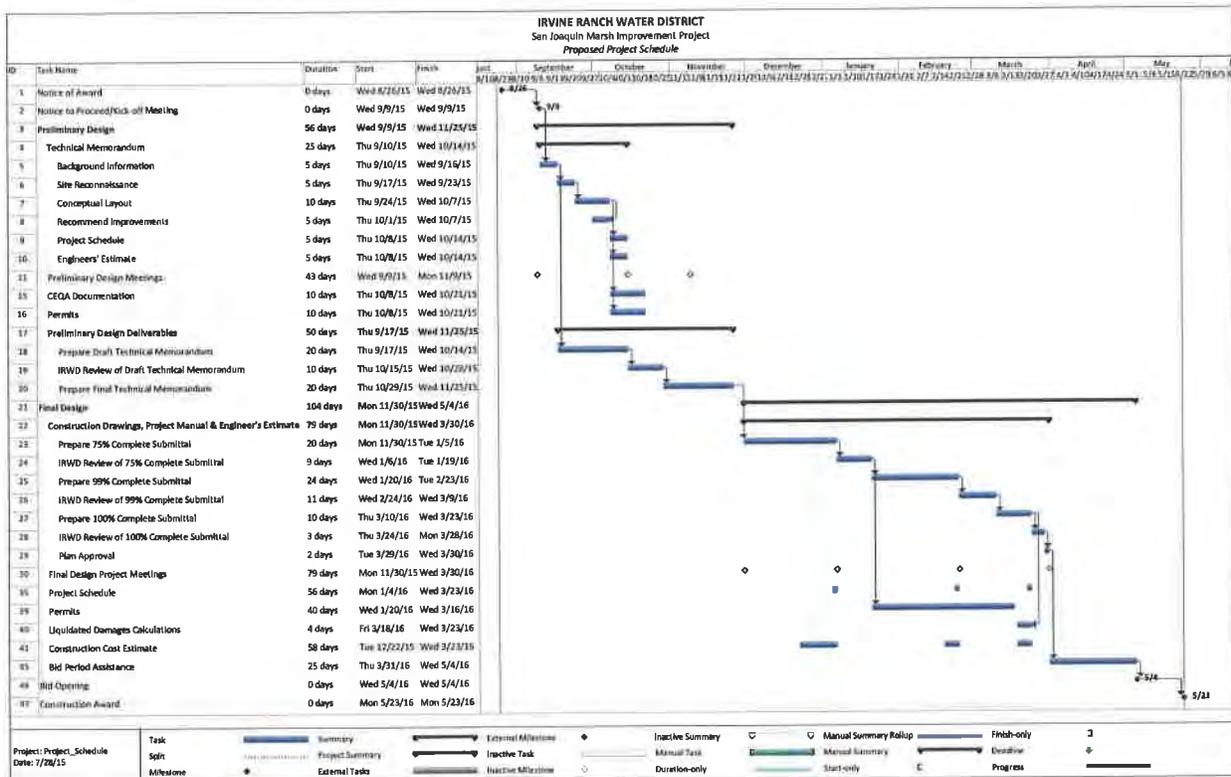
SCHEDULE

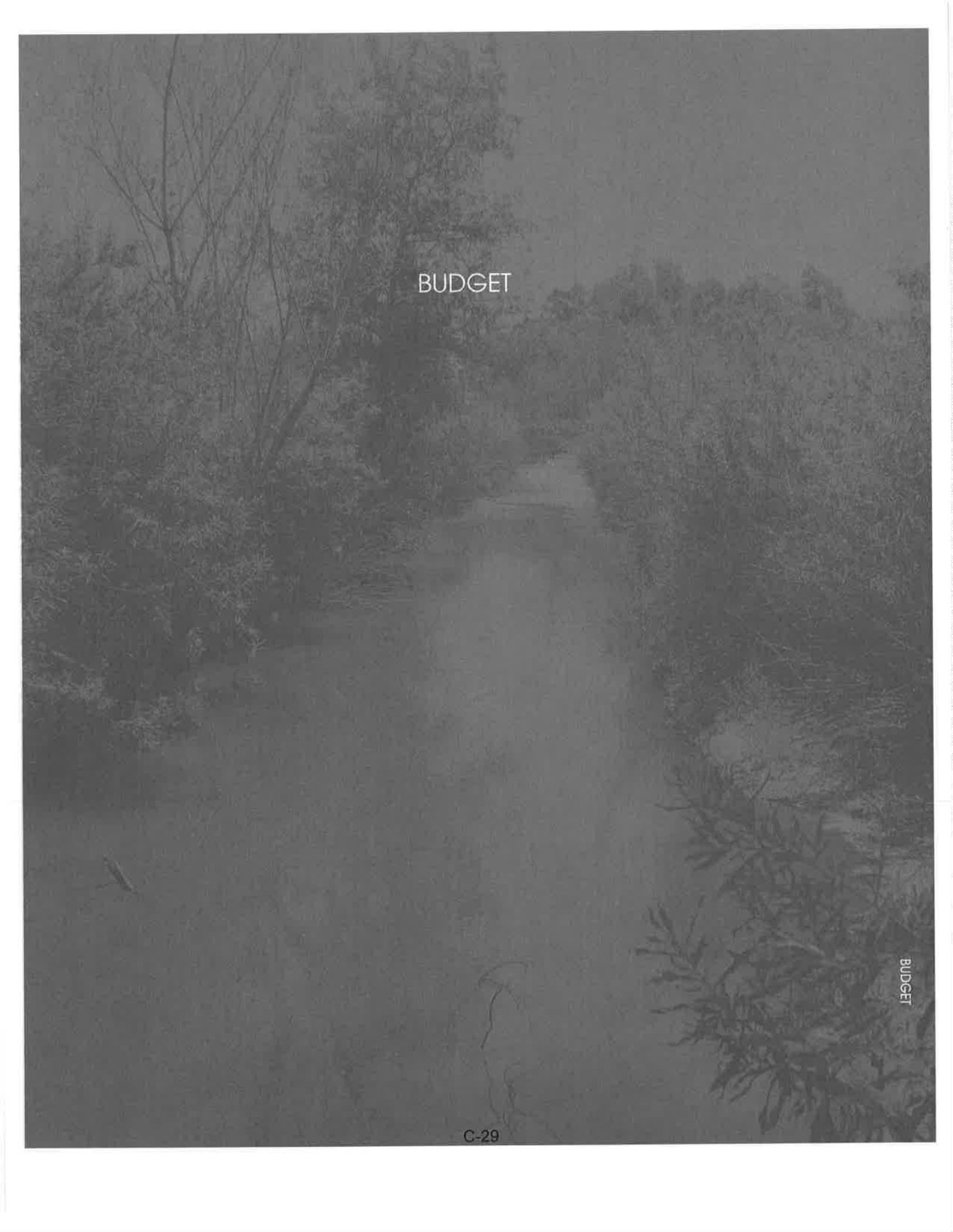
## D. Schedule

The schedule that you have set forth in the RFP is a realistic goal, we are going to help you attain bid period goals by May 4, 2016. This section includes our proposed project schedule and the hours that we anticipate for each team member to make it happen. We will use our project management tools to monitor the schedule and hours on a weekly basis, throughout the duration of the project. This way, we can identify concerns early on, and adjust our plan immediately if need be.



You have set a realistic 10-month schedule—our management tools will help you stay on track.





BUDGET

BUDGET

# E. Budget

Provided below is our estimated work hours breakdown. As requested, we have provided our breakdown of fees and expenses in a separately sealed envelope.

**IRVINE RANCH WATER DISTRICT**  
**San Joaquin Marsh Improvement Project**  
**Proposed Project Labor Budget**



Task Description	Stantec Design										Stantec Survey			Stephanie Welsh, SE Structural Engineer	Total Hours
	Doug Johnson, PE Principal-in-Charge QA/QC	Robert Reid, PE Project Manager	Bob Seeman, PE Task Leader - Mechanical	Kevin Brandt, PE Task Leader - Basin Improvements	Nancy Baker, PE Project Engineer	Mary Armenta, PE Task Leader - Electrical & Controls	Senior Electrical Designer	Electrical Designer	Civil/Mechanical Designer	CAD Technician	Ray Mansur, PLS Task Leader - Survey	Engineering/Survey Coordinator	Field Survey Two Person Crew		
<b>Task 1: Preliminary Design</b>															
A. Technical Memorandum															
1. Background Information		2	2	1	2	4									11
2. Site Reconnaissance		4	4			8					4	4	8		32
3. Conceptual Layout		2	8	2	8	6				24					50
4. Recommend Improvements		2	4	1	16										23
5. Project Schedule		2	4												6
6. Engineers' Estimate			2	1	8	6									17
B. Preliminary Design Meetings		6	8		6	6									20
C. CEQA Documentation			2		2					8					12
D. Permits			2	1	4										7
E. Preliminary Design Deliverables															0
1. Draft Technical Memorandum	1	4	8	1	16	10				24					64
2. Final Technical Memorandum	1	4	4	1	8	2				8					28
<b>Task 1 Subtotal</b>	<b>2</b>	<b>26</b>	<b>48</b>	<b>8</b>	<b>70</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>270</b>
<b>Task 2: Final Design</b>															
A. Construction Drawings	2	12	24	6	48	74	40	210	20	236				20	692
B. Drawing Standards			2		2					4					8
C. Project Manual		2	8	4	26		12								64
D. Final Design Deliverables															0
75% Complete Submittal	2	8	4							4					18
99% Complete Submittal	2	8	2							4					16
100% Complete Submittal	1	4	2							4					11
Plan Approval		2													2
E. Final Design Project Meetings		8	10		8										26
F. Project Schedule		4		1	2										7
G. Permits		4	4	2	4										14
H. Liquidated Damages Calculations			2		4										6
I. Construction Cost Estimate	2	4	4	1	8	8	8								35
J. Bid Period Assistance		2	6	2	8	8	8								34
<b>Task 2 Subtotal</b>	<b>9</b>	<b>58</b>	<b>68</b>	<b>16</b>	<b>110</b>	<b>102</b>	<b>68</b>	<b>210</b>	<b>20</b>	<b>252</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>933</b>
<b>Totals:</b>	<b>11</b>	<b>84</b>	<b>116</b>	<b>24</b>	<b>180</b>	<b>138</b>	<b>68</b>	<b>210</b>	<b>20</b>	<b>316</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>20</b>	<b>1203</b>

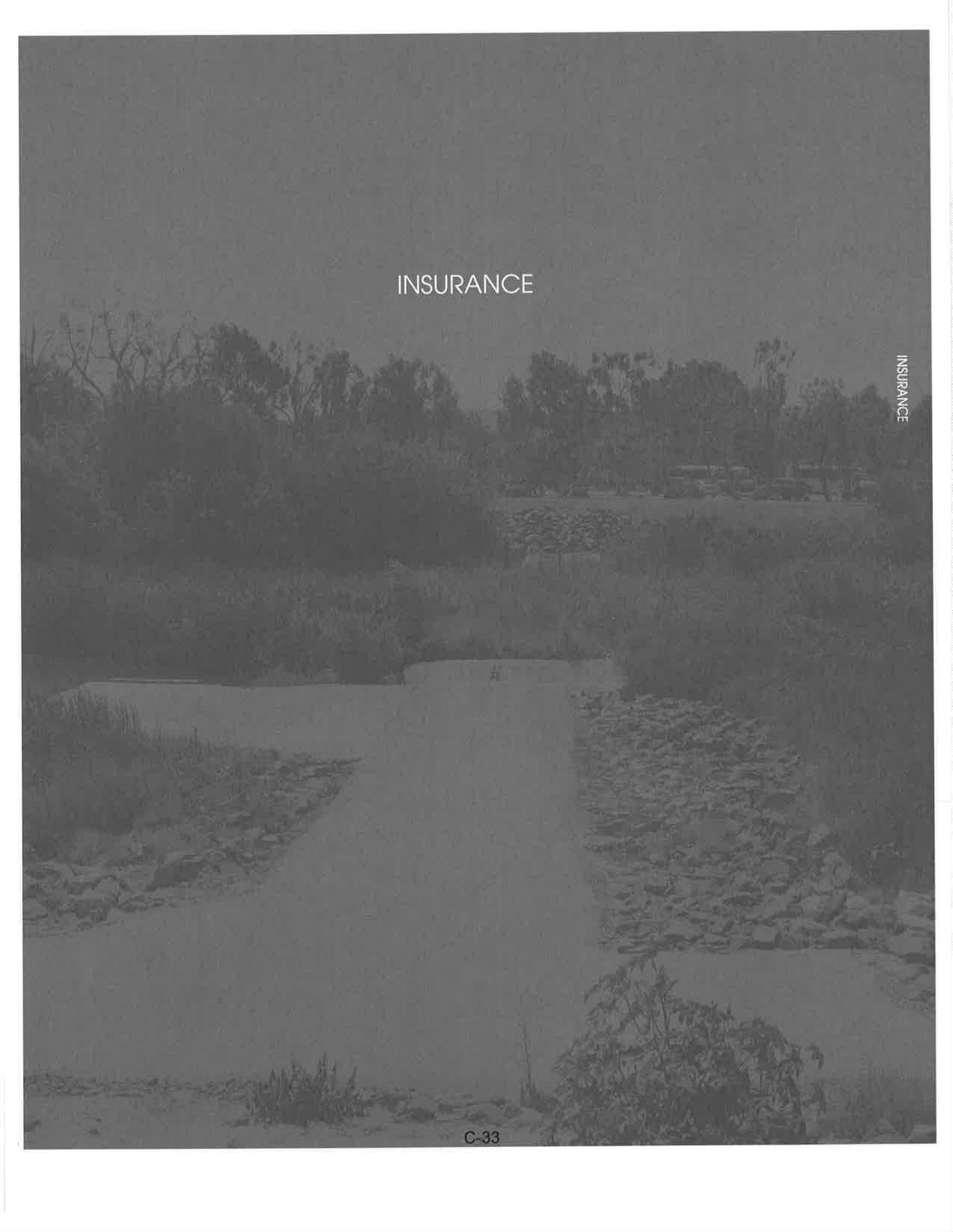
# REQUIRED STATEMENTS

## F. Joint Venture

We are not operating, nor intend to operate as a joint venture for this pursuit.

## G. Conflict of Interest

There are no personal or organizational conflicts of interest as prohibited by law. Neither Stantec nor any individual who has been proposed as part of this project team have any interest, ownership, or receive or anticipate receiving remuneration of any type from the manufacture(s), supplier(s), or distributor(s) which may be recommended on this project.

A grayscale photograph of a landscape. In the foreground, a path or road leads from the bottom center towards the middle ground. The path is flanked by grassy areas and some small plants. In the middle ground, there is a large, open field. In the background, a dense line of trees is visible against a light sky. The overall tone is muted and atmospheric.

# INSURANCE

INSURANCE





# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
08/01/2014

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.**

**IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).**

<b>PRODUCER</b>  <b>MARSH CANADA LIMITED</b> 660, 10180 - 101 STREET EDMONTON, AB T5J 3S4	<b>CONTACT NAME:</b> MICHAEL POPLETT <b>PHONE (A/C, No, Ext):</b> 780-917-4850 <b>FAX (A/C, No):</b> 780-429-1422 <b>EMAIL ADDRESS:</b> MICHAEL.POPLETT@MARSH.COM <hr/> <b>INSURER(S) AFFORDING COVERAGE</b> <b>NAIC #</b> <hr/> <b>INSURER A:</b> <hr/> <b>INSURER B:</b> <hr/> <b>INSURER C:</b> <hr/> <b>INSURER D:</b> <hr/> <b>INSURER E:</b> LLOYD'S OF LONDON      37540 <hr/> <b>INSURER F:</b>
<b>INSURED</b>  <b>STANTEC CONSULTING SERVICES INC.</b> 38 TECHNOLOGY DRIVE, SUITE 100 IRVINE, CA 92618-5312	

**COVERAGES**      **CERTIFICATE NUMBER:** 209      **REVISION NUMBER:**

**THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.**

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR	WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>GENERAL LIABILITY</b> <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR <hr/> GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COM/PO/ AGG \$ \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED    RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> N/A If yes, describe under DESCRIPTION OF OPERATIONS below						WC STATU-TORY LIMITS    OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
E	<b>PROFESSIONAL LIABILITY</b> INCLUDING CONTRACTORS POLLUTION LIABILITY	N/A		QF047014	08/01/14	08/01/15	<b>CLAIM &amp; AGGREGATE LIMIT</b> <b>\$3,000,000 INCLUSIVE OF COSTS</b> <b>CLAIMS MADE BASIS</b>
<b>DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)</b> IRVINE, CA. CONSULTING							

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)**  
 IRVINE, CA. CONSULTING

<b>CERTIFICATE HOLDER</b>  <p style="text-align: center;">TO WHOM IT MAY CONCERN</p>	<b>CANCELLATION</b>  <p style="text-align: center;">SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.</p> <hr/> <b>AUTHORIZED REPRESENTATIVE</b>  <div style="text-align: center;"> </div>
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ACORD 25 (2010/05)

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CONTRACT

CONTRACT

## I. Contract

We have reviewed your sample professional services agreement and should we be selected for this project, will be able to enter a mutually satisfactory agreement with you.



Design with community in mind





38 Technology Drive, Suite 100  
Irvine, CA 92618  
P: (949) 923-6000  
F: (949) 923-6121

July 28, 2015

**Attention**

Irvine Ranch Water District  
Engineering Department  
15600 Sand Canyon Avenue  
Irvine, CA 92618  
Attention: Malcolm A. Cortez, PE, Principal Engineer

**Reference**

Fee Proposal to Provide Professional Engineering Design Services for San Joaquin Marsh Improvements

Dear Malcolm,

We are pleased to provide the Irvine Ranch Water District (District) with our fee schedule in conjunction with our technical proposal. At Stantec, we strongly believe that the measurement of value is partially referenced from pricing, but also from credentials and capabilities. Our proposal has been created with an understanding of this balance.

As described in our project approach and shown in our team section, we believe that the project would benefit by the addition of a geotechnical engineer. If the District would like to add this optional task, we would be more than happy to provide a fee for their services.

Thank you again for considering us to provide our services on this important project. We look forward to working for you with the assurance that we will commit our best resources for a successful project.

If you have any questions or require additional information, please do not hesitate to contact me at the information below.

Sincerely,

A handwritten signature in blue ink that reads "Robert Reid".

Robert Reid, PE  
Project Manager  
(949) 923-6037  
Robert.Reid@stantec.com

IRVINE RANCH WATER DISTRICT  
San Joaquin Marsh Improvement Project  
Proposed Project Budget



Task Description	Stantec Design													Stantec Survey				TOTAL HOURS	TOTAL LABOR	Water Structures	Direct Costs - Materials	TOTAL
	Doug Johnson, PE (\$202)	Robert O'Neil, PE (\$202)	Eric Sherman, PE (\$174)	Kovin Gnanapavan, PE (\$202)	Nancy Baker, PE (\$166)	Matt Armistead, PE (\$174)	Senior Electrical Designer (\$157)	Electrical Designer (\$118)	Civil/Mechanical Designer (\$118)	CAD Technician (\$102)	Ray Bennett, MS (\$174)	Engineering Survey Coordinator (\$157)	Field Survey Two Person Crew (\$245)									
<b>Task 1: Preliminary Design</b>																						
A. Technical Memorandum																						
1. Background information		2	2	1	2	4							11	\$ 1,982				\$ 1,982				
2. Site Reconnaissance		4	4			8							32	\$ 6,180				\$ 6,180				
3. Conceptual Layout		2	8	2	8	6			24	4	4	8	50	\$ 7,020				\$ 7,020				
4. Recommend Improvements		2	4	1	16								23	\$ 3,958				\$ 3,958				
5. Project Schedule		2	4										6	\$ 1,100				\$ 1,100				
6. Engineers' Estimate			2	1	8	6							17	\$ 2,922				\$ 2,922				
B. Preliminary Design Meetings		6	8		6								20	\$ 3,600				\$ 3,600				
C. CEQA Documentation			2		2				8				12	\$ 1,496				\$ 1,496				
D. Permits			2	1	4								7	\$ 1,214				\$ 1,214				
E. Preliminary Design Deliverables																						
1. Draft Technical Memorandum	1	4	8	1	16	10			24				64	\$ 9,478		\$ 200		\$ 9,678				
2. Final Technical Memorandum	1	4	4	1	8	2			8				28	\$ 4,430		\$ 200		\$ 4,630				
<b>Task 1 Subtotal</b>	<b>2</b>	<b>26</b>	<b>48</b>	<b>8</b>	<b>70</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>270</b>	<b>\$ 43,380</b>	<b>\$ -</b>	<b>\$ 400</b>	<b>\$ 43,780</b>				
<b>Task 2: Final Design</b>																						
A. Construction Drawings	2	12	24	6	48	74	40	210	20	236				672	\$ 86,612	\$ 2,400		\$ 89,012				
B. Drawing Standards			2		2					4				8	\$ 1,088			\$ 1,088				
C. Project Manual		2	8	4	26	12	12							64	\$ 10,892			\$ 10,892				
D. Final Design Deliverables																						
75% Complete Submittal	2	8	4							4				18	\$ 3,184	\$ 600		\$ 3,784				
99% Complete Submittal	2	8	2							4				16	\$ 2,836	\$ 600		\$ 3,436				
100% Complete Submittal	1	4	2							4				11	\$ 1,796	\$ 600		\$ 2,396				
Plan Approval		2												2	\$ 404	\$ 1,624		\$ 2,028				
E. Final Design Project Meetings		8	10		8									26	\$ 4,684			\$ 4,684				
F. Project Schedule		4		1	2									7	\$ 1,342			\$ 1,342				
G. Permits		4	4	2	4									14	\$ 2,572			\$ 2,572				
H. Liquidated Damages Calculations		2	2		4					8				6	\$ 1,012			\$ 1,012				
I. Construction Cost Estimate	2	4	4	1	8	8	8							35	\$ 6,146			\$ 6,146				
J. Bid Period Assistance		2	6	2	8	8	8							34	\$ 5,828			\$ 5,828				
<b>Task 2 Subtotal</b>	<b>9</b>	<b>58</b>	<b>68</b>	<b>16</b>	<b>110</b>	<b>102</b>	<b>68</b>	<b>210</b>	<b>20</b>	<b>252</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>913</b>	<b>\$ 128,396</b>	<b>\$ 2,400</b>	<b>\$ 3,424</b>	<b>\$ 134,220</b>				
<b>Totals</b>	<b>11</b>	<b>84</b>	<b>116</b>	<b>24</b>	<b>180</b>	<b>138</b>	<b>68</b>	<b>210</b>	<b>20</b>	<b>316</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>1183</b>	<b>\$ 171,776</b>	<b>\$ 2,400</b>	<b>\$ 3,824</b>	<b>\$ 178,000</b>				

August 24, 2015  
 Prepared by: K. Lew  
 Submitted by: K. Burton *RKM*  
 Approved by: Paul Cook *[Signature]*

CONSENT CALENDAR

TUSTIN LEGACY  
PARK AVENUE AND MOFFETT DRIVE CAPITAL IMPROVEMENTS

SUMMARY:

The City of Tustin is starting construction of Park Avenue and Moffett Drive Improvements in the Tustin Legacy development. As part of the project, the City will construct IRWD capital facilities under an existing Reimbursement Agreement. Staff recommends that the Board authorize a budget increase for Project 11866 in the amount of \$416,900, from \$162,800 to \$579,700; Project 21866 in the amount of \$224,400, from \$162,800 to \$387,200; and Project 31866 in the amount of \$405,900, from \$162,800 to \$568,700.

BACKGROUND:

The City is starting construction of Park Avenue from Victory Road to Moffett Drive and Moffett Drive from Park Avenue to Jamboree Road. A Project Location Map is provided as Exhibit "A". The Park Avenue and Moffett Drive capital facilities consist of approximately 3,000 feet of 12-inch diameter domestic water, 2,600 feet of 12-inch and 15-inch sewer, and 3,100 feet of 6-inch and 16-inch recycled water pipeline. The required IRWD domestic water, sewer, and recycled water capital facilities are documented in the Tustin Legacy Sub-Area Master Plan Update, as prepared by RBF Consulting, Inc. in June 2013.

The design and construction of the Park Avenue and Moffett Drive capital facilities will be performed under a City contract through the terms of an existing Reimbursement Agreement between IRWD and the City. The City retained Hunsaker to prepare the Park Avenue and Moffett Drive improvement plans and it received bids from nine contractors. KEC Engineering was the lowest bidder for the overall project. KEC's bid for the IRWD portion of the work was the fifth lowest in the amount of \$939,997.75 as shown in Exhibit "B". Bids for IRWD's portion of the work ranged from \$738,825.50 to \$1,597,136.40, and the engineer's estimate was \$1,119,759. Staff has reviewed the construction bids and concurs with awarding the contract to KEC. In addition, the City has received consultant proposals for services during construction and staff finds the amounts to be acceptable. A summary of the Park Avenue and Moffett Drive Improvement costs is shown below:

Design Engineering (Hunsaker)	\$ 116,900.00
Construction (KEC)	\$ 939,977.75
Construction (Mobilization)	\$ 19,298.44
Construction Engineering (Hunsaker)	\$ 16,010.00
Construction Soils Testing (NMG)	\$ 28,939.00
Construction Staking (CNC)	\$ 18,774.00
City of Tustin Administration Fee (4%)	\$ <u>38,371.85</u>
	\$1,178,271.04

FISCAL IMPACTS:

Projects 11866 (6109), 21866 (6110), and 31866 (6111) are included in the FY 2015-16 Capital Budget. Funding for IRWD's capital facilities will require budget increases for Projects 11866 (6109), 21866 (6110), and 31866 (6111) as shown in the table below:

<u>Project No.</u>	<u>Current Budget</u>	<u>Addition &lt;Reduction&gt;</u>	<u>Total Budget</u>
11866 (6109)	\$ 162,800	\$ 416,900	\$ 579,700
21866 (6110)	\$ 162,800	\$ 224,400	\$ 387,200
31866 (6111)	\$ 162,800	\$ 405,900	\$ 568,700
<u>Total</u>	<u>\$ 488,400</u>	<u>\$1,047,200</u>	<u>\$1,535,600</u>

The above funding provides for the reimbursement costs to the City for design and construction, consultant support services, and staff time.

ENVIRONMENTAL COMPLIANCE:

This project is subject to CEQA and is in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7. A Joint Environmental Impact Statement/Environmental Impact Report was certified by the City of Tustin and the Department of the Navy on January 3, 2000 (SCH 1982040906).

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on August 20, 2015.

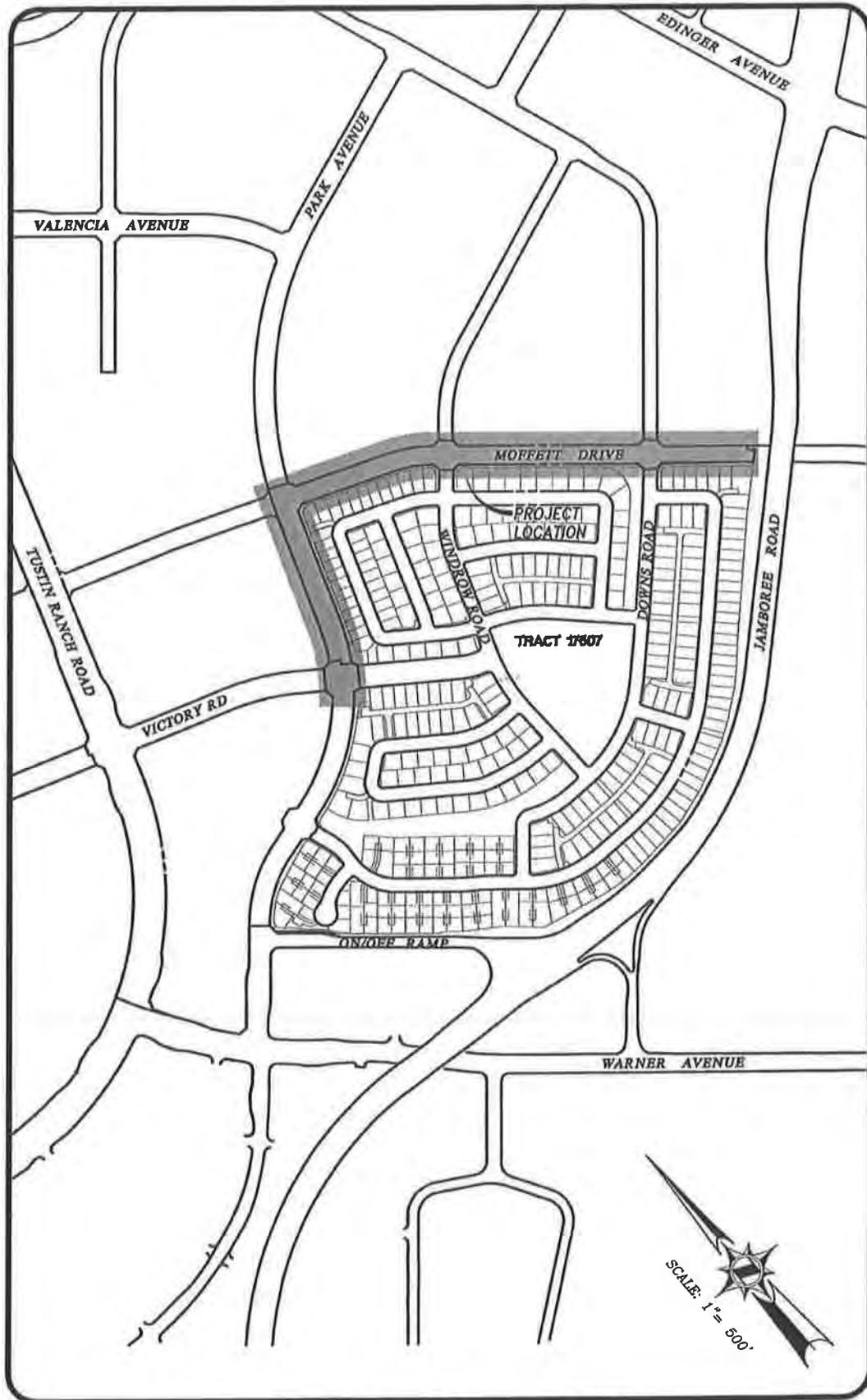
RECOMMENDATION:

THAT THE BOARD AUTHORIZE BUDGET INCREASES FOR PROJECT 11866 (6109) IN THE AMOUNT OF \$416,900, FROM \$162,800 TO \$579,700; PROJECT 21866 (6110) IN THE AMOUNT OF \$224,400, FROM \$162,800 TO \$387,200; AND PROJECT 31866 (6111) IN THE AMOUNT OF \$405,900, FROM \$162,800 TO \$568,700, FOR THE TUSTIN LEGACY PARK AVENUE AND MOFFETT DRIVE CAPITAL IMPROVEMENTS, PROJECTS 11866 (6109), 21866 (6110), AND 31866 (6111).

LIST OF EXHIBITS:

- Exhibit "A" – Project Location Map
- Exhibit "B" – Bid Summary

# EXHIBIT "A"



LOCATION MAP

MOFFETT DRIVE AND PARK AVENUE EXTENSION ROADWAY, GRADING AND STORM DRAIN CONSTRUCTION PROJECT

EXHIBIT "B"

CIP NOS. 70224 & 70225

BID OPENING : 10:00 A.M., JUNE 23, 2015

ITEM NO.	CONTRACT ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	KEC Engineering 200 N. Sherman Ave Corona, CA 92682 951-734-3010		USS Cal Builders 8051 Main St Stanton, CA 90680 714-828-4882		Sukut Construction, Inc. 4010 West Chandler Ave. Santa Ana, CA 92704-5274 714-540-5351		Mamco, Inc 84 W. Ramona Expressway, Ste. Peris, CA 92571 951-776-9300		Los Angeles Engineering, Inc. 633 N. Barranca Ave. Covina, CA 91723 626-454-5222		OHL USA 1920 Main St., Ste 310 Irvine, CA 92614 949-242-4432		R. J. Noble, Co. 15505 E. Lincoln Ave. Orange, CA 92656 714-637-1550		Ames Construction, Inc. 391 N. Main St. Corona, CA 92880 951-356-1275		Ortiz 6Cushing, Ste. 200 Irvine, CA 92618 949-753-1414	
				UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE
1	Mobilization	1	LS	50,000.00	50,000.00	800,000.00	800,000.00	610,000.00	610,000.00	576,684.40	576,684.40	1,138,157.25	1,138,157.25	800,000.00	800,000.00	750,000.00	750,000.00	440,000.00	440,000.00	1,700,000.00	1,700,000.00
2	Construction Survey, Staking & Survey Monument Preservation	1	LS	108,000.00	108,000.00	60,000.00	60,000.00	75,000.00	75,000.00	93,000.00	93,000.00	100,000.00	100,000.00	100,000.00	100,000.00	105,000.00	105,000.00	75,000.00	75,000.00	70,000.00	70,000.00
3	Develop Construction Water	1	LS	10,000.00	10,000.00	15,000.00	15,000.00	50,000.00	50,000.00	10,000.00	10,000.00	10,000.00	10,000.00	60,000.00	60,000.00	79,000.00	79,000.00	50,000.00	50,000.00	20,000.00	20,000.00
4	Dust Control & Clean Up	1	LS	168,000.00	168,000.00	32,000.00	32,000.00	45,000.00	45,000.00	385,000.00	385,000.00	5,000.00	5,000.00	110,000.00	110,000.00	88,000.00	88,000.00	100,000.00	100,000.00	30,000.00	30,000.00
5	Storm Water Pollution Prevention Plan & BMPs	1	LS	43,000.00	43,000.00	30,000.00	30,000.00	50,000.00	50,000.00	45,000.00	45,000.00	100,000.00	100,000.00	115,000.00	115,000.00	50,000.00	50,000.00	200,000.00	200,000.00	160,000.00	160,000.00
<b>Total</b>					<b>379,000.00</b>		<b>937,000.00</b>		<b>830,000.00</b>		<b>1,109,684.40</b>		<b>1,353,157.25</b>		<b>1,185,000.00</b>		<b>1,072,000.00</b>		<b>865,000.00</b>		<b>1,980,000.00</b>
<b>Grading</b>																					
6	Site Preparation, Cleaning & Grubbing	1	LS	54,000.00	54,000.00	50,000.00	50,000.00	40,000.00	40,000.00	44,000.00	44,000.00	500,000.00	500,000.00	56,000.00	56,000.00	92,000.00	92,000.00	500,000.00	500,000.00	175,000.00	175,000.00
7	Remove and Dispose of Existing Miscellaneous Storm Drain Pipe and Appurtenances	3,323	LF	30.00	99,690.00	21.40	71,112.20	7.00	23,261.00	11.00	36,553.00	24.00	79,752.00	20.00	66,460.00	26.25	87,226.75	25.00	83,075.00	25.00	83,075.00
8	Remove and Dispose of Existing HDPE (18"-30" Diam) and Appurtenances	2,361	LF	19.00	44,859.00	21.40	50,525.40	8.00	18,888.00	11.00	25,971.00	24.00	56,664.00	20.00	47,220.00	26.25	61,976.25	25.00	59,025.00	25.00	59,025.00
9	Remove and Dispose of Existing 18" ACP Waterline and 18" Waterline	10,418	LF	40.00	416,720.00	25.00	260,450.00	16.00	166,688.00	35.00	364,630.00	40.00	416,720.00	29.00	302,122.00	30.45	317,228.10	45.00	468,810.00	25.00	260,450.00
10	Remove and Dispose of Existing 10" PVC (and Appurtenances)	212	LF	29.00	6,148.00	21.40	4,536.80	8.00	1,696.00	9.00	1,908.00	19.00	4,028.00	20.00	4,240.00	10.50	2,226.00	34.00	7,208.00	25.00	5,300.00
11	Remove and Dispose of Existing Waterline (and Appurtenances)	2,425	LF	22.00	53,350.00	21.40	51,895.00	6.00	14,550.00	9.00	21,825.00	35.00	84,875.00	20.00	48,500.00	15.75	38,193.75	21.00	50,925.00	25.00	60,625.00
12	Remove and Dispose of Existing 18" Conc Detention Basin Lining	1	EA	7,500.00	7,500.00	5,350.00	5,350.00	7,500.00	7,500.00	7,000.00	7,000.00	12,000.00	12,000.00	10,000.00	10,000.00	36,750.00	36,750.00	10,000.00	10,000.00	25,000.00	25,000.00
13	Remove and Dispose of Existing Conc Spillway	1	EA	6,700.00	6,700.00	5,350.00	5,350.00	5,000.00	5,000.00	7,000.00	7,000.00	24,000.00	24,000.00	10,000.00	10,000.00	21,000.00	21,000.00	6,000.00	6,000.00	5,000.00	5,000.00
14	Remove and Dispose of Existing 4" Minimum Inlet Pipe (and Appurtenances)	164	LF	37.00	6,068.00	21.40	3,509.60	14.00	2,296.00	40.00	6,560.00	33.00	5,412.00	25.00	4,100.00	42.00	6,888.00	25.00	4,100.00	150.00	24,600.00
15	Remove and Dispose of Existing Concrete Encased Electrical/Telephone	1,255	LF	30.00	37,650.00	21.40	26,857.00	7.00	8,785.00	16.00	20,080.00	23.00	28,865.00	38.00	47,690.00	30.50	38,277.50	28.00	35,140.00	20.50	25,727.50
16	Unclassified Excavation	40,570	CY	2.08	84,385.60	2.20	89,254.00	2.15	87,225.50	5.00	202,850.00	3.40	137,938.00	3.50	141,995.00	2.10	85,197.00	1.50	60,855.00	3.00	121,710.00
17	Unsuitable Material Removal & Re-Compaction	249,000	CY	2.51	624,990.00	2.20	547,800.00	1.70	423,300.00	3.00	747,000.00	3.40	846,600.00	2.90	722,100.00	1.42	353,580.00	3.00	747,000.00	3.00	747,000.00
18	Wet Material Special Handling, Excavation & Re-Compaction Premium	3,900	CY	6.30	24,570.00	4.30	16,770.00	6.00	23,400.00	26.00	101,400.00	7.40	28,860.00	19.50	76,050.00	4.40	17,160.00	15.00	58,500.00	15.00	58,500.00
19	Stabilization of Overly-Wet Removal Bottom	79,500	SF	3.17	252,015.00	2.50	198,750.00	3.25	258,375.00	2.40	190,800.00	3.10	246,450.00	4.60	365,700.00	2.25	178,675.00	2.60	206,700.00	3.00	238,500.00
20	Import from Borrow Site	87,710	CY	2.50	219,275.00	2.30	201,733.00	2.05	179,805.50	5.00	438,550.00	4.95	434,164.50	3.50	306,985.00	1.85	162,263.50	1.00	87,710.00	1.00	87,710.00
21	Fine Grading (Excluding Streets)	14.90	AC	3,600.00	53,640.00	7,500.00	111,750.00	3,500.00	52,150.00	4,500.00	67,500.00	6,700.00	99,830.00	3,750.00	55,875.00	1,890.00	28,161.00	2,800.00	41,720.00	9,000.00	134,100.00
22	Final Erosion and Sediment Control After Grading	27.30	AC	2,500.00	68,250.00	3,000.00	81,900.00	2,100.00	57,330.00	2,000.00	54,600.00	2,475.00	67,567.50	1,500.00	40,950.00	3,285.00	83,685.00	500.00	13,650.00	2,500.00	68,250.00
23	Install Monitoring Well K-Rail Guard	1	EA	2,700.00	2,700.00	8,500.00	8,500.00	2,350.00	2,350.00	3,000.00	3,000.00	2,000.00	2,000.00	3,200.00	3,200.00	5,250.00	5,250.00	2,500.00	2,500.00	4,200.00	4,200.00
24	Extend Monitoring Well Casing	1	EA	2,000.00	2,000.00	5,350.00	5,350.00	200.00	200.00	5,000.00	5,000.00	3,000.00	3,000.00	3,000.00	3,000.00	5,250.00	5,250.00	5,000.00	5,000.00	10,000.00	10,000.00
<b>Total for Grading</b>					<b>2,064,510.60</b>		<b>1,791,393.00</b>		<b>1,372,800.00</b>		<b>2,345,777.00</b>		<b>3,078,726.00</b>		<b>2,312,187.00</b>		<b>1,627,185.35</b>		<b>2,447,918.00</b>		<b>2,193,772.50</b>
<b>Storm Drain - City of Tustin</b>																					
25	18" HDPE Pipe	5	LF	205.00	1,025.00	55.60	278.00	355.00	1,825.00	330.00	1,650.00	700.00	3,500.00	195.00	975.00	210.00	1,050.00	300.00	1,500.00	207.00	1,035.00
26	24" HDPE Pipe	91	LF	100.00	9,100.00	62.00	5,642.00	135.00	12,285.00	110.00	10,010.00	200.00	18,200.00	115.00	10,465.00	210.00	19,110.00	120.00	10,920.00	110.00	10,010.00
27	36" HDPE Pipe	136	LF	116.00	15,776.00	80.30	10,920.80	122.00	16,552.00	102.00	13,872.00	200.00	27,200.00	110.00	14,960.00	226.50	29,988.00	110.00	14,960.00	105.00	14,280.00
28	48" HDPE Pipe	34	LF	188.00	6,392.00	96.30	3,274.20	250.00	8,500.00	175.00	5,950.00	525.00	17,850.00	175.00	5,950.00	236.25	8,032.50	200.00	6,800.00	190.00	6,460.00
29	Construct Drain Pipe and 36" HDPE Riser	1	EA	4,100.00	4,100.00	3,000.00	3,000.00	3,100.00	3,100.00	3,000.00	3,000.00	5,000.00	5,000.00	3,450.00	3,450.00	7,675.00	7,675.00	66,300.00	66,300.00	7,500.00	7,500.00
30	Construct Drain Pipe and 36" HDPE Riser	1	EA	6,100.00	6,100.00	3,300.00	3,300.00	4,000.00	4,000.00	5,200.00	5,200.00	5,500.00	5,500.00	4,100.00	4,100.00	8,137.50	7,000.00	7,000.00	7,000.00	7,900.00	7,900.00
31	Construct Drain Pipe and 48" HDPE Riser	1	EA	6,300.00	6,300.00	6,300.00	6,300.00	3,750.00	3,750.00	6,000.00	6,000.00	6,500.00	6,500.00	5,100.00	5,100.00	8,190.00	8,190.00	8,000.00	8,000.00	8,400.00	8,400.00
32	Construct Drain Pipe and 54" HDPE Riser	1	EA	6,700.00	6,700.00	8,300.00	8,300.00	5,200.00	5,200.00	11,500.00	11,500.00	8,000.00	8,000.00	8,600.00	8,600.00	9,660.00	9,660.00	22,000.00	22,000.00	9,700.00	9,700.00
33	Construct Drain Pipe and 72" HDPE Riser	1	EA	8,800.00	8,800.00	8,100.00	8,100.00	7,500.00	7,500.00	8,300.00	8,300.00	9,000.00	9,000.00	9,000.00	9,000.00	9,660.00	9,660.00	22,000.00	22,000.00	9,700.00	9,700.00
34	Construct Conc Drain to Pipe and Inlet	1	EA	1,550.00	1,550.00	5,000.00	5,000.00	3,100.00	3,100.00	8,500.00	8,500.00	8,000.00	8,000.00	2,150.00	2,150.00	11,025.00	2,500.00	2,500.00	2,100.00	2,100.00	
35	Remove and Dispose of Existing RCB	70	LF	175.00	12,250.00	32.00	2,240.00	180.00	11,200.00	220.00	15,400.00	400.00	30,100.00	225.00	15,750.00	513.45	35,941.50	200.00	14,000.00	225.00	15,750.00
36	Join Exist RCB	1	EA	210.00	210.00	5,000.00	5,000.00	3,000.00	3,000.00	3,500.00	3,500.00	2,000.00	2,000.00	3,000.00	3,000.00	5,250.00	5,250.00	1,500.00	1,500.00	6,000.00	6,000.00
37	Install 24" R.C.P																				

MOFFETT DRIVE AND PARK AVENUE EXTENSION ROADWAY, GRADING AND STORM DRAIN CONSTRUCTION PROJECT

CIP NOS. 70224 & 70225

BID OPENING : 10.00 A.M., JUNE 23, 2015

				KEC Engineering 200 N. Sherman Ave. Corona, CA 92682 951-734-3010		USS Cal Builders 8051 Main St Stanlon, CA 90680 714-828-4882		Sukut Construction, Inc. 4010 West Chandler Ave. Santa Ana, CA 92704-5774 714-540-5351		Mamco, Inc. 64 W. Ramona Expressway, Ste. Perris, CA 92571 951-776-9300		Los Angeles Engineering, Inc. 633 N. Barranca Ave. Covina, CA 91723 626-454-5222		OHL USA 1920 Main St., Ste 310 Irvine, CA 92614 949-242-4432		R. J. Noble, Co. 15505 E. Lincoln Ave. Orange, CA 92656 714-637-1550		Ames Construction, Inc. 391 N. Main St. Corona, CA 92680 951-356-1275		Ortiz 6Cushing, Ste 200 Irvine, CA 92618 949-753-1414	
ITEM NO.	CONTRACT ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE
44	Construct Double 10W X 4H R.C.B.	90	LF	1,300.00	117,000.00	1,200.00	108,000.00	1,525.00	137,250.00	1,450.00	130,500.00	1,400.00	126,000.00	2,200.00	198,000.00	2,179.00	196,110.00	1,900.00	171,000.00	1,600.00	144,000.00
45	Construct Manhole per SPPWC Std. Plan 321-2	3	EA	6,000.00	18,000.00	6,500.00	19,500.00	6,500.00	19,500.00	6,500.00	19,500.00	4,000.00	12,000.00	3,300.00	9,900.00	6,825.00	20,475.00	7,000.00	21,000.00	10,000.00	30,000.00
46	Construct Transition Structure RCB To RCB per SPPWC Std. Plan 341-2	1	EA	14,600.00	14,600.00	8,500.00	8,500.00	13,000.00	13,000.00	20,000.00	20,000.00	25,000.00	25,000.00	18,000.00	18,000.00	18,900.00	18,900.00	20,000.00	20,000.00	30,000.00	30,000.00
47	Construct Transition Structure Double RCB To Single RCB Per SPPWC Std.	1	EA	70,000.00	70,000.00	11,500.00	11,500.00	40,000.00	40,000.00	50,000.00	50,000.00	50,000.00	50,000.00	64,000.00	64,000.00	66,517.50	66,517.50	65,000.00	65,000.00	50,000.00	50,000.00
48	Construct Transition Structure per SPPWC Std. Plan 344-2	1	EA	21,000.00	21,000.00	8,100.00	8,100.00	19,000.00	19,000.00	21,000.00	21,000.00	25,000.00	25,000.00	19,700.00	19,700.00	25,200.00	25,200.00	30,000.00	30,000.00	30,000.00	30,000.00
49	Construct Window Detail per SPPWC Std. Plan 382-2	4	EA	600.00	2,400.00	5,500.00	22,000.00	1,900.00	7,600.00	1,000.00	4,000.00	500.00	2,000.00	350.00	1,400.00	3,675.00	14,700.00	750.00	3,000.00	12,500.00	50,000.00
50	Construct Junction Structure Pipe To RCB per SPPWC Std. Plan 333-2	6	EA	3,500.00	21,000.00	5,100.00	30,600.00	6,200.00	37,200.00	1,700.00	10,200.00	425.00	2,550.00	315.00	1,890.00	4,935.00	29,610.00	2,000.00	12,000.00	17,500.00	315,000.00
51	Construct Junction Structure Pipe To RCB per SPPWC Std. Plan 334-2	18	EA	2,600.00	46,800.00	5,500.00	99,000.00	5,900.00	106,200.00	1,500.00	27,000.00	425.00	7,650.00	550.00	9,900.00	2,625.00	47,250.00	750.00	13,500.00	17,500.00	315,000.00
52	Construct Junction Structure per Detail on Plan	1	EA	2,800.00	2,800.00	8,100.00	8,100.00	8,000.00	8,000.00	10,000.00	10,000.00	10,000.00	10,000.00	1,020.00	1,020.00	9,975.00	9,975.00	5,500.00	5,500.00	17,500.00	17,500.00
53	Construct Block and Mortar Plug	10	EA	575.00	5,750.00	1,000.00	10,000.00	650.00	6,500.00	1,500.00	15,000.00	500.00	5,000.00	775.00	7,750.00	525.00	5,250.00	500.00	5,000.00	1,100.00	11,000.00
54	Construct Reinforced Concrete Box Manhole per SPPWC Std. Plan 323-2	15	EA	3,700.00	55,500.00	8,300.00	124,500.00	3,800.00	57,000.00	1,800.00	27,000.00	2,700.00	40,500.00	2,200.00	33,000.00	3,675.00	55,125.00	2,500.00	37,500.00	13,500.00	202,500.00
55	Construct Concrete Collar per SPPWC Std. Plan 380-4	5	EA	840.00	4,200.00	1,400.00	7,000.00	850.00	4,250.00	800.00	4,000.00	777.00	3,885.00	1,300.00	6,500.00	945.00	4,725.00	500.00	2,500.00	1,500.00	7,500.00
56	Construct Inlet Type OS per City of Tustin Std. No. 300 (Orim Lid - To be	12	EA	3,350.00	40,200.00	4,300.00	51,600.00	3,400.00	40,800.00	3,500.00	42,000.00	3,700.00	44,400.00	1,500.00	18,000.00	6,825.00	81,900.00	9,000.00	108,000.00	3,600.00	43,200.00
57	Construct Inlet Type OL per City of Tustin Std. No. 300, L-7 (Orim Lid - To	5	EA	4,100.00	20,500.00	4,400.00	22,000.00	4,500.00	22,500.00	3,500.00	17,500.00	21,000.00	4,700.00	23,500.00	1,750.00	8,750.00	53,500.00	10,000.00	50,000.00	4,000.00	20,000.00
<b>Total for Storm Drain - City of Tustin</b>					<b>5,898,553.00</b>		<b>5,649,053.00</b>		<b>6,932,777.00</b>		<b>6,247,542.00</b>		<b>7,094,835.00</b>		<b>8,066,769.00</b>		<b>8,625,112.25</b>		<b>8,905,660.00</b>		<b>8,388,855.00</b>
<b>Storm Drain - OCPCD</b>																					
58	Remove and Salvage Existing Rip-Rap	340	CY	11.50	3,910.00	42.80	14,552.00	10.00	3,400.00	18.00	6,120.00	12.00	4,080.00	20.00	6,800.00	68.25	23,265.00	35.00	11,900.00	12.00	4,080.00
59	Remove, Salvage and Restore Existing CMB Road	440	SF	10.00	4,400.00	5.40	2,376.00	1.25	550.00	5.00	2,200.00	9.00	3,960.00	13.00	5,720.00	23.00	10,120.00	8.00	3,520.00	3.50	1,540.00
60	Remove, Salvage and Restore Existing Chain Link Fence	40	LF	69.00	2,760.00	87.70	3,508.00	32.00	1,280.00	68.00	2,720.00	82.00	3,280.00	88.00	3,520.00	86.10	3,444.00	30.00	1,200.00	82.00	3,280.00
61	Construct Double 10W X 4H R.C.B.	151	LF	2,050.00	309,550.00	1,300.00	196,300.00	3,200.00	483,200.00	1,900.00	286,900.00	2,050.00	309,550.00	2,775.00	419,025.00	3,377.85	510,055.35	3,100.00	468,100.00	2,800.00	422,800.00
62	Construct RCB Outlet Structure per Detail on Plan	1	EA	94,500.00	94,500.00	2,000.00	2,000.00	85,000.00	85,000.00	140,000.00	140,000.00	70,000.00	70,000.00	200,000.00	200,000.00	152,250.00	152,250.00	100,000.00	100,000.00	93,000.00	93,000.00
63	8" High Fences per OCPW Std. No. 600-3-OC	30	LF	96.00	2,880.00	80.30	2,409.00	32.00	960.00	95.00	2,850.00	75.00	2,250.00	88.00	2,640.00	78.75	2,362.50	30.00	900.00	75.00	2,250.00
64	Place Rip-Rap Protection per OCPW Std. Plan Nos. 1326, 1809 and Limits	435	CY	18.50	8,047.50	107.00	46,545.00	25.00	10,875.00	87.00	37,845.00	28.00	12,180.00	35.00	15,225.00	89.25	38,823.75	55.00	23,925.00	11.00	4,785.00
<b>Total for Storm Drain - OCPCD</b>					<b>426,047.50</b>		<b>287,690.00</b>		<b>585,285.00</b>		<b>478,635.00</b>		<b>495,300.00</b>		<b>652,930.00</b>		<b>740,260.50</b>		<b>609,545.00</b>		<b>531,735.00</b>
<b>Street Improvements</b>																					
65	Subgrade Preparation and Fine Grate Street	270,750	SF	0.15	40,612.50	0.20	54,150.00	0.10	27,075.00	0.15	40,612.50	0.50	135,375.00	0.15	40,612.50	0.42	113,715.00	0.15	40,612.50	0.15	40,612.50
66	0.2" Asphalt Rubber Hot Mix Surface Course (ARHM-GG-C-PG 64-16, 1/2")	2,310	TON	80.00	184,800.00	80.70	186,417.00	79.00	182,490.00	81.00	187,110.00	88.30	203,973.00	92.00	212,520.00	74.00	170,940.00	80.00	184,800.00	90.00	207,900.00
67	0.5" Asphalt Concrete Pavement Base Course (Type III, B2-PG 64-10, 3/4")	5,780	TON	64.00	369,920.00	63.00	364,140.00	62.00	358,360.00	67.00	387,260.00	72.00	416,160.00	78.00	450,840.00	59.00	341,020.00	64.00	369,920.00	70.00	404,600.00
68	Aggregate Base	11,815	TON	15.50	183,132.50	20.60	243,388.00	17.00	200,855.00	18.00	212,670.00	15.40	181,951.00	15.00	177,225.00	13.50	159,502.50	17.00	200,855.00	15.00	177,225.00
69	Full Depth AC to AB	1,420	SF	5.00	7,100.00	4.50	6,390.00	4.70	6,674.00	1.00	15,620.00	4.50	6,390.00	5.50	7,810.00	5.30	7,526.00	7.00	9,940.00	16.50	23,430.00
70	Subgrade Preparation and Fine Grate Curb & Gutter	11,535	LF	3.20	36,912.00	6.50	74,977.50	1.50	17,302.50	1.00	11,535.00	1.50	17,302.50	1.00	11,535.00	4.00	46,140.00	3.00	34,605.00	2.00	23,070.00
71	8" Curb & Gutter, Type A-2 per Std. 201	5,935	LF	22.00	130,570.00	16.00	94,960.00	14.00	83,090.00	16.00	94,960.00	15.00	89,025.00	17.00	100,895.00	14.15	83,980.25	15.00	89,025.00	20.00	118,700.00
72	8" Curb, Type A per Std. 201	5,600	LF	19.00	106,400.00	12.90	72,240.00	11.00	61,600.00	14.00	78,400.00	10.00	56,000.00	13.00	72,800.00	11.00	61,600.00	11.00	61,600.00	17.00	95,200.00
73	Subgrade Preparation and Fine Grate Sidewalk	34,135	SF	1.70	58,029.50	1.40	47,789.00	0.50	17,067.50	0.50	17,067.50	1.00	34,135.00	1.90	64,856.50	1.10	37,548.50	0.75	25,601.25	0.80	27,308.00
74	Monolithic Concrete Sidewalk, 4" Thick per Std. 204	8,300	SF	4.10	34,030.00	3.80	31,540.00	3.20	26,560.00	5.00	41,500.00	4.50	37,350.00	4.00	33,200.00	3.15	26,145.00	3.30	27,390.00	4.00	33,200.00
75	Concrete Sidewalk, 4" Thick per Std. 204	25,840	SF	3.50	90,440.00	3.20	82,688.00	3.20	82,688.00	5.00	129,200.00	4.35	112,404.00	3.50	90,440.00	3.15	81,396.00	3.30	85,272.00	4.00	103,360.00
76	Access Ramp per Std. 211	12	EA	2,300.00	27,600.00	2,000.00	24,000.00	2,500.00	30,000.00	1,900.00	22,800.00	2,250.00	27,000.00	3,170.00	38,040.00	1,900.00	22,800.00	2,000.00	24,000.00	2,100.00	25,200.00
77	Local Depression per Std. 304	16	EA	2,300.00	36,800.00	1,300.00	20,800.00	270.00	4,320.00	700.00	11,200.00	1,000.00	16,000.00	1,400.00	22,400.00	1,732.50	27,720.00	1,500.00	24,000.00	450.00	7,200.00
78	Catch Basin Lid, Protection Bar, Manhole Frame, and Cover per City of	15	EA	3,300.00	49,500.00	3,200.00	48,000.00	3,100.00	46,500.00	4,000.00	60,000.00	3,600.00	54,000.00	3,200.00	48,000.00	3,200.00	48,000.00	1,200.00	18,000.00	1,000.00	15,000.00
79	Concrete Median Nose per Std. 213	8	EA	2,400.00	19,200.00	2,100.00	16,800.00	330.00	2,640.00	1,000.00	8,000.00	550.00	4,400.00	2,335.00	18,680.00	1,575.00	12,600.00	5			

MOFFETT DRIVE AND PARK AVENUE EXTENSION ROADWAY, GRADING AND STORM DRAIN CONSTRUCTION PROJECT

CIP NOS. 70224 & 70225

BID OPENING : 10.00 A.M., JUNE 23, 2015

		KEC Engineering 200 N. Sherman Ave Corona, CA 92882 951-734-3010		USS Cal Builders 8651 Main St Stanton, CA 90680 714-828-4882		Sukut Construction, Inc. 4010 West Chandler Ave. Santa Ana, CA 92704-5274 714-540-5351		Mamco, Inc. 64 W. Ramona Expressway, Ste Peris, CA 92571 951-776-9300		Los Angeles Engineering, Inc. 633 N. Barranca Ave Covina, CA 91723 626-454-5222		OHL USA 1920 Main St., Ste. 310 Irvine, CA 92614 949-242-4432		R. J. Noble, Co. 15505 E. Lincoln Ave Orange, CA 92856 714-637-1550		Amas Construction, Inc. 391 N. Main St Corona, CA 92880 951-356-1275		Ortiz 6Cushing, Ste. 200 Irvine, CA 92618 949-753-1414			
ITEM NO.	CONTRACT ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE		
85	Traffic Signal Modifications – Park Avenue at Victory Road	1	LS	22,000.00	22,000.00	17,000.00	17,000.00	21,000.00	21,000.00	17,000.00	17,000.00	30,000.00	30,000.00	20,000.00	20,000.00	21,000.00	21,000.00	20,000.00	20,000.00	16,000.00	16,000.00
86	Traffic Signal Interconnect	1	LS	27,700.00	27,700.00	23,500.00	23,500.00	27,000.00	27,000.00	24,000.00	24,000.00	50,000.00	50,000.00	25,700.00	25,700.00	27,300.00	27,300.00	20,000.00	20,000.00	22,000.00	22,000.00
87	Remove Striping	1	LS	4,100.00	4,100.00	3,500.00	3,500.00	4,000.00	4,000.00	4,100.00	4,100.00	8,370.00	8,370.00	4,500.00	4,500.00	3,925.00	3,925.00	8,000.00	8,000.00	1,700.00	1,700.00
88	Install Sign - 1 Post	6	EA	360.00	2,160.00	280.00	1,680.00	350.00	2,100.00	355.00	2,130.00	350.00	2,100.00	350.00	2,100.00	341.00	2,046.00	350.00	2,100.00	300.00	1,800.00
89	Install Sign - No Posts	25	EA	210.00	5,250.00	145.00	3,625.00	200.00	5,000.00	207.00	5,175.00	300.00	7,500.00	205.00	5,125.00	200.00	5,000.00	150.00	3,750.00	250.00	6,250.00
90	Remove Sign - No Posts	2	EA	88.00	176.00	38.50	77.00	85.00	170.00	87.00	174.00	100.00	200.00	90.00	180.00	84.00	168.00	100.00	200.00	175.00	350.00
91	Install Thermoplastic Traffic Striping Detail 9 per Caltrans Std. Plan	1,114	LF	0.75	835.50	0.60	668.40	0.70	779.80	1.00	1,114.00	1.25	1,392.50	0.70	779.80	0.68	757.52	1.30	1,448.20	0.50	557.00
92	Install Thermoplastic Traffic Striping Detail 37B per Caltrans Std. Plan	400	LF	1.10	440.00	1.00	400.00	1.10	440.00	1.10	440.00	1.50	600.00	1.10	440.00	1.05	420.00	1.60	640.00	0.60	240.00
93	Install Thermoplastic Traffic Striping Detail 38 per Caltrans Std. Plan	1,050	LF	1.05	1,102.50	1.60	1,680.00	1.00	1,050.00	1.10	1,155.00	1.50	1,575.00	1.05	1,102.50	1.00	1,050.00	1.60	1,680.00	1.25	1,312.50
94	Install Thermoplastic Traffic Striping Detail 29 per Caltrans Std. Plan	6	LF	22.00	132.00	1.60	9.60	21.00	126.00	22.00	132.00	10.00	60.00	22.00	132.00	21.00	126.00	10.00	60.00	5.00	30.00
95	Install Thermoplastic Traffic Striping Detail 39 per Caltrans Std. Plan	8,578	LF	0.70	6,004.60	1.30	11,151.40	0.65	5,575.70	0.70	6,004.60	1.00	8,578.00	0.65	5,575.70	0.63	5,404.14	1.10	9,435.80	0.85	7,291.30
96	Install Thermoplastic Traffic Striping Detail 39A per Caltrans Std. Plan	1,600	LF	0.67	1,072.00	1.30	2,080.00	0.65	1,040.00	0.70	1,120.00	1.00	1,600.00	0.65	1,040.00	0.63	1,008.00	1.10	1,760.00	0.62	992.00
97	Paint Traffic Striping 1/2" Solid White or Yellow Line	874	LF	1.10	961.40	1.40	1,223.60	1.10	961.40	1.10	961.40	1.50	1,311.00	1.05	917.70	1.05	917.70	1.60	1,398.40	3.50	3,059.00
98	Install Thermoplastic Traffic Striping 4" Solid White or Yellow Line	200	LF	0.84	168.00	0.80	160.00	4.25	850.00	1.10	220.00	1.00	200.00	4.40	880.00	4.20	840.00	1.10	220.00	0.60	120.00
99	Install Thermoplastic Traffic Striping 12" Solid White or Yellow Line	675	LF	4.50	3,037.50	2.70	1,822.50	2.10	1,417.50	3.30	2,227.50	4.00	2,700.00	6.60	4,455.00	6.30	4,252.50	4.25	2,868.75	3.90	2,632.50
100	Install Thermoplastic Traffic Striping Pavement Markings (Symbols, Lettering)	780	SF	6.60	5,148.00	6.50	5,070.00	6.25	4,875.00	6.60	5,148.00	5.00	3,900.00	5.50	4,290.00	6.30	4,914.00	5.20	4,056.00	4.00	3,120.00
101	Paint Median Nose and Install Markers per City of Tustin Std. 507	1	LS	4,400.00	4,400.00	1,600.00	1,600.00	2,100.00	2,100.00	3,100.00	3,100.00	1,985.00	1,985.00	550.00	550.00	2,100.00	2,100.00	2,200.00	2,200.00	4,000.00	4,000.00
<b>Total for Traffic Improvements</b>					<b>391,687.50</b>		<b>300,247.50</b>		<b>298,485.40</b>		<b>327,201.50</b>		<b>347,071.50</b>		<b>333,767.70</b>		<b>299,228.66</b>		<b>279,817.15</b>		<b>281,454.30</b>
<b>Landscape</b>																					
102	6" PVC SDR-35 Perforated Underdrain Pipe, Sock Wrapped w/ 12" X 12"	1,540	LF	14.00	21,560.00	14.00	21,560.00	9.00	13,860.00	15.00	23,100.00	17.00	26,180.00	15.00	23,100.00	13.65	21,021.00	25.00	38,500.00	13.00	20,020.00
103	6" PVC SDR-35 Overflow Drain	24	EA	64.00	1,536.00	64.20	1,540.80	140.00	3,360.00	66.00	1,584.00	200.00	4,800.00	68.00	1,632.00	63.00	1,512.00	100.00	2,400.00	60.00	1,440.00
104	1/2 Oz Non-Woven Geotextile With 30 Mil PVC Liner	6,130	SF	2.00	12,260.00	1.90	11,647.00	0.75	4,597.50	2.00	12,260.00	2.60	15,936.00	2.00	12,260.00	1.85	11,340.50	3.00	18,390.00	1.75	10,727.50
105	12" Soil Media @ Water Quality Swale	5,130	SF	5.40	33,102.00	5.40	33,102.00	7.00	42,910.00	5.50	33,715.00	10.00	61,300.00	6.00	36,780.00	5.25	32,182.50	2.50	15,325.00	5.00	30,650.00
106	6" PVC SDR-35 Pipe	220	LF	12.00	2,640.00	1.80	396.00	17.00	3,740.00	12.00	2,640.00	15.00	3,300.00	12.50	2,750.00	11.55	2,541.00	40.00	8,800.00	11.00	2,420.00
107	PVC Drain to Catch Basin Connection	16	EA	75.00	1,200.00	75.00	1,200.00	165.00	2,640.00	77.00	1,232.00	500.00	8,000.00	80.00	1,280.00	73.50	1,176.00	150.00	2,400.00	70.00	1,120.00
108	Median Landscape & Irrigation	11,110	SF	12.00	133,320.00	11.80	131,098.00	11.50	127,765.00	12.00	133,320.00	16.00	177,760.00	12.50	138,875.00	11.55	128,320.50	12.00	133,320.00	11.00	122,210.00
109	Water Quality Swale Planting & Irrigation	7,680	SF	21.00	161,280.00	21.40	164,352.00	21.00	161,280.00	22.00	168,960.00	16.00	122,880.00	22.50	172,800.00	21.00	161,280.00	30.00	230,400.00	20.00	153,600.00
110	Interlocking Concrete Pavers for Median Nosing Paving	4,505	SF	5.00	22,525.00	17.10	77,035.50	11.00	49,555.00	11.00	49,555.00	30.00	135,150.00	7.50	33,337.50	15.75	70,953.75	20.00	90,100.00	24.00	108,120.00
111	Interlocking Concrete Pavers for Maintenance Edge Paving	3,215	SF	5.00	16,075.00	17.10	64,876.50	8.40	27,006.00	11.00	35,365.00	19.00	61,085.00	7.50	24,112.50	15.75	50,636.25	20.00	64,300.00	12.50	40,187.50
112	Maintenance & Plant Establishment Period (60 Working Days)	60	WDAY	75.00	4,500.00	75.00	4,500.00	75.00	4,500.00	76.00	4,560.00	250.00	15,000.00	80.00	4,800.00	73.50	4,410.00	50.00	3,000.00	70.00	4,200.00
<b>Total for Landscape</b>					<b>405,998.00</b>		<b>501,407.80</b>		<b>441,213.50</b>		<b>466,291.00</b>		<b>631,383.00</b>		<b>451,726.50</b>		<b>485,373.50</b>		<b>606,935.00</b>		<b>494,695.00</b>
<b>Dry Utility</b>																					
<b>Street Crossings</b>																					
113	Trench – Joint	450	LF	7.75	3,487.50	26.75	12,037.50	7.50	3,375.00	24.00	10,800.00	7.00	3,150.00	8.00	3,600.00	7.35	3,307.50	8.00	3,600.00	24.00	10,800.00
114	Trench – Electric Only	920	LF	7.75	7,130.00	21.40	19,688.00	7.50	6,900.00	20.00	18,400.00	7.00	6,440.00	8.00	7,360.00	7.35	6,762.00	8.00	7,360.00	19.00	17,480.00
115	Trench – Gas Only	85	LF	7.75	658.75	17.10	1,453.50	7.50	637.50	17.00	1,445.00	7.00	595.00	8.00	680.00	7.35	624.75	8.00	680.00	50.00	4,250.00
116	Stand – 3" Cushion	1,370	LF	2.00	2,740.00	1.60	2,192.00	1.90	2,603.00	2.00	2,740.00	1.75	2,397.50	2.00	2,740.00	1.85	2,534.50	2.00	2,740.00	2.30	3,151.00
117	Stand – 12" Shade Electric	1,370	LF	2.50	3,425.00	5.40	7,398.00	2.40	3,288.00	5.50	8,905.00	2.25	3,082.50	2.00	2,740.00	2.35	3,219.50	2.50	3,425.00	6.50	8,905.00
118	Stand – 6" Shade Communication	450	LF	2.25	1,012.50	2.70	1,215.00	2.20	990.00	4.50	2,025.00	2.00	900.00	2.00	900.00	2.10	945.00	2.25	1,012.50	5.40	2,430.00
119	Stand – 12" Shade Gas	535	LF	2.25	1,337.50	5.10	2,728.50	2.40	1,284.00	13.00	6,955.00	2.25	1,203.75	3.00	1,605.00	2.35	1,257.25	2.50	1,337.50	25.00	13,375.00
120	Furnish & Install 5" Electrical Conduit, DB100	1,720	LF	7.75	13,330.00	6.70	11,524.00	7.50	12,900.00	5.50	11,180.00	7.00	12,040.00	8.00	13,760.00	7.35	12,642.00	8.00	13,760.00	6.40	11,008.00
121	Furnish & Install 3" Electrical Conduit, DB100	290	LF	4.50	1,305.00	3.50	1,015.00	4.30	1,247.00	4.00	1,160.00	4.00	1,160.00	5.00	1,450.00	4.20	1,218.00	4.50	1,305.00	5.50	1,595.00
122	Furnish & Install 1 1/2" Electrical Conduit, Sch. 40	840	LF	4.00	3,360.00	3.20	2,688.00	4.00	3,360.00	4.00	3,360.00	3.75	3,150.00	4.50	3,780.00	3.95	3,318.00	4.00	3,360.00	3.80	3,192.00
123	Furnish & Install 4" Telephone Conduit, Type C	630	LF	7.00	4,410.00	7.00	4,410.00	6.50	4,095.00	8.00	5,040.00	6.00	3,780.00	7.00	4,410.00	6.30	3,969.00	7.00	4,910.00		

MOFFETT DRIVE AND PARK AVENUE EXTENSION ROADWAY, GRADING AND STORM DRAIN CONSTRUCTION PROJECT

CIP NOS. 70224 & 70225

BID OPENING : 10.00 A.M., JUNE 23, 2015

		KEC Engineering 200 N. Sherman Ave. Corona, CA 92882 951-734-3010		USS Cal Builders 8051 Main St Stanton, CA 90680 714-828-4882		Sukut Construction, Inc. 4010 West Chandler Ave. Santa Ana, CA 92704-5274 714-540-5351		Mamco, Inc. 84 W. Ramona Expressway, Ste. Peris, CA 92571 951-776-9300		Los Angeles Engineering, Inc. 633 N. Barranca Ave. Covina, CA 91723 626-454-5222		OHL USA 1920 Main St., Ste. 310 Irvine, CA 92614 949-242-4432		R. J. Noble, Co. 15505 E. Lincoln Ave Orange, CA 92856 714-637-1550		Ames Construction, Inc. 391 N. Main St. Corona, CA 92880 951-356-1275		Ortiz 6 Cushing, Ste. 200 Irvine, CA 92618 949-753-1414			
ITEM NO.	CONTRACT ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE
<b>Electrical</b>																					
126	Furnish & Install 5" Electrical Conduit, DB100	9,870	LF	7.75	76,492.50	6.40	63,168.00	7.50	74,025.00	7.00	69,090.00	7.00	69,090.00	8.00	78,960.00	7.35	72,544.50	8.00	78,960.00	6.40	63,168.00
127	Furnish & Install 3" Electrical Conduit, DB100	3,085	LF	4.50	13,882.50	7.50	23,137.50	4.40	13,574.00	6.00	18,510.00	4.00	12,340.00	5.00	15,425.00	4.20	12,957.00	4.50	13,882.50	5.20	16,042.00
128	Furnish & Install 1 1/2" Electrical Conduit, Sch. 40	2,030	LF	4.00	8,120.00	5.40	10,962.00	4.00	8,120.00	7.00	14,210.00	3.75	7,612.50	4.50	9,135.00	3.95	8,018.50	4.00	8,120.00	6.10	12,383.00
129	Furnish & Install Electrical Concrete Hand-Hole 17" x 30" x 24"	12	EA	332.00	3,984.00	64.00	768.00	323.00	3,876.00	550.00	6,600.00	300.00	3,600.00	350.00	4,200.00	315.00	3,780.00	300.00	3,600.00	540.00	6,480.00
130	Furnish & Install Electrical Pad 48" x 54" with 17" x 30" Inverted HH	1	EA	1,100.00	1,100.00	480.00	480.00	1,075.00	1,075.00	2,300.00	2,300.00	1,000.00	1,000.00	1,200.00	1,200.00	1,050.00	1,050.00	1,000.00	1,000.00	2,725.00	2,725.00
131	Furnish & Install Electrical Pad 7' x 14' x 11'	1	EA	32,000.00	32,000.00	2,100.00	2,100.00	31,150.00	31,150.00	22,000.00	22,000.00	28,000.00	28,000.00	34,000.00	34,000.00	30,456.00	30,456.00	29,000.00	29,000.00	20,700.00	20,700.00
132	Temporary Barriacades, SCE XFMR Pad 7' x 14' x 11'	1	EA	222.00	222.00	27,000.00	27,000.00	215.00	215.00	3,000.00	3,000.00	200.00	200.00	235.00	235.00	210.00	210.00	200.00	200.00	1,500.00	1,500.00
133	Temporary Barriacades, SCE XFMR Pad 48" x 54"	1	EA	111.00	111.00	2,000.00	2,000.00	108.00	108.00	1,600.00	1,600.00	100.00	100.00	120.00	120.00	105.00	105.00	100.00	100.00	1,500.00	1,500.00
134	Temporary Barriacades, SCE HH	12	EA	111.00	1,332.00	1,500.00	18,000.00	108.00	1,296.00	44.00	528.00	100.00	1,200.00	12.00	144.00	105.00	1,260.00	100.00	1,200.00	1,500.00	18,000.00
Sub-Total for Electrical					<b>137,244.00</b>		<b>147,615.50</b>		<b>133,438.00</b>		<b>137,838.00</b>		<b>124,142.50</b>		<b>143,419.00</b>		<b>130,381.00</b>		<b>136,062.50</b>		<b>142,498.00</b>
<b>Telephone</b>																					
135	Furnish & Install 4" Telephone Conduit	4,330	LF	7.00	30,310.00	15.00	64,950.00	6.50	28,145.00	15.00	64,950.00	6.00	25,980.00	7.00	30,310.00	6.30	27,279.00	7.00	30,310.00	13.70	59,321.00
136	Furnish & Install Manhole 6' x 12' x 7'	4	EA	16,600.00	66,400.00	23,500.00	94,000.00	16,110.00	64,440.00	14,500.00	58,000.00	15,000.00	60,000.00	18,000.00	72,000.00	15,750.00	63,000.00	15,000.00	60,000.00	13,200.00	52,800.00
Sub-Total for Telephone					<b>96,710.00</b>		<b>158,950.00</b>		<b>92,585.00</b>		<b>122,950.00</b>		<b>85,980.00</b>		<b>102,310.00</b>		<b>90,279.00</b>		<b>90,310.00</b>		<b>112,121.00</b>
<b>Private Communication</b>																					
137	Furnish & Install 4" Private Communication Conduit, Sch. 40	8,230	LF	6.65	54,729.50	10.20	83,946.00	6.40	52,672.00	10.00	82,300.00	6.00	49,380.00	7.00	57,610.00	6.30	51,849.00	7.00	57,610.00	9.00	74,070.00
138	Furnish & Install Private Communication Pull-Box 2' x 3' x 3'	4	EA	864.00	3,456.00	3,108.00	12,432.00	645.00	2,580.00	1,800.00	7,200.00	600.00	2,400.00	700.00	2,800.00	630.00	2,520.00	600.00	2,400.00	1,800.00	7,200.00
Sub-Total for Private Communication					<b>57,385.50</b>		<b>96,378.00</b>		<b>55,252.00</b>		<b>89,500.00</b>		<b>51,780.00</b>		<b>60,410.00</b>		<b>54,369.00</b>		<b>60,010.00</b>		<b>81,270.00</b>
<b>Trench</b>																					
139	Trench for Mainline Joint	2,990	LF	7.75	23,172.50	26.75	79,982.50	7.50	22,425.00	25.00	74,750.00	7.00	20,930.00	8.00	23,920.00	7.35	21,976.50	8.00	23,920.00	23.00	68,770.00
140	Trench for Electrical Only	35	LF	7.75	271.25	91.00	3,185.00	7.50	262.50	88.00	3,080.00	7.00	245.00	8.00	280.00	7.35	257.25	8.00	280.00	99.00	3,465.00
141	Trench for Street Light Only	300	LF	7.75	2,325.00	21.40	6,420.00	7.50	2,250.00	22.00	6,600.00	7.00	2,100.00	8.00	2,400.00	7.35	2,205.00	8.00	2,400.00	22.00	6,600.00
142	3" Sand - Cushion	3,225	LF	2.00	6,450.00	1.60	5,160.00	1.90	6,127.50	2.00	6,450.00	1.75	5,643.75	2.00	6,450.00	1.85	5,966.25	2.00	6,450.00	2.00	6,450.00
143	12" Sand - Shade Electric	3,325	LF	2.50	8,312.50	5.40	17,955.00	2.40	7,980.00	7.00	23,275.00	2.25	7,481.25	2.75	9,143.75	2.35	7,813.75	2.50	8,312.50	6.20	20,615.00
144	6" Sand - Shade Communication	2,990	LF	2.25	6,727.50	3.20	9,568.00	2.20	6,578.00	4.40	13,156.00	2.00	5,980.00	2.50	7,475.00	2.10	6,279.00	2.25	6,727.50	4.20	12,558.00
145	12" Sand - Shade Gas	2,990	LF	2.50	7,475.00	6.00	17,940.00	2.40	7,176.00	13.00	38,870.00	2.25	6,727.50	2.50	7,475.00	2.35	7,026.50	2.50	7,475.00	25.00	74,750.00
Sub-Total for Trench					<b>54,733.75</b>		<b>140,210.50</b>		<b>52,799.00</b>		<b>166,181.00</b>		<b>49,107.50</b>		<b>57,143.75</b>		<b>51,524.25</b>		<b>55,565.00</b>		<b>193,208.00</b>
Total for Dry Utility					<b>399,497.00</b>		<b>622,068.50</b>		<b>385,191.50</b>		<b>601,579.00</b>		<b>358,608.75</b>		<b>417,802.75</b>		<b>376,535.75</b>		<b>396,432.50</b>		<b>699,456.00</b>
<b>IRWD Non-Critical Domestic Water</b>																					
146	8" PVC	342	LF	60.00	20,520.00	72.80	24,897.60	56.00	19,152.00	45.00	15,390.00	39.00	13,338.00	66.00	22,572.00	131.25	44,887.50	48.00	16,416.00	115.00	39,330.00
147	8" Butterfly Valve & Valve Box	4	EA	3,200.00	12,800.00	2,300.00	9,200.00	2,200.00	8,800.00	2,000.00	8,000.00	1,700.00	6,800.00	2,500.00	10,000.00	5,250.00	21,000.00	2,400.00	9,600.00	2,100.00	8,400.00
148	8" DI Tee	1	EA	1,800.00	1,800.00	2,600.00	2,600.00	800.00	800.00	500.00	500.00	1,000.00	1,000.00	1,700.00	1,700.00	2,625.00	2,625.00	1,100.00	1,100.00	550.00	550.00
149	8" DI Fitting/Bands/Spools	18	EA	1,100.00	19,800.00	800.00	14,400.00	400.00	7,200.00	360.00	6,480.00	275.00	4,950.00	1,200.00	21,600.00	1,890.00	34,020.00	1,000.00	18,000.00	260.00	4,680.00
150	Commercial Fire Hydrant w/ 6" Butterfly Valve	5	EA	7,100.00	35,500.00	8,100.00	40,500.00	8,000.00	40,000.00	6,800.00	34,000.00	7,000.00	35,000.00	11,000.00	55,000.00	7,875.00	39,375.00	8,400.00	42,000.00	8,250.00	41,250.00
151	Commercial Fire Hydrant w/ 8" Butterfly Valve	5	EA	7,800.00	39,000.00	10,000.00	50,000.00	8,800.00	44,000.00	7,800.00	39,000.00	12,000.00	60,000.00	12,000.00	60,000.00	9,975.00	49,875.00	11,000.00	55,000.00	8,900.00	44,500.00
152	Temporary Flush Out Assembly	3	EA	3,300.00	9,900.00	2,400.00	7,200.00	5,000.00	15,000.00	2,800.00	8,400.00	3,000.00	9,000.00	2,900.00	8,700.00	4,725.00	14,175.00	4,500.00	13,500.00	3,100.00	9,300.00
153	Remove Temporary Flush Out and Join	2	EA	1,700.00	3,400.00	1,000.00	2,000.00	1,600.00	3,200.00	650.00	1,300.00	2,100.00	4,200.00	5,100.00	10,200.00	1,280.00	2,560.00	4,200.00	8,400.00	4,210.00	8,420.00
154	Trailing	342	LF	10.00	3,420.00	32.00	10,944.00	4.00	1,368.00	3.50	1,197.00	10.00	3,420.00	10.50	3,591.00	11.55	3,950.10	7.00	2,394.00	10.00	3,420.00
Sub-Total for Domestic Water					<b>145,140.00</b>		<b>161,741.60</b>		<b>139,520.00</b>		<b>114,967.00</b>		<b>137,708.00</b>		<b>193,363.00</b>		<b>212,427.60</b>		<b>166,410.00</b>		<b>159,850.00</b>
<b>Recorded Water</b>																					
155	4" PVC	270	LF	46.00	12,420.00	51.30	13,851.00	57.00	15,390.00	44.00	11,880.00	26.00	7,020.00	79.00	21,330.00	89.25	24,097.50	37.00	9,990.00	68.00	18,360.00
156	4" DIP	25	LF	100.00	2,500.00	65.30	1,632.50	160.00	4,000.00	125.00	3,125.00	90.00	2,250.00	195.00	4,875.00	315.00	7,875.00	80.00	2,000.00	100.00	2,500.00
157	4" DI Fitting/Bands	14	EA	910.00	12,740.00	760.00	10,640.00	350.00	4,900.00	350.00	4,900.00	150.00	2,100.00	740.00	10,360.00	1,155.00	16,170.00	600.00	8,400.00	200.00	2,800.00
158	2" Copper Service	4	EA	2,900.00	11,600.00	5,000.00	20,000.00	5,500.00	22,000.00	2,800.00	11,200.00	2,500.00	10,000.00	3,200.00	12,800.00	5,040.00	20,160.00	3,500.00	14,000.00	3,200.00	12,800.00
159	Temporary Flush Out Assembly	2	EA	2,900.00	5,800.00	1,300.00	2,600.00	3,200.00	6,400.00	650.00	1,300.00	2,500.00	5,000.00	2,650.00	5,300.00	2,205.00	4,410.00	2,500.00	5,000.00	3,100.00	6,200.00

MOFFETT DRIVE AND PARK AVENUE EXTENSION ROADWAY, GRADING AND STORM DRAIN CONSTRUCTION PROJECT

CIP NOS. 70224 & 70225

BID OPENING : 10.00 A.M., JUNE 23, 2015

ITEM NO.	CONTRACT ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	KEC Engineering 200 N. Sherman Ave. Corona, CA 92882 951-734-3010		USS Cal Builders 8051 Main St Stanton, CA 90680 714-828-4882		Sukut Construction, Inc. 4010 West Chandler Ave. Santa Ana, CA 92704-5274 714-540-5351		Mamco, Inc. 54 W. Ramona Expressway, Ste. Perris, CA 92571 951-775-9300		Los Angeles Engineering, Inc. 633 N. Barranca Ave. Covina, CA 91723 626-454-5222		OHL USA 1920 Main St., Ste 310 Irvine, CA 92614 949-242-4432		R. J. Noble, Co. 15505 E. Lincoln Ave. Orange, CA 92656 714-637-1550		Ames Construction, Inc. 391 N. Main St. Corona, CA 92880 951-356-1275		Ortiz 6Cushing, Ste 200 Irvine, CA 92618 949-753-1414	
				UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE
160	Remove Temporary Flush Out and Join	2	EA	1,200.00	2,400.00	1,600.00	3,200.00	1,100.00	2,200.00	250.00	500.00	2,200.00	4,400.00	3,800.00	7,600.00	1,260.00	2,520.00	4,100.00	8,200.00	4,210.00	8,420.00
161	Testing	295	LF	11.00	3,245.00	32.10	9,469.50	4.00	1,180.00	3.50	1,032.50	7.00	2,065.00	8.50	2,507.50	2.10	619.50	4.00	1,180.00	10.00	2,950.00
	<b>Sub-Total for Recycled Water</b>				<b>50,705.00</b>		<b>61,393.00</b>		<b>56,070.00</b>		<b>33,937.50</b>		<b>32,835.00</b>		<b>64,772.50</b>		<b>75,852.00</b>		<b>48,770.00</b>		<b>54,030.00</b>
	<b>Total for IRWD Non-Capital</b>				<b>196,845.00</b>		<b>223,134.50</b>		<b>195,590.00</b>		<b>148,964.50</b>		<b>170,543.00</b>		<b>258,135.50</b>		<b>288,279.60</b>		<b>215,180.00</b>		<b>213,880.00</b>
	<b>IRWD Capital</b>																				
	<b>Domestic Water</b>																				
162	12" PVC	3,212	LF	61.00	195,932.00	72.80	233,833.60	44.00	141,328.00	45.00	144,540.00	49.00	157,388.00	59.00	189,508.00	94.50	303,534.00	52.00	167,024.00	57.00	183,084.00
163	12" Butterfly Valve & Valve Box	11	EA	4,900.00	53,900.00	4,000.00	44,000.00	2,800.00	30,800.00	2,900.00	31,900.00	2,000.00	22,000.00	3,600.00	39,600.00	6,510.00	71,610.00	4,800.00	52,800.00	3,700.00	40,700.00
164	12" DI Cross	3	EA	2,400.00	7,200.00	3,500.00	10,500.00	1,400.00	4,200.00	1,400.00	4,200.00	1,500.00	4,500.00	2,400.00	7,200.00	2,625.00	7,875.00	2,000.00	6,000.00	2,500.00	7,500.00
165	12" DI Tee	9	EA	2,200.00	19,800.00	930.00	8,370.00	1,400.00	12,600.00	900.00	8,100.00	800.00	7,200.00	1,850.00	16,650.00	2,310.00	20,790.00	1,700.00	15,300.00	1,000.00	9,000.00
166	12" DI Fitting/Bends	29	EA	1,200.00	34,800.00	860.00	24,940.00	600.00	17,400.00	650.00	18,850.00	600.00	17,400.00	1,150.00	33,350.00	2,100.00	60,900.00	700.00	20,300.00	750.00	21,750.00
167	2" Air Vac Assembly	3	EA	3,800.00	11,400.00	7,300.00	21,900.00	4,000.00	12,000.00	2,900.00	8,700.00	4,000.00	12,000.00	4,500.00	13,500.00	5,775.00	17,325.00	3,675.00	11,025.00	3,600.00	10,800.00
168	Temporary Flush Out Assembly	2	EA	3,200.00	6,400.00	2,000.00	4,000.00	6,400.00	12,800.00	5,200.00	10,400.00	3,500.00	7,000.00	3,300.00	6,600.00	3,675.00	7,350.00	4,300.00	8,600.00	3,600.00	7,200.00
169	Remove Temporary Flush Out and Join	1	EA	1,300.00	1,300.00	2,700.00	2,700.00	2,000.00	2,000.00	900.00	900.00	2,200.00	2,200.00	4,300.00	4,300.00	1,260.00	1,260.00	4,200.00	4,200.00	5,800.00	5,800.00
170	Testing	3,212	LF	7.00	22,484.00	10.70	34,368.40	4.00	12,848.00	3.00	9,636.00	2.00	6,424.00	2.50	8,030.00	2.10	6,745.20	6.00	19,272.00	4.00	12,848.00
	<b>Sub-Total for Domestic Water</b>				<b>353,216.00</b>		<b>384,612.00</b>		<b>245,976.00</b>		<b>237,226.00</b>		<b>236,112.00</b>		<b>316,738.00</b>		<b>497,389.20</b>		<b>309,996.00</b>		<b>299,582.00</b>
	<b>Recycled Water</b>																				
171	6" DIP	62	LF	135.00	8,370.00	153.00	9,486.00	130.00	8,060.00	180.00	11,160.00	110.00	6,820.00	98.00	5,952.00	147.00	9,114.00	65.00	4,030.00	163.00	10,106.00
172	6" PVC	702	LF	49.00	34,398.00	51.50	36,153.00	28.00	19,656.00	31.00	21,762.00	32.00	22,464.00	39.00	27,378.00	84.00	58,968.00	50.00	35,100.00	39.00	27,378.00
173	16" PVC	2,359	LF	75.00	176,925.00	115.00	271,285.00	60.00	141,540.00	63.00	148,517.00	60.00	141,540.00	69.00	162,771.00	123.00	290,157.00	78.00	184,002.00	74.00	174,566.00
174	6" Butterfly Valve & Valve Box	4	EA	3,000.00	12,000.00	2,250.00	9,000.00	2,000.00	8,000.00	1,900.00	7,600.00	1,500.00	6,000.00	2,300.00	9,200.00	3,950.00	15,950.00	2,300.00	9,200.00	1,900.00	7,600.00
175	16" Butterfly Valve & Valve Box	5	EA	6,000.00	30,000.00	7,000.00	35,000.00	4,300.00	21,500.00	4,000.00	20,000.00	4,400.00	22,000.00	5,500.00	27,500.00	8,190.00	40,950.00	6,500.00	32,500.00	4,400.00	22,000.00
176	6" Fittings	8	EA	935.00	7,480.00	2,000.00	16,000.00	375.00	3,000.00	350.00	2,800.00	370.00	2,960.00	400.00	3,200.00	1,260.00	10,080.00	700.00	5,600.00	250.00	2,000.00
177	16" DI Cross	2	EA	2,700.00	5,400.00	3,100.00	6,200.00	2,300.00	4,600.00	2,000.00	4,000.00	2,000.00	4,000.00	2,600.00	5,200.00	6,510.00	13,020.00	2,300.00	4,600.00	2,900.00	5,800.00
178	16" DI Tees	1	EA	2,800.00	2,800.00	2,250.00	2,250.00	2,300.00	2,300.00	1,400.00	1,400.00	1,800.00	1,800.00	2,500.00	2,500.00	5,040.00	5,040.00	2,400.00	2,400.00	1,600.00	1,600.00
179	16" DI Fittings	9	EA	1,400.00	12,600.00	1,300.00	11,700.00	1,050.00	9,450.00	1,000.00	9,000.00	1,200.00	10,800.00	1,200.00	10,800.00	1,200.00	9,600.00	2,940.00	2,940.00	1,000.00	9,000.00
180	1" Air Vac Assembly	1	EA	4,500.00	4,500.00	3,100.00	3,100.00	3,900.00	3,900.00	3,300.00	3,300.00	3,000.00	3,000.00	3,900.00	3,900.00	4,725.00	4,725.00	3,800.00	3,800.00	3,500.00	3,500.00
181	2" Air Vac Assembly	1	EA	6,000.00	6,000.00	4,500.00	4,500.00	4,000.00	4,000.00	4,500.00	4,500.00	4,800.00	4,800.00	4,650.00	4,650.00	5,775.00	5,775.00	4,600.00	4,600.00	4,400.00	4,400.00
182	4" Blow Off Assembly	2	EA	6,000.00	12,000.00	17,300.00	34,600.00	12,000.00	24,000.00	8,700.00	17,400.00	12,000.00	24,000.00	8,500.00	17,000.00	8,925.00	17,850.00	7,500.00	15,000.00	11,200.00	22,400.00
183	Temporary Flush Out Assembly	2	EA	4,000.00	8,000.00	3,500.00	7,000.00	7,500.00	15,000.00	6,500.00	13,000.00	5,000.00	10,000.00	2,900.00	5,800.00	7,875.00	15,750.00	5,000.00	10,000.00	3,800.00	7,600.00
184	Remove Temporary Flush Out and Join	1	EA	1,700.00	1,700.00	2,400.00	2,400.00	1,300.00	1,300.00	650.00	650.00	4,500.00	4,500.00	4,100.00	4,100.00	1,260.00	1,260.00	4,200.00	4,200.00	6,200.00	6,200.00
185	Testing	3,123	LF	7.00	21,861.00	10.70	33,416.10	4.00	12,492.00	1.70	5,309.10	1.50	4,684.50	2.30	7,182.90	2.10	6,558.30	3.00	9,369.00	3.00	9,369.00
	<b>Sub-Total for Recycled Water</b>				<b>344,034.00</b>		<b>482,090.10</b>		<b>278,796.00</b>		<b>270,498.10</b>		<b>269,368.50</b>		<b>297,133.90</b>		<b>521,667.30</b>		<b>333,401.00</b>		<b>313,119.00</b>
	<b>Sewer</b>																				
186	6" PVC Sewer Lateral	40	LF	66.00	2,640.00	51.40	2,056.00	135.00	5,400.00	60.00	2,400.00	125.00	5,000.00	300.00	12,000.00	236.25	9,450.00	200.00	6,000.00	145.00	5,800.00
187	12" PVC	1,009	LF	54.00	54,486.00	60.00	60,540.00	43.00	43,387.00	105.00	105,945.00	118.00	119,062.00	120.00	121,080.00	152.25	153,820.25	65.00	65,585.00	66.00	66,594.00
188	15" PVC	1,534	LF	65.00	99,710.00	72.80	111,675.20	48.00	73,032.00	125.00	191,750.00	125.00	191,750.00	125.00	191,750.00	184.80	283,483.20	88.00	134,992.00	89.00	136,526.00
189	27" Steel Casing	50	LF	260.00	13,000.00	280.00	14,000.00	335.00	16,750.00	400.00	20,000.00	400.00	20,000.00	530.00	26,500.00	682.50	34,125.00	370.00	18,500.00	195.00	9,750.00
190	48" Manhole	3	EA	5,600.00	16,800.00	7,300.00	21,900.00	6,200.00	18,600.00	4,100.00	12,300.00	6,500.00	19,500.00	14,000.00	42,000.00	7,350.00	22,050.00	8,500.00	25,500.00	4,950.00	14,850.00
191	60" Manhole	5	EA	5,300.00	26,500.00	8,500.00	42,500.00	7,000.00	35,000.00	5,200.00	26,000.00	7,700.00	38,500.00	9,700.00	48,500.00	8,610.00	43,050.00	10,000.00	50,000.00	5,700.00	28,500.00
192	72" Manhole	1	EA	13,700.00	13,700.00	9,500.00	9,500.00	8,800.00	8,800.00	6,300.00	6,300.00	10,000.00	10,000.00	14,000.00	14,000.00	10,290.00	10,290.00	11,000.00	11,000.00	7,400.00	7,400.00
193	6" Terminal Cleanout	5	EA	1,700.00	8,500.00	800.00	4,000.00	825.00	4,125.00	750.00	3,750.00	2,000.00	10,000.00	3,000.00	15,000.00	2,625.00	13,125.00	1,500.00	7,500.00	2,000.00	10,000.00
194	Remove Temporary Terminal Cleanout & Join																				

MOFFETT DRIVE AND PARK AVENUE EXTENSION ROADWAY, GRADING AND STORM DRAIN CONSTRUCTION PROJECT

CIP NOS. 70224 & 70225

BID OPENING : 10.00 A.M., JUNE 23, 2015

			KEC Engineering 200 N. Sherman Ave. Corona, CA 92882 951-734-3010		USS Cal Builders 8051 Main St. Stanton, CA 90680 714-828-4882		Sukul Construction, Inc. 4010 West Chandler Ave. Santa Ana, CA 92704-5274 714-540-5351		Mantco, Inc. 64 W. Ramona Expressway, Ste. Perris, CA 92571 951-776-9300		Los Angeles Engineering, Inc. 633 N. Barranca Ave. Covina, CA 91723 626-454-5222		OHL USA 1920 Main St., Ste. 310 Irvine, CA 92614 949-242-4432		R. J. Noble, Co. 15505 E. Lincoln Ave. Orange, CA 92656 714-637-1590		Ames Construction, Inc. 391 N. Main St. Corona, CA 92880 951-356-1275		Ortiz 6 Cushing, Ste. 200 Irvine, CA 92618 949-753-1414		
ITEM NO.	CONTRACT ITEM DESCRIPTION	ESTIMATOR QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE
196	Provide Legal Pollution Liability Insurance for the Next 5 Year After the Date	5	YR	1,100.00	5,500.00	9,000.00	45,000.00	1,200.00	6,000.00	3,800.00	19,000.00	100.00	500.00	1,600.00	8,000.00	2,856.00	14,280.00	900.00	2,500.00	6,000.00	30,000.00
197	Water Control	1	LS	553,315.15	553,315.15	53,500.00	53,500.00	225,000.00	225,000.00	375,000.00	375,000.00	50,000.00	50,000.00	100,000.00	100,000.00	800,000.00	800,000.00	30,000.00	30,000.00	270,000.00	270,000.00
198	Install Chain Link Fence	3,231	LF	18.00	58,158.00	16.60	53,634.60	16.00	51,696.00	18.00	58,158.00	15.50	50,080.50	17.50	56,542.50	16.30	52,685.30	17.00	54,927.00	15.50	50,080.50
199	Relocate Chain Link Fence	600	LF	23.00	13,800.00	9.60	5,760.00	10.00	6,000.00	23.00	13,800.00	9.00	5,400.00	10.00	6,000.00	9.45	5,670.00	10.00	6,000.00	9.00	5,400.00
200	Chain Link Gate (Double Swing - 22' Max)	4	EA	2,300.00	9,200.00	30,200.00	120,800.00	3,100.00	12,400.00	2,300.00	9,200.00	3,000.00	12,000.00	3,400.00	13,600.00	3,150.00	12,600.00	3,500.00	14,000.00	3,000.00	12,000.00
201	Handscape	1	LS	55,300.00	55,300.00	80,000.00	80,000.00	90,000.00	90,000.00	200,000.00	200,000.00	60,000.00	60,000.00	3,000.00	3,000.00	120,750.00	120,750.00	20,000.00	20,000.00	115,000.00	115,000.00
202	Install LED Lights	1	LS	35,400.00	35,400.00	30,200.00	30,200.00	35,000.00	35,000.00	33,000.00	33,000.00	10,000.00	10,000.00	36,500.00	36,500.00	61,000.00	61,000.00	20,000.00	20,000.00	33,000.00	33,000.00
203	Install Electrical Meter Pedestal	1	LS	17,700.00	17,700.00	17,100.00	17,100.00	21,000.00	21,000.00	17,000.00	17,000.00	4,000.00	4,000.00	18,100.00	18,100.00	7,400.00	7,400.00	12,000.00	12,000.00	17,000.00	17,000.00
<b>Total for Miscellaneous</b>					<b>748,373.15</b>		<b>405,994.60</b>		<b>447,896.00</b>		<b>725,158.00</b>		<b>191,980.50</b>		<b>241,742.50</b>		<b>1,074,385.30</b>		<b>159,427.00</b>		<b>532,480.50</b>
<b>GRAND TOTAL</b>					<b>13,280,099.00</b>		<b>13,288,401.00</b>		<b>13,488,429.90</b>		<b>14,777,777.00</b>		<b>15,984,000.00</b>		<b>16,565,658.56</b>		<b>17,532,480.16</b>		<b>17,635,954.40</b>		<b>17,750,471.80</b>
Contractor's Total Price Amount, as shown in the Bid Document					13,280,099.00		13,336,119.84		13,488,314.90		14,777,777.00		15,984,000.00		16,565,658.56		17,532,480.16		17,635,954.40		17,750,471.80
± Correction							60,281.16		115.00												

August 24, 2015  
Prepared By: J. Corey/K. Welch  
Submitted By: F. Sanchez/P. Weghorst  
Approved By: Paul Cook 

## CONSENT CALENDAR

### STOCKDALE INTEGRATED BANKING PROJECT ENVIRONMENTAL COMPLIANCE VARIANCE NO. 5

#### SUMMARY:

On March 26, 2012, the Board authorized a Professional Services Agreement in the amount of \$135,675 with Environmental Science Associates (ESA) to prepare an Environmental Impact Report (EIR) for the Stockdale Integrated Banking Project. Additional work is needed beyond the original budgeted scope of work to develop responses to complex comments that were received during public review of the Draft EIR. To accommodate this additional work, staff recommends that the Board approve an increase to the FY 2015-16 Capital Budget in the amount of \$33,220 for Project 11645 (3766) and authorize the General Manager to execute Variance No. 5 to the Professional Services Agreement with ESA.

#### BACKGROUND:

Staff has been working with Rosedale-Rio Bravo Water Storage District (Rosedale) to develop the Stockdale Integrated Banking Project that would utilize IRWD's Stockdale West Ranch and Rosedale's Stockdale East property located directly east of the Strand Ranch. A location map of these properties is provided as Exhibit "A". On March 26, 2012, the Board authorized a Professional Services Agreement in the amount of \$135,675 with ESA to prepare an EIR for the project. The existing Development Agreement between Rosedale and IRWD for the project was also approved by the Board on March 26, 2012. This agreement calls for IRWD and Rosedale to equally share the cost of the preparation of the EIR and related technical studies, including hydrogeologic evaluations. IRWD agreed to initially fund the cost of the EIR and Rosedale agreed to initially fund the cost of the hydrogeologic evaluations. The overall costs will be reconciled and shared once all of the work has been completed.

#### Previous Variances:

Four prior variances to ESA's Professional Services Agreement have been approved as follows:

- In March 2013, the Board approved Variance No. 1 in the amount of \$29,174, to include the programmatic level analysis of a potential third water banking property;
- In February 2014, the General Manager approved Variance No. 2 in the amount of \$3,020 to include a Central Intake Canal in the project description and environmental analyses;

- In July 2014, the General Manager approved Variance No. 3 in the amount of \$24,765 to include preparation of the third Screencheck Draft EIR and to provide assistance with the National Environmental Policy Act review process to facilitate federal grant funding for the project from the U. S. Bureau of Reclamation under its WaterSMART Program; and
- In December 2014, the General Manager approved Variance No. 4 in the amount of \$34,435 to include the preparation of a fourth Screencheck Draft EIR including incorporation of a groundwater monitoring mitigation program and additional project-level assessment of the Central Intake Canal.

Variance No. 5 Work Items:

A fifth variance is needed to cover additional work that was not included in ESA's original scope of work. Following is a description of additional work to be accomplished through Variance No. 5:

- Substantial comments on Screencheck Draft EIR No. 4 were provided by Rosedale, Rosedale's legal counsel and IRWD staff. As a result, the preparation of the public Draft EIR was more complex and additional work was required beyond the scope of work.
- The volume and complexity of public comments received on the Draft EIR exceeded what was expected in the original scope of work. Additional time and resources are needed to respond to the comments and manage the development of the Final EIR. The effort to respond to comments will require close coordination with Rosedale and IRWD legal counsels. The current schedule for the completion of the Final EIR and presentation to the Board of Directors will be extended from April 2015 to November 2015.

Staff has negotiated ESA's request for additional budget in the amount of \$33,220 and considers the request fair and reasonable. Staff recommends that the Board approve Variance No. 5. ESA's variance request, budget and revised schedule are attached as Exhibit "B".

FISCAL IMPACTS:

Project 11645 (3766), Stockdale Integrated Banking Project, is included in the FY 2015-16 Capital Budget. IRWD and Rosedale will equally share in the costs associated with the preparation of the EIR. The overall costs will be reconciled and shared after all work has been completed. The cost for ESA to perform the additional work under Variance No. 5 is \$33,220. Staff requests an increase to the FY 2015/16 Capital Budget in the amount of \$33,220 for Project 11645 (3766).

Project No.	Current Budget	Addition <Reduction>	Total Budget
11645 (3766)	\$2,770,700	\$33,220	\$2,803,920

**ENVIRONMENTAL COMPLIANCE:**

The preparation of an EIR is necessary for the implementation of the proposed Stockdale Integrated Banking Project in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended), codified at California Public Resources Code Sections 21000 et. seq., and the State CEQA Guidelines in the Code of Regulations, Title 14, Division 6, Chapter 3. Environmental compliance in accordance with the National Environmental Policy Act is required to receive federal grant funding for the project from the U. S. Bureau of Reclamation under the WaterSMART Program.

**COMMITTEE STATUS:**

This item was reviewed by the Water Banking Committee on August 12, 2015.

**RECOMMENDATION:**

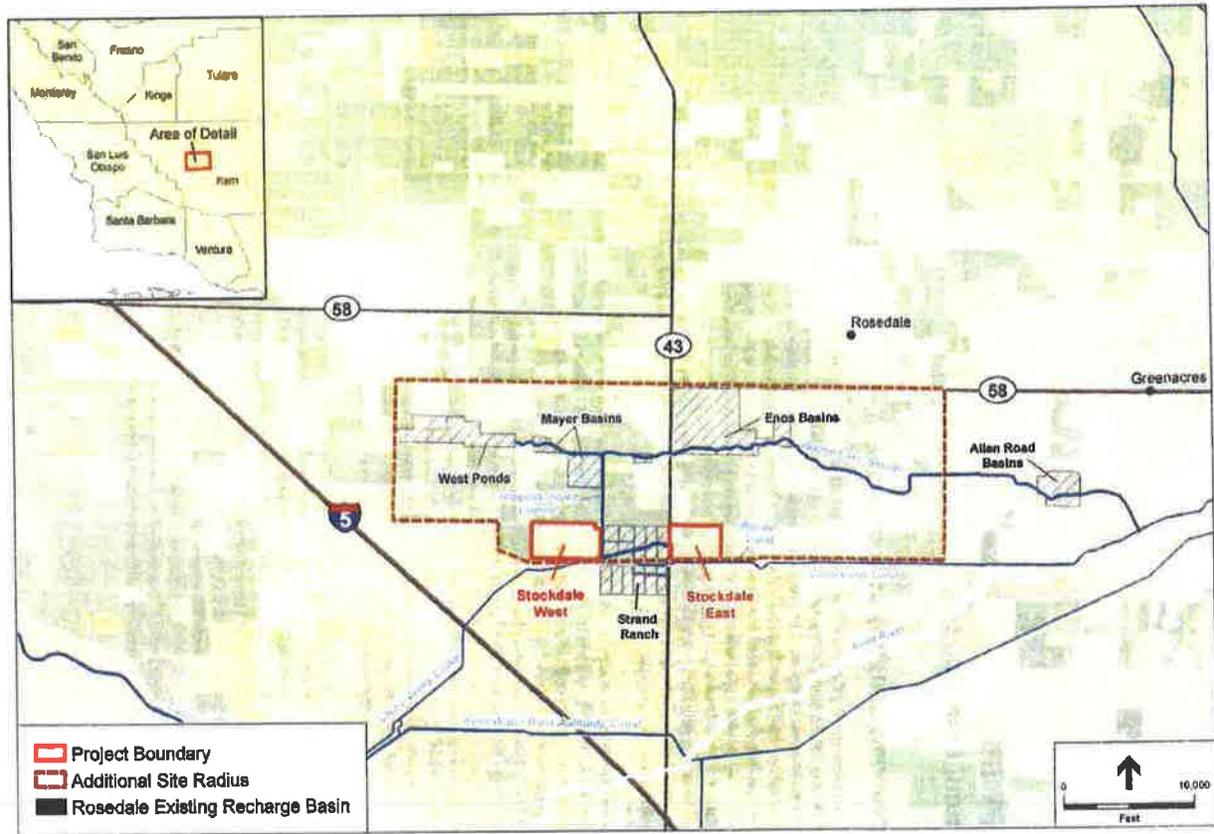
THAT THE BOARD APPROVE AN INCREASE TO THE FY 2015-16 CAPITAL BUDGET IN THE AMOUNT OF \$33,220 FOR PROJECT 11645 (3766) FOR ADDITIONAL ENVIRONMENTAL COMPLIANCE WORK AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 5 WITH ESA IN THE AMOUNT OF \$33,220.

**EXHIBITS:**

Exhibit "A" – Location Map: Stockdale Integrated Banking Project

Exhibit "B" – Variance No. 5 with ESA Scope of Work, Budget, and Schedule

# EXHIBIT "A"



SOURCE: ESRI 2013

Stockdale Integrated Banking Project, 211181  
**Figure 2-1**  
Project Location

Exhibit A

EXHIBIT "B"  
**IRVINE RANCH WATER DISTRICT  
 PROFESSIONAL SERVICES VARIANCE**

Project Title: IRWD Stockdale Integrated Banking Project Environmental Impact Report

Project No.: 11645 (3766) (Task 1020.2)  
 Purchase Order No.: 508021

Date: 7/28/2015  
 Variance No.: 5

Originator:      IRWD        ENGINEER/CONSULTANT      Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*):  
See attached letter with revised scope of work.

**Engineering & Management Cost Impact:**

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Modify tasks (see attached scope of work, cost estimate) related to preparation of Draft EIR and Responses to Comments/Final EIR due to comment letters received			\$33,220			\$33,220
<b>Total \$ =</b>						\$33,220

**Schedule Impact:**

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
9	Final EIR Certification	July 2015	4 months	November 2015
	(See also attached schedule)			

**Required Approval Determination:**

Total Original Contract	\$ <u>135,675</u>	<input type="checkbox"/> Director: Cumulative total of Variances less than or equal to \$50,000.
Previous Variances	\$ <u>91,394</u>	<input type="checkbox"/> Executive Director: Cumulative total of Variances less than or equal to \$75,000.
This Variance	\$ <u>33,220</u>	<input type="checkbox"/> General Manager: Cumulative total of Variances less than or equal to \$100,000.
Total Sum of Variances	\$ <u>124,614</u>	<input type="checkbox"/> Board: Cumulative total of Variances greater than \$100,000.
New Contract Amount	\$ <u>260,289</u>	
Percentage of Total Variances to Original Contract	<u>91.85 %</u>	

ENGINEER/CONSULTANT: ESA  
 Company Name

IRVINE RANCH WATER DISTRICT

Project Engineer/Manager \_\_\_\_\_ Date \_\_\_\_\_

Department Director \_\_\_\_\_ Date \_\_\_\_\_

Engineer's/Consultant's Management \_\_\_\_\_ Date \_\_\_\_\_

General Manager/Board \_\_\_\_\_ Date \_\_\_\_\_

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: <u>IRWD Stockdale Integrated Banking Project Environmental Impact Report</u>				
Project No.: <u>11645 (3766)</u> Project Manager: <u>Kellie Welch</u>				
Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Modify tasks to analyze additional property at a programmatic level to achieve CEQA compliance.	3/25/13		\$29,174
2	Modify project description and EIR analysis to include Central Intake Canal.	2/13/14		\$3,020
3	Modify tasks to include preparation of a third Screencheck Draft EIR and assistance with the NEPA process	7/31/14		\$24,765
4	Modify tasks to include preparation of a fourth Screencheck Draft EIR, including groundwater monitoring mitigation program and project-level assessment of Central Intake	12/15/14		\$34,435
5	Modify tasks related to preparation of Draft EIR and Responses to Comments/Final EIR due to comment letters received	7/28/15		\$33,220

July 27, 2015

Kellie Welch  
Irvine Ranch Water District  
15600 Sand Canyon Ave  
Irvine, CA 92618-3102

**Subject: Request for Variance No. 5 to the Scope of Work for the Stockdale Integrated Banking Project**

Dear Kellie:

ESA is currently preparing the environmental documentation for the Stockdale Integrated Banking Project for Rosedale-Rio Bravo Water Storage District (Rosedale) and Irvine Ranch Water District (IRWD). The Project includes development of Stockdale East, Stockdale West, and a third Stockdale project site with groundwater banking facilities for integration with Rosedale's Conjunctive Use Program in Kern County. To-date, four iterations of the Screencheck Draft Environmental Impact Report (EIR) have been completed; the Draft EIR has been released for public review; and comments on the Draft EIR have been received.

Substantial comments on Screencheck Draft EIR No. 4 were provided by the Project team, including Rosedale's legal counsel, that exceeded the approved scope for purposes of revising and preparing the public Draft EIR for final team review. In addition, the volume of comments received on the Draft EIR exceeds that expected in the approved scope. This letter outlines the tasks required in addition to the previously-approved scope of work (as amended by Professional Service Variances Nos. 1-4) for the successful completion of the CEQA process for the Project. ESA is requesting approval of the proposed scope of work and associated cost estimate, which is included as **Table 1**.

## **Additional Scope of Work**

### **Task 1. Project Management**

The original scope of work assumed approximately eight (8) hours per month would be required for purposes of project management. Under Variance No. 4, the schedule for the CEQA process was extended through April 2014. The current projected schedule for the Project, as attached, estimates that the Final EIR will be certified in November 2015. Therefore, we request additional funds for purposes of project management through November 2015.

### **Task 6. Screencheck Draft EIR**

ESA revised Screencheck Draft EIR No. 4 based on the comments provided by the Project team and prepared the final print-ready public Draft EIR for final review. The changes that were incorporated into this iteration of the Draft EIR were in response to comments made by the Project team per the teleconference held on March 20, 2015, and subsequent written comments that included legal counsel comments and required substantial revisions to the document, including additional analysis of the 2015 Drought Emergency Project as a cumulative project.

### **Task 9. Final EIR and Response to Comments**

The comments received on the Draft EIR include substantial comments from the City of Bakersfield via their legal counsel, Duane Morris. This 32-page letter includes over 120 individual comments. Together with other

comment letters, including those from Kern County Water Agency (KCWA) and the Kern Water Bank Authority (KWBA), there are over 180 individual comments that require responses. The effort to respond to comments will require special coordination with both Rosedale's and IRWD's legal counsel. Our scope assumes that up to three (3) team meetings lasting two (2) hours each via teleconference will be required in order to complete responses to comments. Currently both Rosedale and IRWD are scheduling meetings with the City, KCWA, and KWBA to discuss major issues prior to completing the responses to comments. The level of effort required to respond to comments will result in an extension of the schedule by two to three months. ESA is requesting additional budget associated with the increased level of effort required to complete the responses to comments.

**Cost Estimate and Schedule**

Table 1 shows the assumed level of effort corresponding to the additional scope of work described above. ESA is requesting approval for an increase in the Project budget by \$33,220, for a total contract ceiling of \$260,289.

**TABLE 1: PRICING PROPOSAL  
 ESA Labor Detail and Expense Summary**

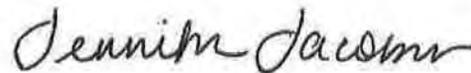
Task Number / Description	Professional Staff			Administrative Staff			Total Hours	Total Labor Price
	Jacobus Sr MA	Spano Assoc III	Subtotal	J Neisen Graphlos	G. JaPoila Production	Subtotal		
Hourly Billing Rate:		\$175	\$110		\$ 105	\$100		
Task 1	Project Management (through October 2015)	56		\$ 9,800		\$ -	56	\$ 9,800
Task 6	Comments on Screencheck DEIR No. 4	10	16	\$ 3,510	2	\$ 610	32	\$ 4,120
Task 9	Final EIR and Response to Comments	60	80	\$ 19,300		\$ -	140	\$ 19,300
Total Hours		126	96		2	4	228	
<b>Subtotals - Labor Costs</b>		<b>\$ 22,050</b>	<b>\$ 10,560</b>	<b>\$ 32,610</b>	<b>\$ 210</b>	<b>\$ 400</b>	<b>\$ 610</b>	<b>\$ 33,220</b>
Percent of Effort - Labor Hours Only		55.3%	42.1%		0.9%	1.8%	100.0%	
Percent of Effort - Total Project Cost		6.5%	4.1%		0.1%	0.2%		12.8%
<b>TOTAL- Variance No. 6</b>								<b>\$ 33,220</b>
Previously-approved Budget Ceiling								\$ 227,069
<b>TOTAL REVISED PROJECT PRICE</b>								<b>\$ 260,289</b>

In addition, a revised schedule is also attached. The schedule reflects an expected certification date in November 2015 for the Final EIR. Please take a look at our level of effort and scope assumptions, which we are happy to discuss any time.

Sincerely,



Tom Barnes  
 Vice President and Director  
 ESA Southern California Water Practice



Jennifer Jacobus, PhD  
 Senior Managing Associate  
 ESA Southern California Water Practice

Rosedale/IRWD Stockdale Integrated Banking Project EIR  
CEQA Documentation Schedule

ID	Task Name	Duration	Start	Finish	2014												2015																	
					Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	<b>CEQA Environmental Review Process</b>	654 days	Tue 9/24/13	Fri 11/6/15																														
2	ESA Prepares a Notice of Preparation and Notice of Completion	22 days	Tue 9/24/13	Thu 10/24/13																														
3	NOP Publication	0 days	Tue 9/24/13	Tue 9/24/13																														
4	Circulation of NOP for 30 days	30 days	Tue 9/24/13	Thu 10/24/13																														
5	<b>Conduct Public Scoping Meeting</b>	17 days	Tue 9/24/13	Wed 10/16/13																														
6	ESA Prepares Meeting Presentation/Materials	2 wks	Tue 9/24/13	Mon 10/7/13																														
7	IRWD/Rosedale Reviews Meeting Presentation/Materials	7 days	Tue 10/8/13	Wed 10/16/13																														
8	Scoping Meeting	0 days	Wed 10/16/13	Wed 10/16/13																														
9	<b>ESA Prepares Administrative Draft EIR</b>	90.5 days	Thu 10/24/13	Thu 2/27/14																														
10	ESA Prepares Administrative Draft EIR	42 days	Thu 10/24/13	Fri 12/20/13																														
11	Submit ADEIR for Review	0 days	Mon 12/23/13	Mon 12/23/13																														
12	IRWD/Rosedale provides comments on Administrative Draft EIR	20 days	Tue 12/24/13	Mon 1/20/14																														
13	ESA Prepares Admin Draft EIR NO. 2	2 wks	Tue 1/21/14	Mon 2/3/14																														
14	IRWD/Rosedale provides comments on Administrative Draft EIR	3.5 wks	Tue 2/4/14	Thu 2/27/14																														
15	<b>ESA Prepares Screencheck Draft EIR</b>	279.5 days	Thu 2/27/14	Wed 3/25/15																														
16	ESA Prepares Screencheck Draft EIR	13 days	Thu 2/27/14	Tue 3/18/14																														
17	IRWD/Rosedale Review Screencheck Draft EIR	13 days	Tue 3/18/14	Fri 4/4/14																														
18	ESA resubmits Screencheck No. 2	1 wk	Fri 4/4/14	Fri 4/11/14																														
19	Screencheck Draft EIR No. 2 available for KWBA/KCWA	0 days	Fri 4/11/14	Fri 4/11/14																														
20	<b>Meeting with KWBA/KCWA (one week after receipt)</b>	0 days	Wed 5/14/14	Wed 5/14/14																														
21	Receive comment letters from KWBA/KCWA	5 wks	Wed 5/14/14	Tue 6/17/14																														
22	Follow-up mtg to discuss comments on Screencheck Draft EIR	0 days	Mon 6/23/14	Mon 6/23/14																														
23	Tom Harder prepare additional analysis and revise report	10 wks	Tue 6/24/14	Mon 9/1/14																														
24	ESA reviews and resubmits Screencheck No. 3	3 wks	Tue 8/2/14	Mon 9/22/14																														
25	IRWD/Rosedale final review + ATTORNEY REVIEW	12 wks	Tue 9/23/14	Mon 12/15/14																														
26	ESA revises and resubmits Screencheck No. 4	11.4 wks	Tue 12/16/14	Wed 3/4/15																														
27	IRWD/Rosedale final review + ATTORNEY REVIEW	3 wks	Thu 3/5/15	Wed 3/25/15																														
28	<b>ESA Prepares Public Draft EIR, Notice of Availability, Notice of Completion</b>	57 days	Thu 3/26/15	Fri 6/12/15																														
29	ESA Finalizes Public Draft EIR	3 wks	Thu 3/26/15	Wed 4/15/15																														
30	Final Review, Notice, Printing, Mailing	9 days	Thu 4/16/15	Tue 4/28/15																														
31	<b>Public Draft EIR Publication</b>	0 days	Tue 4/28/15	Tue 4/28/15																														
32	45-Day Comment Period	45 days	Tue 4/28/15	Fri 6/12/15																														
33	<b>Conduct Public Meeting for Draft EIR</b>	11 days	Wed 4/29/15	Wed 6/13/15																														
34	ESA Prepares Meeting Presentation/Materials	1 wk	Wed 4/29/15	Tue 5/5/15																														
35	IRWD/Rosedale Reviews Meeting Presentation/Materials	4 days	Wed 5/6/15	Mon 5/11/15																														
36	<b>Public Meetings</b>	2 days	Tue 5/12/15	Wed 5/13/15																														
37	<b>ESA Prepares Final EIR and Response to Comments</b>	95 days	Mon 6/15/15	Fri 10/23/15																														
38	Review of Comment Letters / Meetings with Agencies	10 wks	Mon 6/15/15	Fri 8/21/15																														
39	Preparation of Responses to Comments and Final EIR	4 wks	Mon 8/24/15	Fri 9/18/15																														
40	Review/Revision of Responses to Comments and Final EIR	4 wks	Mon 9/21/15	Fri 10/16/15																														
41	ESA Finalizes Final EIR and Responses to Comments	1 wk	Mon 10/19/15	Fri 10/23/15																														
42	<b>Mailout Final EIR</b>	0 days	Fri 10/23/15	Fri 10/23/15																														
43	<b>ESA Prepares MMRP, Findings, SOC, and NOD</b>	17 days	Mon 9/21/15	Tue 10/13/15																														
44	ESA Prepares MMRP, Findings, SOC, and NOD	2 wks	Mon 9/21/15	Fri 10/2/15																														
45	IRWD/Rosedale Review MMRP, Findings, SOC, and NOD	1 wk	Mon 10/5/15	Fri 10/9/15																														
46	ESA Finalizes MMRP, Findings, SOC, and NOD	2 days	Mon 10/12/15	Tue 10/13/15																														
47	<b>Final Certification by Rosedale and IRWD Boards</b>	0 days	Fri 11/6/15	Fri 11/6/15																														

B-5

Date: Tue 7/28/15

Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Progress	
Split		External Tasks		Inactive Summary		Manual Summary		Deadline	
Milestone		External Milestone		Manual Task		Start-only			
Summary		Inactive Task		Duration-only		Finish-only			

August 24, 2015

Prepared by: Gretchen Ronin

Submitted by: Jenny Roney

Approved by: Paul Cook 

## ACTION CALENDAR

### MEMORANDUM OF UNDERSTANDING WITH THE IRVINE RANCH WATER DISTRICT EMPLOYEES ASSOCIATION AND ASSOCIATED SALARY GRADE SCHEDULE CHANGES

#### SUMMARY:

Negotiations have been completed between IRWD and the General Employees' Unit of the Irvine Ranch Water District Employees Association (IRWDEA), with voting members of the IRWDEA ratifying the Memorandum of Understanding (MOU) through an election process. Staff recommends that the Board authorize the General Manager to execute the MOU with IRWDEA subject to non-substantive changes, rescind Resolution No. 2015-14 and adopt a resolution by title establishing a revised schedule of positions and salary rate changes associated with the salary grade schedule for the General Employees Unit of the IRWDEA.

#### BACKGROUND:

On February 10, 2014, the District and IRWDEA approved an 18-month agreement which expired on March 31, 2015. The General Manager and the Director of Human Resources served as the negotiators on behalf of the District to develop a new MOU between the two parties. Negotiations between the parties, initiated on February 12, 2015 resulted in a tentative agreement being reached on August 12, 2015. On August 19, 2015, the IRWDEA held a meeting at which the agreement was ratified by the voting members of the General Employees Unit. Changes to the proposed MOU include:

- The term will be from April 1, 2015 to June 30, 2018;
- Change to the language in Article VIII reflecting that employees enrolled in the District's first tier CalPERS retirement formula of 2.5% at 55 now pay the full 8% employee contribution;
- Change to Article IX to reflect Cost of Living Adjustments as follows:
  - Effective at the beginning of the pay period during which the MOU is ratified (August 15, 2015), the District shall implement a 2.0% salary increase and corresponding adjustment to the salary ranges;
  - Effective July 2, 2016, the District shall implement a 2.0% salary increase and corresponding adjustment to the salary ranges; and
  - Effective July 1, 2017, the District shall implement a 2.0% salary increase and corresponding adjustment to the salary ranges
- Change to Article XI to include language allowing for healthcare benefits to be provided by CalPERS or other comparable medical insurance;

- Addition of language relative to Commercial Drivers' License incentive pay, increasing the annual incentive from \$100 per year to \$200 per year for most commercial license drivers based on operational need as determined by the District;
- Effective January 1, 2016, establishment of a Shared Health and Fitness Incentive reimbursing employees for 50% of approved expenses up to \$400 per calendar year and elimination of existing exercise incentive program.

All other provisions of the prior MOU remain unchanged.

FISCAL IMPACTS:

Actual funds needed to implement a 2.0% Cost of Living Adjustment for eligible represented employees is approximately \$274,000 in wages and \$68,500 in PERS employer contributions. There are sufficient funds in the FY 2015-16 operating budget to implement the recommended action. The fiscal impact for FY 2016-17, anticipated to be approximately \$395,000, and FY 2017-18, anticipated to be approximately \$405,000, will be included in the budgetary process for each of those years.

Funds needed to increase the Commercial Drivers' License incentive will be approximately \$5,000 for FY2015-16.

The fiscal impact of the Shared Health and Fitness Incentive program will be based on participation levels and is not expected to exceed \$40,000 for FY 2015-16.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3, Section 15378.

COMMITTEE STATUS:

The terms of the MOU with IRWDEA have been discussed with the full Board during the negotiation process.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE THE MEMORANDUM OF UNDERSTANDING BETWEEN IRWD AND THE IRVINE RANCH WATER DISTRICT EMPLOYEES ASSOCIATION SUBJECT TO NON-SUBSTANTIVE CHANGES, THAT THE BOARD APPROVE A 2.0% INCREASE TO THE SALARY GRADE RANGES FOR ALL ELIGIBLE REPRESENTED POSITIONS EFFECTIVE AUGUST 15, 2015; AND ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION 2015-

RESOLUTION OF THE BOARD OF DIRECTORS  
OF IRVINE RANCH WATER DISTRICT, RESCINDING  
RESOLUTION NO. 2015-14 AND ESTABLISHING  
A REVISED SCHEDULE OF POSITIONS AND SALARY  
RATE RANGES

LIST OF EXHIBITS

- Exhibit "A" – Memorandum of Understanding between IRWD and IRWDEA
- Exhibit "B" – Resolution and revised salary grade schedule

**Memorandum of Understanding**

**Irvine Ranch Water District Employees' Association  
and  
Irvine Ranch Water District**

**April~~September~~ 01~~25~~, 2015~~3~~ – June~~March~~ 30~~1~~, 2018~~5~~**

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**Memorandum of Understanding**  
**Between Irvine Ranch Water District Employees' Association**  
**and**  
**Irvine Ranch Water District**  
**~~April~~~~September~~ 0125, 20153 – ~~June~~~~March~~ 301, 20185**

**I. PARTIES AND RECOGNITION**

This Memorandum of Understanding (“MOU”) is made and entered into between the Irvine Ranch Water District (“IRWD” or “District”) and the Irvine Ranch Water District Employees’ Association (“IRWDEA” or “Association”), the formally recognized exclusive representative, pursuant to the provisions of the Meyers-Milias Brown Act.

**II. TERM OF AGREEMENT**

The terms and conditions of this Memorandum of Understanding (“MOU”) shall remain in full force and effect from September 25, 2013 until March 31, 2015 inclusive. This MOU represents the total agreement between the parties. Neither party shall be compelled to negotiate on any subject within the scope of this Agreement during the term of this Agreement without the express written agreement of the other. If either party desires to make any changes or modifications of this Agreement for the ensuing period, it shall give written notice to the other party not less than sixty (60) days prior to the termination of this Agreement, in writing.

**III. SCOPE OF AGREEMENT**

A. **Recognition.** This Agreement shall apply to IRWD’s employees in the positions listed in Exhibit A, excluding managerial, confidential and supervisory employees as defined in the Meyers Milias Brown Act and applicable Public Employment Relations Board regulations.

B. **Representation.** The IRWD recognizes the Association as the ~~exclusiv~~**Exclusive** representative of all employees covered hereby for the purpose of meeting and conferring with respect to wages, hours and all other terms and conditions of employment, as defined by the Meyers Milias Brown Act.

**IV. FEDERATION RIGHTS**

The Association is the only employee organization entitled to meet-and-confer in good faith on matters within the scope of representation on behalf of employees in this unit.

## V. DISTRICT RIGHTS

A. The District shall retain and continue to have sole and exclusive responsibility and right, except as otherwise expressly and clearly provided by this Agreement, to manage, plan, direct and control all aspects of its operations, to direct its employees and its work force; to hire, promote, transfer, demote, layoff, recall, discipline, suspend or discharge employees at will and in its sole discretion; to assign and reassign employees to new or different duties or classifications, hours of work and shifts; to add or delete job classifications and duties; to establish rules and regulations not in direct conflict with this Agreement; to introduce new and improved methods of operation; to subcontract to others any work on or off premises; to set and attain work and production standards; to improve quality; to reduce costs; to perform any and all other things which the District deems necessary and desirable for the efficient and successful operation of its business, subject to any meet and confer obligations imposed by the Meyers Miliias Brown Act.

B. The District shall be the sole judge as to the reliability, competency and performance of any of the employees. All employees must perform their work to the satisfaction of the District.

C. Nothing in this Agreement shall limit the District's management functions, under which it shall have, among others, the right to determine the qualifications of employees; to observe and evaluate an employee's job performance and to apply disciplinary action as the District deems necessary, desirable or appropriate; and to require employees to observe District rules and regulations presently in effect and/or to be put into effect, provided they are not in direct violation with the provisions of this Agreement, subject to any meet and confer obligations imposed by the Meyers Miliias Brown Act.

D. It is the exclusive right of the District to administer the merit system.

E. Without limiting the above, the District retains the authority to take whatever action may be necessary when it determines there exists an emergency situation.

F. The right and responsibility of final decisions regarding wages, hours, fringe benefits, working conditions, and other terms and conditions of employment resides solely with the District's Board, subject to any meet and confer obligations imposed by the Meyers Miliias Brown Act.

G. This Agreement shall not abridge any right to a "Skelly" hearing, if such right is due to an employee independent of this Agreement.

## VI. EMPLOYEE RELATIONS DISCUSSION FORUM

A. The Director of Human Resources and up to three(3) other District representatives shall meet with the Association's President and no more than four(4) other Association representatives once every three (3) months at the request of either party. The General Manager will make every effort to attend as available. More frequent meetings may be held my mutual agreement. The requesting party shall construct a meeting agenda and submit it to the other side in writing prior to the meeting.

- B. The basic purpose of these meetings is to discuss issues of common interest and to solve problems in a constructive fashion.

## VII. ASSOCIATION ACCESS

A. **Reasonable Access.** RWDEA board members will be allowed reasonable time to meet with management to perform IRWDEA duties as needed. Time spent during regular work hours must be approved in advance by the Director of Human Resources or the General Manager

B. **Access to Facilities.** The Association may schedule pre-work, after work or lunch meetings in the District conference rooms at reasonable times when these facilities are not being used by submitting a verbal, written or electronic request to the appropriate District representative. The request shall include the date, time and the number of people expected for the meeting.

C. **Bulletin Boards.** The District shall provide for the Association's use, designated bulletin boards where employees in the bargaining unit have access during regular business hours subject to the following conditions:

1. All postings for bulletin boards must contain the date of posting and the identification of the organization;
2. The Association will not post information which is defamatory, derogatory or obscene, subject to the immediate removal of the right to post for a period not to exceed 90 days.

## VIII. CONTRIBUTION TO CALPERS RETIREMENT BENEFIT

A. Association employees hired on or after January 1, 2013 who have worked for another CalPERS or other reciprocal agency without a six month break in service shall be enrolled for CalPERS retirement benefits in the District's 2<sup>nd</sup> tier retirement formula of two percent at 60 (2% @ 60) and will contribute the full amount of the employee portion of the CalPERS contribution, currently established by CalPERS as 7%, commencing at their date of hire.

B. Association employees hired on or after January 1, 2013 shall be enrolled for CalPERS retirement benefits in the two percent at 62 (2% @ 62) formula as mandated by the California Public Employees' Pension Reform Act of 2012 (PEPRA), and will contribute an employee contribution of 50% of the total normal cost of benefits, limited to a maximum of 8% of compensation as provided by PEPRA.

C. For Association employees enrolled in the District's 1<sup>st</sup> tier CalPERS retirement benefit formula of two and one half percent at 55 (2.5% @ 55) the District's Employer Paid Member Contribution (EPMC) benefit shall be modified as follows:

1. ~~Effective the first full pay period in March 2014 the employee will contribute an additional .63% of "member's earnings" into his/her retirement account for a total of 6.63% contribution of "member's earnings" into his/her retirement account.~~
2. ~~1. Effective the first full pay period in March 2015 the employee will contribute an additional 1.37% of "member's earnings" into his/her retirement account for a total of 8% contribution of "member's earnings" into his/her retirement account.~~

It is the intent that this section shall be construed in a manner consistent with PEPRA; to the extent of any conflict between PEPRA and this MOU, PEPRA shall be controlling. Resolutions, amendments to the District's contract with CalPERS and such other proceedings and documents as may be necessary or requested by CalPERS to implement the changes to the CalPERS retirement benefits as discussed in this MOU will be submitted for adoption by the District's Board.

#### **IX. COST OF LIVING ADJUSTMENT**

Effective, ~~retroactive to August 15, 2015, which is the beginning of the pay period in which this MOU was ratified by the Unit, retroactively to December 1, 2013,~~ Association employees shall receive a Cost of Living Adjustment equal to ~~2.0.63%~~.

Effective ~~on December 21, 2014 and again on July 1, 2017,~~ Association employees shall receive a Cost of Living Adjustment equal ~~2%, to the change in the Consumer Price Index for the Orange-Riverside-Los Angeles All Urban Consumers, as measured from September 2013 to September 2014, no less than 2%.~~

~~The intent of this Cost of Living Adjustment deviation for this MOU period from District long standing past practice of providing Cost of Living Adjustments equal to the Consumer Price Index for the Orange-Riverside-Los Angeles All Urban Consumers as measured from September to September is to recognize and accommodate Association members' increased percentage contribution of "member's earnings" to the CalPERS retirement system as described in Article VIII.~~

#### **X. DEFERRED COMPENSATION**

The District will continue to match up to 3% of employees' contribution to the District's deferred compensation plan in accordance with District Policy during the term of this Agreement.

#### **XI. HEALTHCARE BENEFITS CONTRIBUTION**

IRWDEA Employees will ~~continue to receive CalPERS or other comparable program~~ medical insurance, ~~that includes comparable costs, services and providers, as determined through the bargaining process, for which employee premiums will be paid partly by the District.~~ Beginning January 1, 2014, employee contributions to the premiums for each Plan provided by the District

will be increased to the amounts set forth in Exhibit B. The District contribution to employee premiums will be based on the calculation methodology of 90% of the highest enrollment PPO plan offered.

## **XII. WORK SCHEDULES AND REST PERIODS**

- A. **Work Schedules.** The standard work week for Association employees consists of seven consecutive 24-hour periods beginning at noon on Friday and ending at noon the following Friday. An alternate work week may be allowed with the approval of the General Manager. Regular daily-shift starting and ending times are between the hours of 6:30am and 5:30pm as determined by the Department Director or his/her designee. Exceptions to the regular daily-shift start times may occur as the operational needs of the District require for work occurring outside the 6:30am to 5:30pm time frame.
- B. **Rest Periods.** Association employees may, on their regularly scheduled day of work, utilize a 10-minute rest break in the morning hours and an additional 10-minute rest break in the afternoon, as well as a 30 minute meal period. Meal periods are not compensable. Meal period times are assigned by the immediate supervisor on a schedule basis to meet the needs of the District service. Rest breaks must be taken at times that do not disrupt District service as determined by the employee's supervisor.

## **XIII. OVERTIME**

- A. **Daily/Weekly.** Full-time non-exempt Association employees (employees who are regularly scheduled to work 40 hours/week) who are required by their supervisor or other authorized person to work in excess of 40 hours in one work week, or more than his/her regularly scheduled hours in one day will be compensated at their overtime rate of pay as defined by District policy. Overtime shall only be worked with approval of the employee's supervisor.
- B. **Holiday.** Full-time non-exempt Association employees who are required by their supervisor or other authorized person to work on a District approved holiday will be compensated at his/her overtime rate of pay for all hours worked on the holiday, in addition to straight-time for his/her normally scheduled hours of holiday pay.

## **XIV. STANDBY PAY**

Association employees who are required by the District to be on standby for emergency work during normal off-duty hours will be paid three-quarters (3/4) of an hour at his/her overtime rate of pay for every eight (8)-hour period of normal off-duty hours the employee is on standby, not to exceed twelve (12) hours of overtime pay for one work week. Association employees will not receive standby pay for days on which he/she does not report to work or leaves work early due to illness

**XV. CALL OUT PAY**

Association Employees called back to work during an off-duty period will be compensated for a minimum of two (2) hours of pay. Call Out Pay will include pay for the time the employee uses to travel to and from the work location.

**XVI. ANNUAL SICK LEAVE PAYOUT**

Association employees may elect, annually, in accordance with District Policy to be paid for up to 96 hours of accrued sick leave. Employees must retain a minimum eighty (80) hour sick leave balance at the time of the payout. Payment will be made in accordance with the following schedule:

0-10 years of service	up to 96 hours at 50%
11-15 years of service	up to 30 hours @ 100%, remainder (up to 96 hrs) @ 50%
16-20 years of service	up to 60 hours @ 100%, remainder (up to 96 hrs) @ 50%
21+ years of service	up to 96 hours at 100%

**XVII. UNIFORMS**

The District will provide to each Association employee, required by the District to wear a uniform as a condition of employment, eleven (11) sets of uniforms, one belt and two items of outerwear. The District will provide the maintenance and upkeep of the provided uniforms.

Standby personnel will be issued three additional shirts and pants for a total of 14 each of shirts and pants.

Lab employees will be provided with lab coats which will be maintained by the District.

**XVIII. EDUCATION AND TRAINING ASSISTANCE**

A. **Tuition Reimbursement.** Association employees are eligible for tuition reimbursement of up to 75% of eligible tuition and text book expenses in accordance with District policy.

B. **College Degree Incentive Program.** Association employees who obtain a college degree through an accredited program are eligible to receive a \$1000.00 incentive payment in accordance with District policy.

C. **Certificates of Competence Incentive Program.** Association employees who obtain a job-related Certificate of Competence which exceeds his/her minimum job requirements are eligible to receive a \$750.00 incentive payment for each Certificate received in accordance with District Policy.

D. **Occupational Program Certificate Incentive Program.** Association employees who obtain a job-related Occupational Program certificate which exceeds his/her

minimum job requirements are eligible to receive a \$750.00 incentive payment for each Certificate received in accordance with District policy.

### **XIX. SAFETY EQUIPMENT**

The District agrees to provide Association members with safety equipment to ensure personal safety in the performance of his/her job duties.

- A. **Safety Shoe Reimbursement.** Association employees will be provided reimbursement for the purchase of safety shoes in accordance with District Policy according to the following schedule:

Category 1	Up to \$200/calendar year
Category 2	Up to \$125/calendar year
Category 3	Up to \$125/calendar year
Category 4	Up to \$125/calendar year plus Category 1 reimbursement if eligible
Physician prescribed shoes	Up to \$200/calendar year

- B. **Prescription Safety Eyewear.** Association employees who require prescription eye glasses and who are required to wear safety glasses as part of their normal job duties will be provided reimbursement for the purchase of prescription safety glasses in accordance with District policy, not to exceed \$225/calendar year.

### **XX. COMMERCIAL DRIVER'S LICENSE INCENTIVE**

**A.** Association employees who are required to maintain a commercial driver's license for the performance of their assigned job duties will receive an annual Commercial Driver's License Incentive of \$200, to be paid on a per-pay period basis of \$7.69.

**B.** Association employees in non-commercial driver's license required job classifications will receive the annual Commercial Driver's License Incentive describe in section A above if the employee maintains their Commercial Driver's License in good standing and it is determined by the District that such licensure in the specific job class is beneficial to the District service.

**C.** Employees currently receiving a \$100 annual Commercial Driver's License Incentive (paid on a per pay period basis of \$3.85) and who do not meet the criteria in sections A and B above will continue to receive the \$100 incentive until such time as they do not renew their Commercial Driver's License.

### **XXI. SHARED HEALTH AND FITNESS INCENTIVE**

**Effective January 1, 2016, Association employees are eligible for 50% reimbursement of costs associations with gym memberships, electronic fitness tracking devices, monitored weight loss programs (i.e. Weight Watchers, Jenny Craig, Lindora, etc) and or smoking cessation**

programs up to a maximum of \$400 per fiscal year. The Shared Health and Fitness Incentive replaces Exercise Incentive program of \$10 for each 25 hours of exercise performed at a District fitness facility.

**XX.XXII. OTHER BENEFITS AND FORMS OF COMPENSATION**

All other forms of compensation, including employee benefits, not specifically mentioned in this MOU shall remain unchanged for the duration of the MOU.

**XXI.XXIII. AGENCY SHOP/IRWDEA FEES AND/OR DUES**

The District will deduct IRWDEA fees and/or dues in the amount specified by any employee who voluntarily authorizes such payroll deduction in writing on a payroll deduction form provided by the District. The collected fees and dues will be automatically deposited to the IRWDEA bank account provided by the IRWDEA Board and on file with the District. Such authorization but may be revoked in writing by the employee at any time.

**XXII.XXIV. NO LOCKOUT/WORK STOPPAGES**

A. No employee shall engage in a strike, work stoppage, slowdown, job action, sick-in, sick-out, or any concerted interference with work of the District or impeding of work or business of the District. Due to the direct threat to public health and safety that would result, participation by any employee in a strike, work stoppage, slowdown, job action, sick-in, sick-out, or any concerted interference with work of the District or impeding of work or business of the District shall subject the employee to immediate discharge at the sole discretion of the District. Without limiting the foregoing, the District shall be entitled to injunctive relief to end any such strike, work stoppage, slowdown, job action, sick-in, sick-out, or any concerted interference with work of the District or impeding of work or business of the District

B. For the purposes of this Agreement, "strike" or "striking activity" is defined to mean or include engaging or directly participating in any strike, slowdown, job action, sick-in, sick-out, or any concerted interference with the work of the District or impeding of work or business of the District.

C The District shall not lockout bargaining Unit Employees.

D. The District shall not hire non-bargaining unit Regular employees (as defined by District policy) to perform bargaining unit work.

**XXIII.XXV. PRE-DISCIPLINARY PROCEDURAL NOTICE AND OPPORTUNITY FOR RESPONSE AND HEARING**

A. **Minor Discipline.** Non-probationary Unit employees subject to minor discipline (not qualifying as "Substantial Discipline" as defined below) may provide a written response to be attached to the minor discipline documentation if they so choose. Such written response must be submitted within ten (10) calendar days from receipt of the minor discipline.

B. **Substantial Discipline.** Non-probationary Unit employees will be accorded pre-disciplinary safeguards as described in this section before any substantial disciplinary action is imposed. Substantial disciplinary action shall include:

1. Suspension without pay for five(5) or more working days;
2. Involuntary demotion or reduction in pay;
3. Termination.

C. **Notice of Intent.** A written Notice of Intent to impose substantial disciplinary action must be prepared by the Manager, working with Human Resources, setting forth:

1. A short statement of the reason for the proposed action;
2. A summary of the performance problems upon which the action is based;
3. An explanation of the rule or policy that was violated, including references to the policy number or other source, if applicable;
4. A summary of any preceding disciplinary actions within the last year, with copies attached;
5. A description of any documents or other physical or documentary evidence being relied upon in connection with this action with copies attached; and
6. A statement that the employee will have a right to respond, verbally, in writing or both to the appropriate District authority.

A copy of the Notice of Intent, with a signed employee acknowledgment, must be forwarded to Human Resources for retention in the employee's personnel file.

D. **Employee Response.** To ensure that the District does not act without considering relevant information available to it, employees are to be provided the opportunity to respond verbally, in writing or both to the intended imposition of any substantial disciplinary action within seven (7) calendar days from the date of the Notice of Intent to the department director, who may at his or her discretion reverse the Manager's ~~recommendation~~ recommendation.

E. **Appeals**

1. **Right to Appeal.** Employees have a right to appeal the imposition of the following actions:
  - a. Termination
  - b. Demotion involving reduction in pay
  - c. Disciplinary reduction in pay constituting more than one (1) weeks pay
  - d. Suspension without pay in excess of five (5) days.

2. Method of Appeal

- a. In the event of the imposition of substantial discipline as described herein, the decision of the department director will be considered final unless the employee files an appeal in accordance with this policy.
- b. An employee wishing to appeal must file a signed written statement with the Director of Human Resources within seven (7) calendar days of the effective date of the action. This writing must describe his/her intention to appeal, the reason for the appeal, and whether or not the use of a hearing officer is being requested.
- c. Upon receipt of the notice and if no hearing officer is requested, the Director of Human Resources or his/her designee will arrange for a meeting with the General Manager or his/her designee and the employee requesting an appeal, within seven (7) calendar days of the filing of the appeal. After weighing all the evidence, the General Manager will render a decision within seven (7) calendar days of the meeting unless a time extension is deemed necessary. The decision of the General Manager is final.
- d. If a hearing officer is requested, the Director of Human Resources will arrange for a meeting between the employee, his representative if any and the General Manager or his/her designee within seven calendar days after the hearing officer has submitted findings and recommendations. The General Manager after weighing all the evidence and the findings of the hearing officer will make a decision which will be final.

3. Hearing Officer

- a. At any time during the conduct of the appeal, but prior to its submission to the General Manager or designee, the use of a hearing officer may be requested by either the employee or the employee's representative, if any, the department director who imposed the substantial discipline or the Director of Human Resources.
- b. If a hearing officer is requested, the District will secure a hearing officer who will be a neutral professional with fact-finding experience. If the hearing officer is requested by the appellant, the cost will be borne by the appellant. If the hearing officer is requested by the District, the cost will be borne by the District. If the hearing officer is determined to be used by mutual agreement of the parties, the cost will be borne equally by the appellant and the District.
- c. The function of the hearing officer will be to examine the facts and available evidence, question witnesses and make a recommendation to the General Manager.
- e. The findings and recommendations of the hearing officer will be submitted to both the appellant and the General Manager.

4. Right to representation.

In the conduct of the appeal, the appellant will have the right, at his/her own expense to be represented by another person of his own choosing and to summon witnesses on his/her behalf.

**XXIV.XXVI. GRIEVANCE PROCEDURE**

**A. Definitions:**

1. Grievance - A grievance is an allegation by an employee(s) or the Association of a violation of any express provision of the applicable MOU.
2. Grievant – An employee, group of employees or the Association.

**B. Timeliness:**

1. The grievance must be filed by the grievant within the timelines set forth herein.
2. The timelines contained herein may be extended to a definite date by written, mutual agreement of the grievant and the District's appropriate representative.

C. Employee Representation. The grievant, at his/her own expense, may be represented by a person of his or her choice to prepare and present the grievance at any step of this process. The employee may use a reasonable amount of pre-approved release time to process the grievance.

D. Informal Grievance Procedure. Within fifteen (15) calendar days following the event, or within fifteen (15) calendar days after the grievant should reasonably have known of the event, the grievant should attempt to resolve the grievance on an informal basis by discussion with his/her immediate supervisor. If the grievant is not able to resolve the grievance after informal discussion with his/her immediate supervisor, the grievant will have the right to file a formal grievance in writing within ten (10) calendar days after the informal discussion with his/her immediate supervisor. The written formal grievance shall contain:

1. Employee name, job title and department name
2. Name of representative, if any
3. Statement of grievance, providing date and time or action aggrieved and circumstances of grievance

4. Specific provisions of MOU alleged to have been violated
5. Date of informal discussion with immediate supervisor
6. Date of filing of formal grievance
7. Signature of employee and/or representative, if any. (Electronic signature accepted.)

**E. Formal Grievance Procedure.**

1. First Level Formal Review – Department Director: The formal written grievance shall be presented to the employee's Department Director or his/her designee who will discuss the grievance with the employee, his/her representative, if any and any other appropriate persons. The Department Director will render his/her decision in writing to the employee within ten (10) calendar days after receiving the grievance. If the employee does not agree with the Department Director's decision, or if no answer is received within ten (10) calendar days, the employee may present the formal written grievance to the General Manager. Failure of the employee to submit the grievance to the General Manager within ten (10) calendar days after receipt of the written decision from his/her Department Director will constitute a dropping of the grievance.

2. Second Level Formal Review - General Manager Review: The General Manager, after receiving the grievance, will discuss the grievance with the employee, his/her representative, if any and any other appropriate persons. The General Manager may select a designee not in the normal line of supervision to advise him concerning the grievance. The General Manager will render a decision in writing to the employee within 14 calendar days after receiving the grievance. The decision of the General Manager shall be final.

**XXV. XXVII. SAVINGS CLAUSE**

Should any part hereof or any provision herein contained be rendered or declared illegal or an unfair labor practice by reason of any existing or subsequently enacted legislation, or by any decree of a court of competent jurisdiction, or by the decision of any authorized governmental agency, including the Public Employment Relations Board, such invalidation of such part or portion of this Agreement shall not invalidate the remaining portions hereof; provided however, upon such invalidation the parties agree immediately to meet and negotiate substitute provisions for such parts or provisions rendered or declared illegal or an unfair labor practice. The remaining parts or provisions shall remain in full force and effect.

| ADOPTED, SIGNED and APPROVED this 24<sup>th</sup> day of ~~August~~February 20154.

\_\_\_\_\_  
Craig M. Irey, President      Date  
Irvine Ranch Water District  
Employee ~~Association~~Association (IRWDEA)

\_\_\_\_\_  
Paul Cook, General Manager      Date  
Irvine Ranch Water District

\_\_\_\_\_  
APPROVED AS TO FORM:      Date  
~~PAYNE AND FEARS, LLP~~  
Bowie, Arneson, Wiles & Giannone

## EXHIBIT A

### Positions included in the General Employees' Unit of the IRWDEA

Accountant	Office Specialist
Accounting Clerk	Office Specialist, Senior
Accounting Clerk, Senior	Operations Coordinator
Analyst	Operator I
Automation Programmer	Operator II
	Operator III
Automation Specialist	<u>Payroll Administrator</u>
	<u>Public Affairs Analyst</u>
Automation Technician	Public Affairs Specialist
Buyer	Purchasing Coordinator
Buyer, Senior	Purchasing Coordinator, Senior
Collection Systems CCTV Technician, Senior	Recycled Water Project Specialist
Collection Systems Technician I	Recycled Water Specialist
Collection Systems Technician II	Recycled Water Specialist, Senior
Collection Systems Technician, Senior	Right of Way <u>Agent</u> & Real Property Manager
Collections Systems CCTV Tech II	Risk Analyst
Construction Inspector I	Scientist
Construction Inspector II	Scientist, Senior
Construction Inspector III	Support Specialist
Cross Connection Control Specialist	Support Specialist, Senior
Customer Service Field Technician	Treasury Analyst
Customer Service Field Technician, Senior	Utility Worker
Customer Service Specialist I	Vehicle/Equipment Maintenance Mechanic
Customer Service Specialist II	Vehicle/Equipment Maintenance Mechanic, Senior
Customer Service Specialist III	Water Maintenance Technician I
Electrical Technician	Water Maintenance Technician II
	Water Maintenance Technician III
Electrical Technician, Senior	<u>Water Resources Planner</u>
Electrical/Instrumentation Designer	Water Resources Manager
Energy Analyst	Water Use Efficiency Analyst
Engineer	Water Use Efficiency Specialist
Engineer, Assistant	Water Use Efficiency Specialist, Senior
Engineer, Associate	Wetlands Specialist
Engineering Technician I	Wetlands Specialist, Senior
Engineering Technician II	
Engineering Technician III	
Facilities Services Technician	
Facilities Services Technician, Senior	
Information Services Coordinator	
Instrumentation Technician	
Instrumentation Technician, Senior	
Laboratory Analyst	
Laboratory QA/QC	
Landscape Contracts Administrator	
Mail Coordinator	
Maintenance Apprentice	
Maintenance Mechanic	
Maintenance Mechanic, Senior	
Material Control Clerk I	
Material Control Clerk II	
Material Control Clerk II	
Metering Systems Technician I	
Metering Systems Technician II	
Metering Systems Technician III	
Office Assistant	

**EXHIBIT B**

<b>Employee Medical Plans (Effective January 1, 2014)</b>	<b>District Pays</b>		<b>Employee Pays</b>		<b>Total Premium</b>	
<b>Kaiser Permanente</b>	Single Two-Party Family	<del>\$ 552.79</del> \$1,104.58 \$1,431.25	Single Two-Party Family	<del>\$ 50.00</del> <del>\$ 101.00</del> <del>\$ 136.00</del>	Single Two-Party Family	<del>\$ 602.79</del> \$1,205.58 \$1,567.25
<b>Blue Shield Access+ HMO</b>	Single Two-Party Family	<del>\$ 536.21</del> \$1,071.42 \$1,379.35	Single Two-Party Family	<del>\$ 7.00</del> <del>\$ 15.00</del> <del>\$ 33.00</del>	Single Two-Party Family	<del>\$ 543.21</del> \$1,086.42 \$1,412.35
<b>Blue Shield Net Value HMO</b>	Single Two-Party Family	<del>\$ 450.17</del> <del>\$ 899.34</del> \$1,155.64	Single Two-Party Family	<del>\$ 7.00</del> <del>\$ 15.00</del> <del>\$ 33.00</del>	Single Two-Party Family	<del>\$ 457.17</del> <del>\$ 914.34</del> \$1,188.64
<b>PERS Choice PPO (80/20)</b>	Single Two-Party Family	<del>\$ 552.25</del> \$1,104.50 \$1,431.85	Single Two-Party Family	<del>\$ 60.00</del> <del>\$ 120.00</del> <del>\$ 160.00</del>	Single Two-Party Family	<del>\$ 612.25</del> \$1,224.50 \$1,591.85
<b>PERS Select PPO (80/20)</b>	Single Two-Party Family	<del>\$ 552.32</del> \$1,104.64 \$1,431.43	Single Two-Party Family	<del>\$ 34.00</del> <del>\$ 68.00</del> <del>\$ 93.00</del>	Single Two-Party Family	<del>\$ 586.32</del> \$1,172.64 \$1,524.43
<b>PERS Care PPO (90/10)</b>	Single Two-Party Family	<del>\$ 552.22</del> \$1,104.44 \$1,431.37	Single Two-Party Family	<del>\$ 86.00</del> <del>\$ 172.00</del> <del>\$ 228.00</del>	Single Two-Party Family	<del>\$ 638.22</del> \$1,276.44 \$1,659.37
<b>Anthem Traditional HMO</b>	Single Two-Party Family	<del>\$ 552.20</del> \$1,104.40 \$1,432.72	Single Two-Party Family	<del>\$ 40.00</del> <del>\$ 80.00</del> <del>\$ 107.00</del>	Single Two-Party Family	<del>\$ 592.20</del> \$1,184.40 \$1,539.72
<b>Anthem Select HMO</b>	Single Two-Party Family	<del>\$ 536.99</del> \$1,073.98 \$1,396.17	Single Two-Party Family	<del>\$ 7.00</del> <del>\$ 15.00</del> <del>\$ 33.00</del>	Single Two-Party Family	<del>\$ 529.99</del> \$1,058.98 \$1,363.17
<b>Health Net Salud y Mas HMO</b>	Single Two-Party Family	<del>\$ 482.82</del> <del>\$ 964.64</del> \$1,240.53	Single Two-Party Family	<del>\$ 7.00</del> <del>\$ 15.00</del> <del>\$ 33.00</del>	Single Two-Party Family	<del>\$ 489.82</del> <del>\$ 964.64</del> \$1,240.53
<b>Health Net SmartCare HMO</b>	Single Two-Party Family	<del>\$ 552.51</del> \$1,104.02 \$1,431.13	Single Two-Party Family	<del>\$ 16.00</del> <del>\$ 33.00</del> <del>\$ 47.00</del>	Single Two-Party Family	<del>\$ 568.51</del> \$1,137.02 \$1,478.13
<b>United HealthCare HMO</b>	Single Two-Party Family	<del>\$ 514.01</del> \$1,027.02 \$1,321.63	Single Two-Party Family	<del>\$ 7.00</del> <del>\$ 15.00</del> <del>\$ 33.00</del>	Single Two-Party Family	<del>\$ 521.01</del> \$1,042.02 \$1,354.63
<b>Sharp Health Plan</b>	Single Two-Party Family	<del>\$ 531.59</del> \$1,062.18 \$1,367.33	Single Two-Party Family	<del>\$ 7.00</del> <del>\$ 15.00</del> <del>\$ 33.00</del>	Single Two-Party Family	<del>\$ 538.59</del> \$1,077.18 \$1,400.33

# **Memorandum of Understanding**

**Irvine Ranch Water District Employees' Association  
and  
Irvine Ranch Water District**

**April 01, 2015 – June 30, 2018**

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**Memorandum of Understanding**  
**Between Irvine Ranch Water District Employees' Association**  
**and**  
**Irvine Ranch Water District**  
**April 01, 2015 – June 30, 2018**

**I. PARTIES AND RECOGNITION**

This Memorandum of Understanding ("MOU") is made and entered into between the Irvine Ranch Water District ("IRWD" or "District") and the Irvine Ranch Water District Employees' Association ("IRWDEA" or "Association"), the formally recognized exclusive representative, pursuant to the provisions of the Meyers-Milias Brown Act.

**II. TERM OF AGREEMENT**

The terms and conditions of this Memorandum of Understanding ("MOU") shall remain in full force and effect from September 25, 2013 until March 31, 2015 inclusive. This MOU represents the total agreement between the parties. Neither party shall be compelled to negotiate on any subject within the scope of this Agreement during the term of this Agreement without the express written agreement of the other. If either party desires to make any changes or modifications of this Agreement for the ensuing period, it shall give written notice to the other party not less than sixty (60) days prior to the termination of this Agreement, in writing.

**III. SCOPE OF AGREEMENT**

A. **Recognition.** This Agreement shall apply to IRWD's employees in the positions listed in Exhibit A, excluding managerial, confidential and supervisory employees as defined in the Meyers Milias Brown Act and applicable Public Employment Relations Board regulations.

B. **Representation.** The IRWD recognizes the Association as the exclusive representative of all employees covered hereby for the purpose of meeting and conferring with respect to wages, hours and all other terms and conditions of employment, as defined by the Meyers Milias Brown Act.

**IV. FEDERATION RIGHTS**

The Association is the only employee organization entitled to meet-and-confer in good faith on matters within the scope of representation on behalf of employees in this unit.

**V. DISTRICT RIGHTS**

A. The District shall retain and continue to have sole and exclusive responsibility and right, except as otherwise expressly and clearly provided by this Agreement, to manage, plan,

direct and control all aspects of its operations, to direct its employees and its work force; to hire, promote, transfer, demote, layoff, recall, discipline, suspend or discharge employees at will and in its sole discretion; to assign and reassign employees to new or different duties or classifications, hours of work and shifts; to add or delete job classifications and duties; to establish rules and regulations not in direct conflict with this Agreement; to introduce new and improved methods of operation; to subcontract to others any work on or off premises; to set and attain work and production standards; to improve quality; to reduce costs; to perform any and all other things which the District deems necessary and desirable for the efficient and successful operation of its business, subject to any meet and confer obligations imposed by the Meyers Miliias Brown Act.

B. The District shall be the sole judge as to the reliability, competency and performance of any of the employees. All employees must perform their work to the satisfaction of the District.

C. Nothing in this Agreement shall limit the District's management functions, under which it shall have, among others, the right to determine the qualifications of employees; to observe and evaluate an employee's job performance and to apply disciplinary action as the District deems necessary, desirable or appropriate; and to require employees to observe District rules and regulations presently in effect and/or to be put into effect, provided they are not in direct violation with the provisions of this Agreement, subject to any meet and confer obligations imposed by the Meyers Miliias Brown Act.

D. It is the exclusive right of the District to administer the merit system.

E. Without limiting the above, the District retains the authority to take whatever action may be necessary when it determines there exists an emergency situation.

F. The right and responsibility of final decisions regarding wages, hours, fringe benefits, working conditions, and other terms and conditions of employment resides solely with the District's Board, subject to any meet and confer obligations imposed by the Meyers Miliias Brown Act.

G. This Agreement shall not abridge any right to a "Skelly" hearing, if such right is due to an employee independent of this Agreement.

## **VI. EMPLOYEE RELATIONS DISCUSSION FORUM**

- A. The Director of Human Resources and up to three(3) other District representatives shall meet with the Association's President and no more than four(4) other Association representatives once every three (3) months at the request of either party. The General Manager will make every effort to attend as available. More frequent meetings may be held my mutual agreement. The requesting party shall construct a meeting agenda and submit it to the other side in writing prior to the meeting.
- B. The basic purpose of these meetings is to discuss issues of common interest and to solve problems in a constructive fashion.

## **VII. ASSOCIATION ACCESS**

**A. Reasonable Access.** RWDEA board members will be allowed reasonable time to meet with management to perform IRWDEA duties as needed. Time spent during regular work hours must be approved in advance by the Director of Human Resources or the General Manager

**B. Access to Facilities.** The Association may schedule pre-work, after work or lunch meetings in the District conference rooms at reasonable times when these facilities are not being used by submitting a verbal, written or electronic request to the appropriate District representative. The request shall include the date, time and the number of people expected for the meeting.

**C. Bulletin Boards.** The District shall provide for the Association's use, designated bulletin boards where employees in the bargaining unit have access during regular business hours subject to the following conditions:

1. All postings for bulletin boards must contain the date of posting and the identification of the organization;
2. The Association will not post information which is defamatory, derogatory or obscene, subject to the immediate removal of the right to post for a period not to exceed 90 days.

## **VIII. CONTRIBUTION TO CALPERS RETIREMENT BENEFIT**

**A.** Association employees hired on or after January 1, 2013 who have worked for another CalPERS or other reciprocal agency without a six month break in service shall be enrolled for CalPERS retirement benefits in the District's 2<sup>nd</sup> tier retirement formula of two percent at 60 (2% @ 60) and will contribute the full amount of the employee portion of the CalPERS contribution, currently established by CalPERS as 7%, commencing at their date of hire.

**B.** Association employees hired on or after January 1, 2013 shall be enrolled for CalPERS retirement benefits in the two percent at 62 (2% @ 62) formula as mandated by the California Public Employees' Pension Reform Act of 2012 (PEPRA), and will contribute an employee contribution of 50% of the total normal cost of benefits, limited to a maximum of 8% of compensation as provided by PEPRA.

**C.** Association employees enrolled in the District's 1<sup>st</sup> tier CalPERS retirement benefit formula of two and one half percent at 55 (2.5% @ 55) will contribute 8% of "member's earnings" into his/her retirement account.

It is the intent that this section shall be construed in a manner consistent with PEPRA; to the extent of any conflict between PEPRA and this MOU, PEPRA shall be controlling. Resolutions, amendments to the District's contract with CalPERS and such other proceedings and documents as may be necessary or requested by CalPERS to implement the changes to the CalPERS

retirement benefits as discussed in this MOU will be submitted for adoption by the District's Board.

**IX. COST OF LIVING ADJUSTMENT**

Effective, retroactive to August 15, 2015, which is the beginning of the pay period in which this MOU was ratified by the Unit, Association employees shall receive a Cost of Living Adjustment equal to 2.0%.

Effective on July 2, 2016 and again on July 1, 2017, Association employees shall receive a Cost of Living Adjustment equal 2%.

**X. DEFERRED COMPENSATION**

The District will continue to match up to 3% of employees' contribution to the District's deferred compensation plan in accordance with District Policy during the term of this Agreement.

**XI. HEALTHCARE BENEFITS CONTRIBUTION**

IRWDEA Employees will receive CalPERS or other comparable program medical insurance, that includes comparable costs, services and providers, as determined through the bargaining process. The District contribution to employee premiums will be based on the calculation methodology of 90% of the highest enrollment PPO plan offered.

**XII. WORK SCHEDULES AND REST PERIODS**

- A. **Work Schedules.** The standard work week for Association employees consists of seven consecutive 24-hour periods beginning at noon on Friday and ending at noon the following Friday. An alternate work week may be allowed with the approval of the General Manager. Regular daily-shift starting and ending times are between the hours of 6:30am and 5:30pm as determined by the Department Director or his/her designee. Exceptions to the regular daily-shift start times may occur as the operational needs of the District require for work occurring outside the 6:30am to 5:30pm time frame.
  
- B. **Rest Periods.** Association employees may, on their regularly scheduled day of work, utilize a 10-minute rest break in the morning hours and an additional 10-minute rest break in the afternoon, as well as a 30 minute meal period. Meal periods are not compensable. Meal period times are assigned by the immediate supervisor on a schedule basis to meet the needs of the District service. Rest breaks must be taken at times that do not disrupt District service as determined by the employee's supervisor.

**XIII. OVERTIME**

- A. **Daily/Weekly.** Full-time non-exempt Association employees (employees who are regularly scheduled to work 40 hours/week) who are required by their supervisor or other authorized person to work in excess of 40 hours in one work week, or more than his/her regularly scheduled hours in one day will be compensated at their overtime rate of pay as defined by District policy. Overtime shall only be worked with approval of the employee's supervisor.
  
- B. **Holiday.** Full-time non-exempt Association employees who are required by their supervisor or other authorized person to work on a District approved holiday will be compensated at his/her overtime rate of pay for all hours worked on the holiday, in addition to straight-time for his/her normally scheduled hours of holiday pay.

**XIV. STANDBY PAY**

Association employees who are required by the District to be on standby for emergency work during normal off-duty hours will be paid three-quarters (3/4) of an hour at his/her overtime rate of pay for every eight (8)-hour period of normal off-duty hours the employee is on standby, not to exceed twelve (12) hours of overtime pay for one work week. Association employees will not receive standby pay for days on which he/she does not report to work or leaves work early due to illness

**XV. CALL OUT PAY**

Association Employees called back to work during an off-duty period will be compensated for a minimum of two (2) hours of pay. Call Out Pay will include pay for the time the employee uses to travel to and from the work location.

**XVI. ANNUAL SICK LEAVE PAYOUT**

Association employees may elect, annually, in accordance with District Policy to be paid for up to 96 hours of accrued sick leave. Employees must retain a minimum eighty (80) hour sick leave balance at the time of the payout. Payment will be made in accordance with the following schedule:

0-10 years of service	up to 96 hours at 50%
11-15 years of service	up to 30 hours @ 100%, remainder (up to 96 hrs) @ 50%
16-20 years of service	up to 60 hours @ 100%, remainder (up to 96 hrs) @ 50%
21+ years of service	up to 96 hours at 100%

**XVII. UNIFORMS**

The District will provide to each Association employee, required by the District to wear a uniform as a condition of employment, eleven (11) sets of uniforms, one belt and two items of outerwear. The District will provide the maintenance and upkeep of the provided uniforms.

Standby personnel will be issued three additional shirts and pants for a total of 14 each of shirts and pants.

Lab employees will be provided with lab coats which will be maintained by the District.

### **XVIII. EDUCATION AND TRAINING ASSISTANCE**

A. **Tuition Reimbursement.** Association employees are eligible for tuition reimbursement of up to 75% of eligible tuition and text book expenses in accordance with District policy.

B. **College Degree Incentive Program.** Association employees who obtain a college degree through an accredited program are eligible to receive a \$1000.00 incentive payment in accordance with District policy.

C. **Certificates of Competence Incentive Program.** Association employees who obtain a job-related Certificate of Competence which exceeds his/her minimum job requirements are eligible to receive a \$750.00 incentive payment for each Certificate received in accordance with District Policy.

D. **Occupational Program Certificate Incentive Program.** Association employees who obtain a job-related Occupational Program certificate which exceeds his/her minimum job requirements are eligible to receive a \$750.00 incentive payment for each Certificate received in accordance with District policy.

### **XIX. SAFETY EQUIPMENT**

The District agrees to provide Association members with safety equipment to ensure personal safety in the performance of his/her job duties.

A. **Safety Shoe Reimbursement.** Association employees will be provided reimbursement for the purchase of safety shoes in accordance with District Policy according to the following schedule:

Category 1	Up to \$200/calendar year
Category 2	Up to \$125/calendar year
Category 3	Up to \$125/calendar year
Category 4	Up to \$125/calendar year plus Category 1 reimbursement if eligible
Physician prescribed shoes	Up to \$200/calendar year

B. **Prescription Safety Eyewear.** Association employees who require prescription eye glasses and who are required to wear safety glasses as part of their normal job duties will be provided reimbursement for the purchase of prescription safety glasses in accordance with District policy, not to exceed \$225/calendar year.

## **XX. COMMERCIAL DRIVER'S LICENSE INCENTIVE**

A. Association employees who are required to maintain a commercial driver's license for the performance of their assigned job duties will receive an annual Commercial Driver's License Incentive of \$200, to be paid on a per-pay period basis of \$7.69.

B. Association employees in non-commercial driver's license required job classifications will receive the annual Commercial Driver's License Incentive describe in section A above if the employee maintains their Commercial Driver's License in good standing and it is determined by the District that such licensure in the specific job class is beneficial to the District service.

C. Employees currently receiving a \$100 annual Commercial Driver's License Incentive (paid on a per pay period basis of \$3.85) and who do not meet the criteria in sections A and B above will continue to receive the \$100 incentive until such time as they do not renew their Commercial Driver's License.

## **XXI. SHARED HEALTH AND FITNESS INCENTIVE**

Effective January 1, 2016, Association employees are eligible for 50% reimbursement of costs associations with gym memberships, electronic fitness tracking devices, monitored weight loss programs (i.e. Weight Watchers, Jenny Craig, Lindora, etc) and or smoking cessation programs up to a maximum of \$400 per fiscal year. The Shared Health and Fitness Incentive replaces Exercise Incentive program of \$10 for each 25 hours of exercise performed at a District fitness facility.

## **XXII. OTHER BENEFITS AND FORMS OF COMPENSATION**

All other forms of compensation, including employee benefits, not specifically mentioned in this MOU shall remain unchanged for the duration of the MOU.

## **XXIII. AGENCY SHOP/IRWDEA FEES AND/OR DUES**

The District will deduct IRWDEA fees and/or dues in the amount specified by any employee who voluntarily authorizes such payroll deduction in writing on a payroll deduction form provided by the District. The collected fees and dues will be automatically deposited to the IRWDEA bank account provided by the IRWDEA Board and on file with the District. Such authorization but may be revoked in writing by the employee at any time.

## **XXIV. NO LOCKOUT/WORK STOPPAGES**

A. No employee shall engage in a strike, work stoppage, slowdown, job action, sick-in, sick-out, or any concerted interference with work of the District or impeding of work or business of the District. Due to the direct threat to public health and safety that would result, participation by any employee in a strike, work stoppage, slowdown, job action, sick-in, sick-out, or any concerted interference with work of the District or impeding of work or business of the District shall subject the employee to immediate discharge at the sole discretion of the District. Without limiting the foregoing, the District shall be entitled to injunctive relief to end any such

strike, work stoppage, slowdown, job action, sick-in, sick-out, or any concerted interference with work of the District or impeding of work or business of the District

B. For the purposes of this Agreement, "strike" or "striking activity" is defined to mean or include engaging or directly participating in any strike, slowdown, job action, sick-in, sick-out, or any concerted interference with the work of the District or impeding of work or business of the District.

C The District shall not lockout bargaining Unit Employees.

D. The District shall not hire non-bargaining unit Regular employees (as defined by District policy) to perform bargaining unit work.

## **XXV. PRE-DISCIPLINARY PROCEDURAL NOTICE AND OPPORTUNITY FOR RESPONSE AND HEARING**

A. **Minor Discipline.** Non-probationary Unit employees subject to minor discipline (not qualifying as "Substantial Discipline" as defined below) may provide a written response to be attached to the minor discipline documentation if they so choose. Such written response must be submitted within ten (10) calendar days from receipt of the minor discipline.

B. **Substantial Discipline.** Non-probationary Unit employees will be accorded pre-disciplinary safeguards as described in this section before any substantial disciplinary action is imposed. Substantial disciplinary action shall include:

1. Suspension without pay for five(5) or more working days;
2. Involuntary demotion or reduction in pay;
3. Termination.

C. **Notice of Intent.** A written Notice of Intent to impose substantial disciplinary action must be prepared by the Manager, working with Human Resources, setting forth:

1. A short statement of the reason for the proposed action;
2. A summary of the performance problems upon which the action is based;
3. An explanation of the rule or policy that was violated, including references to the policy number or other source, if applicable;
4. A summary of any preceding disciplinary actions within the last year, with copies attached;
5. A description of any documents or other physical or documentary evidence being relied upon in connection with this action with copies attached; and

6. A statement that the employee will have a right to respond, verbally, in writing or both to the appropriate District authority.

A copy of the Notice of Intent, with a signed employee acknowledgment, must be forwarded to Human Resources for retention in the employee's personnel file.

D. **Employee Response.** To ensure that the District does not act without considering relevant information available to it, employees are to be provided the opportunity to respond verbally, in writing or both to the intended imposition of any substantial disciplinary action within seven (7) calendar days from the date of the Notice of Intent to the department director, who may at his or her discretion reverse the Manager's recommendation.

E. **Appeals**

1. **Right to Appeal.** Employees have a right to appeal the imposition of the following actions:
  - a. Termination
  - b. Demotion involving reduction in pay
  - c. Disciplinary reduction in pay constituting more than one (1) weeks pay
  - d. Suspension without pay in excess of five (5) days.
2. **Method of Appeal**
  - a. In the event of the imposition of substantial discipline as described herein, the decision of the department director will be considered final unless the employee files an appeal in accordance with this policy.
  - b. An employee wishing to appeal must file a signed written statement with the Director of Human Resources within seven (7) calendar days of the effective date of the action. This writing must describe his/her intention to appeal, the reason for the appeal, and whether or not the use of a hearing officer is being requested.
  - c. Upon receipt of the notice and if no hearing officer is requested, the Director of Human Resources or his/her designee will arrange for a meeting with the General Manager or his/her designee and the employee requesting an appeal, within seven (7) calendar days of the filing of the appeal. After weighing all the evidence, the General Manager will render a decision within seven (7) calendar days of the meeting unless a time extension is deemed necessary. The decision of the General Manager is final.
  - d. If a hearing officer is requested, the Director of Human Resources will arrange for a meeting between the employee, his representative if any and the General Manager or his/her designee within seven calendar days *after* the hearing officer has submitted findings and recommendations. The General Manager after weighing all the evidence and the findings of the hearing officer will make a decision which will be final.

3. Hearing Officer

- a. At any time during the conduct of the appeal, but prior to its submission to the General Manager or designee, the use of a hearing officer may be requested by either the employee or the employee's representative, if any, the department director who imposed the substantial discipline or the Director of Human Resources.
- b. If a hearing officer is requested, the District will secure a hearing officer who will be a neutral professional with fact-finding experience. If the hearing officer is requested by the appellant, the cost will be borne by the appellant. If the hearing officer is requested by the District, the cost will be borne by the District. If the hearing officer is determined to be used by mutual agreement of the parties, the cost will be borne equally by the appellant and the District.
- c. The function of the hearing officer will be to examine the facts and available evidence, question witnesses and make a recommendation to the General Manager.
- e. The findings and recommendations of the hearing officer will be submitted to both the appellant and the General Manager.

4. Right to representation.

In the conduct of the appeal, the appellant will have the right, at his/her own expense to be represented by another person of his own choosing and to summon witnesses on his/her behalf.

**XXVI. GRIEVANCE PROCEDURE**

**A. Definitions:**

1. Grievance - A grievance is an allegation by an employee(s) or the Association of a violation of any express provision of the applicable MOU.
2. Grievant – An employee, group of employees or the Association.

**B. Timeliness:**

1. The grievance must be filed by the grievant within the timelines set forth herein.
2. The timelines contained herein may be extended to a definite date by written, mutual agreement of the grievant and the District's appropriate representative.

C. **Employee Representation.** The grievant, at his/her own expense, may be represented by a person of his or her choice to prepare and present the grievance at any step of this process. The employee may use a reasonable amount of pre-approved release time to process the grievance.

D. **Informal Grievance Procedure.** Within fifteen (15) calendar days following the event, or within fifteen (15) calendar days after the grievant should reasonably have known of the event, the grievant should attempt to resolve the grievance on an informal basis by discussion with his/her immediate supervisor. If the grievant is not able to resolve the grievance after informal discussion with his/her immediate supervisor, the grievant will have the right to file a formal grievance in writing within ten (10) calendar days after the informal discussion with his/her immediate supervisor. The written formal grievance shall contain:

1. Employee name, job title and department name
2. Name of representative, if any
3. Statement of grievance, providing date and time or action aggrieved and circumstances of grievance
4. Specific provisions of MOU alleged to have been violated
5. Date of informal discussion with immediate supervisor
6. Date of filing of formal grievance
7. Signature of employee and/or representative, if any. (Electronic signature accepted.)

E. **Formal Grievance Procedure.**

1. **First Level Formal Review – Department Director:** The formal written grievance shall be presented to the employee's Department Director or his/her designee who will discuss the grievance with the employee, his/her representative, if any and any other appropriate persons. The Department Director will render his/her decision in writing to the employee within ten (10) calendar days after receiving the grievance. If the employee does not agree with the Department Director's decision, or if no answer is received within ten (10) calendar days, the employee may present the formal written grievance to the General Manager. Failure of the employee to submit the grievance to the General Manager within ten (10) calendar days after receipt of the written decision from his/her Department Director will constitute a dropping of the grievance.

2. **Second Level Formal Review - General Manager Review:** The General Manager, after receiving the grievance, will discuss the grievance with the employee, his/her representative, if any and any other appropriate persons. The General Manager may select a designee not in the normal line of supervision to advise him concerning the grievance. The

General Manager will render a decision in writing to the employee within 14 calendar days after receiving the grievance. The decision of the General Manager shall be final.

**XXVII. SAVINGS CLAUSE**

Should any part hereof or any provision herein contained be rendered or declared illegal or an unfair labor practice by reason of any existing or subsequently enacted legislation, or by any decree of a court of competent jurisdiction, or by the decision of any authorized governmental agency, including the Public Employment Relations Board, such invalidation of such part or portion of this Agreement shall not invalidate the remaining portions hereof; provided however, upon such invalidation the parties agree immediately to meet and negotiate substitute provisions for such parts or provisions rendered or declared illegal or an unfair labor practice. The remaining parts or provisions shall remain in full force and effect.

ADOPTED, SIGNED and APPROVED this 24<sup>th</sup> day of August 2015.

\_\_\_\_\_  
Craig M. Irely, President      Date  
Irvine Ranch Water District  
Employee Association (IRWDEA)

\_\_\_\_\_  
Paul Cook, General Manager      Date  
Irvine Ranch Water District

\_\_\_\_\_  
APPROVED AS TO FORM:      Date

Bowie, Arneson, Wiles & Giannone

## EXHIBIT A

### Positions included in the General Employees' Unit of the IRWDEA

Accountant	Office Specialist
Accounting Clerk	Office Specialist, Senior
Accounting Clerk, Senior	Operations Coordinator
Analyst	Operator I
Automation Programmer	Operator II
Automation Specialist	Operator III
Automation Technician	Payroll Administrator
Buyer	Public Affairs Analyst
Buyer, Senior	Public Affairs Specialist
Collection Systems CCTV Technician, Senior	Purchasing Coordinator
Collection Systems Technician I	Purchasing Coordinator, Senior
Collection Systems Technician II	Recycled Water Project Specialist
Collection Systems Technician, Senior	Recycled Water Specialist
Collections Systems CCTV Tech II	Recycled Water Specialist, Senior
Construction Inspector I	Right of Way Agent
Construction Inspector II	Risk Analyst
Construction Inspector III	Scientist
Cross Connection Control Specialist	Scientist, Senior
Customer Service Field Technician	Support Specialist
Customer Service Field Technician, Senior	Support Specialist, Senior
Customer Service Specialist I	Treasury Analyst
Customer Service Specialist II	Utility Worker
Customer Service Specialist III	Vehicle/Equipment Maintenance Mechanic
Electrical Technician	Vehicle/Equipment Maintenance Mechanic, Senior
Electrical Technician, Senior	Water Maintenance Technician I
Electrical/Instrumentation Designer	Water Maintenance Technician II
Energy Analyst	Water Maintenance Technician III
Engineer	Water Resources Planner
Engineer, Assistant	Water Resources Manager
Engineer, Associate	Water Use Efficiency Analyst
Engineering Technician I	Water Use Efficiency Specialist
Engineering Technician II	Water Use Efficiency Specialist, Senior
Engineering Technician III	Wetlands Specialist
Facilities Services Technician	Wetlands Specialist, Senior
Facilities Services Technician, Senior	
Information Services Coordinator	
Instrumentation Technician	
Instrumentation Technician, Senior	
Laboratory Analyst	
Laboratory QA/QC	
Landscape Contracts Administrator	
Mail Coordinator	
Maintenance Apprentice	
Maintenance Mechanic	
Maintenance Mechanic, Senior	
Material Control Clerk I	
Material Control Clerk II	
Material Control Clerk II	
Metering Systems Technician I	
Metering Systems Technician II	
Metering Systems Technician III	
Office Assistant	

**EXHIBIT "B"**

**RESOLUTION NO. 2015 -**

**RESOLUTION OF THE BOARD OF DIRECTORS  
OF IRVINE RANCH WATER DISTRICT,  
RESCINDING RESOLUTION NO. 2015-14 AND  
ESTABLISHING A REVISED SCHEDULE OF POSITIONS  
AND SALARY RATE RANGES**

WHEREAS, the Board of Directors of Irvine Ranch Water District, by adoption of Resolution No. 2015-14 on June 8, 2015, established a Schedule of Positions and Salary Rate Ranges of the Irvine Ranch Water District; and

WHEREAS, the Board of Directors of Irvine Ranch Water District has reviewed the Schedule of Positions and Salary Rate Ranges and desires to make revisions thereto.

NOW, THEREFORE, the Board of Directors of Irvine Ranch Water District does hereby resolve, determine and order as follows:

Section 1. That the Schedule of Positions and Salary Rate Ranges adopted by Resolution No. 2015-14 on June 8, 2015 is hereby rescinded, effective August 15, 2015.

Section 2. That the Schedule of Positions and Salary Rate Ranges for the Irvine Ranch Water District be and hereby is approved and adopted as more particularly set forth in Exhibit "A" to this Resolution, attached hereto and by this reference made a part hereto.

Section 3. That the provisions of this Resolution shall be effective July 1, 2015.

ADOPTED, SIGNED and APPROVED THIS 24<sup>th</sup> day of August 2015.

\_\_\_\_\_  
President, IRVINE RANCH WATER DISTRICT  
and of the Board of Directors thereof

\_\_\_\_\_  
Secretary, IRVINE RANCH WATER DISTRICT  
and of the Board of Directors thereof

APPROVED AS TO FORM:  
BOWIE, ARNESON, WILES & GIANNONE

\_\_\_\_\_

**IRVINE RANCH WATER DISTRICT**  
**SALARY GRADE SCHEDULE**  
**GENERAL EMPLOYEES' UNIT**  
August 15, 2015 July 1, 2015

<u>NON-EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE 1.N	\$ <u>26562709</u>	\$ <u>32933359</u>	\$ <u>34573526</u>
SALARY GRADE 2.N	\$ <u>27142768</u>	\$ <u>33833451</u>	\$ <u>35533624</u>
SALARY GRADE 3.N	\$ <u>27712826</u>	\$ <u>34763546</u>	\$ <u>36512724</u>
SALARY GRADE 4.N	\$ <u>28212877</u>	\$ <u>35773649</u>	\$ <u>37563831</u>
SALARY GRADE 5.N	\$ <u>28852943</u>	\$ <u>36763750</u>	\$ <u>38613938</u>
SALARY GRADE 6.N Office Assistant Mail Coordinator	\$ <u>29433002</u>	\$ <u>37833859</u>	\$ <u>39724051</u>
SALARY GRADE 7.N	\$ <u>30013061</u>	\$ <u>38883966</u>	\$ <u>40834165</u>
SALARY GRADE 8.N	\$ <u>30673128</u>	\$ <u>40004080</u>	\$ <u>42004284</u>
SALARY GRADE 9.N	\$ <u>31263189</u>	\$ <u>41104192</u>	\$ <u>43164402</u>
SALARY GRADE 10.N	\$ <u>31903254</u>	\$ <u>42224306</u>	\$ <u>44324521</u>
SALARY GRADE 11.N Material Control Clerk I Maintenance Apprentice Utility Worker	\$ <u>32523317</u>	\$ <u>43314418</u>	\$ <u>45454636</u>
SALARY GRADE 12.N	\$ <u>33163382</u>	\$ <u>44574546</u>	\$ <u>46814775</u>
SALARY GRADE 13.N Customer Service Specialist I Support Specialist	\$ <u>33783446</u>	\$ <u>45854677</u>	\$ <u>48154911</u>

<u>NON-EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE 14.N	\$ <u>34543523</u>	\$ <u>47144808</u>	\$ <u>49505049</u>
SALARY GRADE 15.N Office Specialist Collection Systems Technician I	\$ <u>35283599</u>	\$ <u>48404937</u>	\$ <u>50825184</u>
SALARY GRADE 16.N Accounting Clerk Customer Service Field Technician Metering Systems Technician I Water Maintenance Technician I Laboratory Analyst	\$ <u>36113683</u>	\$ <u>49755075</u>	\$ <u>52235327</u>
SALARY GRADE 17.N Customer Service Specialist II	\$ <u>36883762</u>	\$ <u>50995201</u>	\$ <u>53545461</u>
SALARY GRADE 18.N Material Control Clerk II Senior Support Specialist	\$ <u>37693844</u>	\$ <u>52375342</u>	\$ <u>54995609</u>
SALARY GRADE 19.N Senior Office Specialist Purchasing Coordinator	\$ <u>38553932</u>	\$ <u>53695476</u>	\$ <u>56395752</u>
SALARY GRADE 20.N Senior Accounting Clerk Engineering Technician I Operator I Collection Systems Technician II	\$ <u>39584037</u>	\$ <u>55425653</u>	\$ <u>58205936</u>
SALARY GRADE 21.N Customer Service Specialist III Senior Customer Service Field Technician Collection Systems CCTV Technician II	\$ <u>40704151</u>	\$ <u>57105824</u>	\$ <u>59976117</u>
SALARY GRADE 22.N Sr. Purchasing Coordinator Metering Systems Tech. II Water Maintenance Technician II Maintenance Mechanic Facilities Services Technician Vehicle/Equipment Mechanic Recycled Water Specialist	\$ <u>41824266</u>	\$ <u>58896007</u>	\$ <u>61856309</u>

<u>NON-EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE 23.N Construction Inspector I	\$42924378	\$60686189	\$63716498
SALARY GRADE 24.N Buyer Cross Connection Specialist Wetlands Specialist Water Use Efficiency Specialist	\$44144502	\$62586383	\$65716702
SALARY GRADE 25.N Engineering Technician II Senior Collection Systems Technician Senior Collection Systems CCTV Technician	\$45304621	\$64506579	\$67746909
SALARY GRADE 26.N Metering Systems Tech. III Water Maintenance Technician III	\$46704763	\$66426775	\$69747113
SALARY GRADE 27.N Accountant Senior Vehicle/Equipment Maintenance Mechanic Senior Facilities Services Technician Operator II Senior Maintenance Mechanic Senior Recycled Water Specialist	\$48054901	\$68376974	\$71797323
SALARY GRADE 28.N Construction Inspector II Automation Technician Landscape Contracts Administrator Electrical Technician Instrumentation Technician Scientist	\$49465045	\$70407181	\$73937541
SALARY GRADE 29.N Payroll Administrator Senior Buyer Engineering Technician III Senior Wetlands Specialist Operator III Lead Maintenance Mechanic Recycled Water Project Specialist Senior Water Use Efficiency Specialist Public Affairs Specialist	\$50935195	\$72457390	\$76077759

<u>NON-EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE 30.N Risk Analyst Senior Electrical Technician Senior Instrumentation Technician	\$ <u>52475352</u>	\$ <u>74597608</u>	\$ <u>78337990</u>
SALARY GRADE 31.N Treasury Analyst Information Services Coordinator Construction Inspector III Water Use Efficiency Analyst	\$ <u>54025510</u>	\$ <u>76847838</u>	\$ <u>80678228</u>
SALARY GRADE 32.N Automation Specialist Senior Scientist	\$ <u>55585669</u>	\$ <u>79118069</u>	\$ <u>83078473</u>
SALARY GRADE 33.N Operations Coordinator	\$ <u>57205834</u>	\$ <u>81418304</u>	\$ <u>85488719</u>
SALARY GRADE 34.N Electrical/Instrumentation Designer	\$ <u>58896007</u>	\$ <u>83668533</u>	\$ <u>87858961</u>
SALARY GRADE 35.N	\$ <u>60676188</u>	\$ <u>86178789</u>	\$ <u>90489229</u>

**IRVINE RANCH WATER DISTRICT  
SALARY GRADE SCHEDULE  
GENERAL EMPLOYEES' UNIT**

August 15, 2015/July 1, 2015

<u>EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE 1.E	\$42714356	\$54885598	\$57615876
SALARY GRADE 2.E	\$44134501	\$57005814	\$59856105
SALARY GRADE 3.E	\$45554646	\$59136031	\$62096333
SALARY GRADE 4.E	\$46974791	\$61396262	\$64466575
SALARY GRADE 5.E	\$48404937	\$63676494	\$66866820
SALARY GRADE 6.E	\$50065106	\$66146746	\$69457084
SALARY GRADE 7.E	\$51675270	\$68586995	\$72007344
SALARY GRADE 8.E	\$53355442	\$71267269	\$74837633
SALARY GRADE 9.E	\$54975607	\$73877535	\$77567911
SALARY GRADE 10.E Analyst Assistant Engineer Public Affairs Analyst Regulatory Compliance Analyst	\$56815795	\$76677820	\$80518212
SALARY GRADE 11.E	\$58635980	\$79518110	\$83498516
SALARY GRADE 12.E Programmer/Analyst Energy Analyst Laboratory QA/QC	\$60546175	\$82568421	\$86678840
SALARY GRADE 13.E Right of Way Agent Water Resources Planner	\$62496374	\$85568727	\$89829162

<u>EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE 14.E Associate Engineer	\$ <u>64536582</u>	\$ <u>88869064</u>	\$ <u>93299516</u>
SALARY GRADE 15.E Automation Programmer	\$ <u>66576790</u>	\$ <u>92189402</u>	\$ <u>96779871</u>
SALARY GRADE 16.E	\$ <u>68797017</u>	\$ <u>95679758</u>	\$ <u>1004510246</u>
SALARY GRADE 17.E Engineer	\$ <u>70997241</u>	\$ <u>991810116</u>	\$ <u>1041310621</u>
SALARY GRADE 18.E	\$ <u>73287475</u>	\$ <u>1029610502</u>	\$ <u>1081011026</u>
SALARY GRADE 19.E	\$ <u>75617712</u>	\$ <u>1067610890</u>	\$ <u>1121111435</u>
SALARY GRADE 20.E	\$ <u>77967952</u>	\$ <u>1107111292</u>	\$ <u>1162511858</u>
SALARY GRADE 21.E	\$ <u>80348195</u>	\$ <u>1147111700</u>	\$ <u>1204512286</u>
SALARY GRADE 22.E	\$ <u>82928458</u>	\$ <u>1189712135</u>	\$ <u>1249412744</u>
SALARY GRADE 23.E	\$ <u>85558726</u>	\$ <u>1232912576</u>	\$ <u>1294613205</u>
SALARY GRADE 24.E	\$ <u>87868962</u>	\$ <u>1282513082</u>	\$ <u>1346613735</u>
SALARY GRADE 25.E	\$ <u>90589239</u>	\$ <u>1331113577</u>	\$ <u>1397514255</u>
SALARY GRADE 26.E	\$ <u>94719660</u>	\$ <u>1401414294</u>	\$ <u>1471515009</u>
SALARY GRADE 27.E	\$ <u>990510103</u>	\$ <u>1475615051</u>	\$ <u>1549415804</u>
SALARY GRADE 28.E	\$ <u>1036010567</u>	\$ <u>1553415845</u>	\$ <u>1631116637</u>
SALARY GRADE 29.E	\$ <u>1083211049</u>	\$ <u>1635616683</u>	\$ <u>1717417517</u>
SALARY GRADE 30.E	\$ <u>1133311560</u>	\$ <u>1722417568</u>	\$ <u>1808518447</u>

<u>EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE 31.E	\$ <del>1896</del> <u>12134</u>	\$ <del>1820</del> <u>18565</u>	\$ <del>1911</del> <u>19493</u>
SALARY GRADE 32.E	\$ <del>12493</del> <u>12743</u>	\$ <del>19238</del> <u>19623</u>	\$ <del>20200</del> <u>20604</u>
SALARY GRADE 33.E	\$ <del>13114</del> <u>13376</u>	\$ <del>20330</del> <u>20737</u>	\$ <del>21347</del> <u>21774</u>
SALARY GRADE 34.E	\$ <del>13772</del> <u>14047</u>	\$ <del>21484</del> <u>21914</u>	\$ <del>22557</del> <u>23008</u>

| *Effective Date* ~~07/01/2015~~08/15/2015

**IRVINE RANCH WATER DISTRICT**  
**SALARY GRADE SCHEDULE**  
**UNREPRESENTED POSITIONS**

July 1, 2015

<b><u>NON-EXEMPT</u></b>	<b><u>MINIMUM</u></b>	<b><u>MAXIMUM</u></b>	<b><u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u></b>
SALARY GRADE U1.N	\$2656	\$3293	\$3457
SALARY GRADE U2.N	\$2714	\$3383	\$3553
SALARY GRADE U3.N	\$2771	\$3476	\$3651
SALARY GRADE U4.N	\$2821	\$3577	\$3756
SALARY GRADE U5.N	\$2885	\$3676	\$3861
SALARY GRADE U6.N	\$2943	\$3783	\$3972
SALARY GRADE U7.N	\$3001	\$3888	\$4083
SALARY GRADE U8.N	\$3067	\$4000	\$4200
SALARY GRADE U9.N	\$3126	\$4110	\$4316
SALARY GRADE U10.N	\$3190	\$4222	\$4432
SALARY GRADE U11.N	\$3252	\$4331	\$4545
SALARY GRADE U12.N	\$3316	\$4457	\$4681
SALARY GRADE U13.N	\$3378	\$4585	\$4815
SALARY GRADE U14.N	\$3454	\$4714	\$4950
SALARY GRADE U15.N	\$3528	\$4840	\$5082
SALARY GRADE U16.N	\$3611	\$4975	\$5223

<u>NON-EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE U17.N	\$3688	\$5099	\$5354
SALARY GRADE U18.N	\$3769	\$5237	\$5499
SALARY GRADE U19.N	\$3855	\$5369	\$5639
SALARY GRADE U20.N	\$3958	\$5542	\$5820
SALARY GRADE U21.N	\$4070	\$5710	\$5997
SALARY GRADE U22.N Executive Secretary Human Resources Assistant	\$4182	\$5889	\$6185
SALARY GRADE U23.N	\$4292	\$6068	\$6371
SALARY GRADE U24.N	\$4414	\$6258	\$6571
SALARY GRADE U25.N	\$4530	\$6450	\$6774
SALARY GRADE U26.N Executive Assistant	\$4670	\$6642	\$6974
SALARY GRADE U27.N	\$4805	\$6837	\$7179
SALARY GRADE U28.N	\$4946	\$7040	\$7393
SALARY GRADE U29.N Safety & Security Specialist Administrative Assistant	\$5093	\$7245	\$7607
SALARY GRADE U30.N Collection Systems Supervisor	\$5247	\$7459	\$7833

<u>NON-EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE U31.N Human Resources Analyst Cross Connection Supervisor Water Maintenance Supervisor Facilities Services Supervisor Fleet Supervisor	\$5402	\$7684	\$8067
SALARY GRADE U32.N Network Administrator Mechanical Maintenance Supervisor	\$5558	\$7911	\$8307
SALARY GRADE U33.N Construction Inspection Supervisor	\$5720	\$8141	\$8548
SALARY GRADE U34.N Automation Supervisor Electrical Supervisor Instrumentation Supervisor	\$5889	\$8366	\$8785
SALARY GRADE U35.N Operations Supervisor	\$6067	\$8617	\$9048

**IRVINE RANCH WATER DISTRICT**  
**SALARY GRADE SCHEDULE**  
**UNREPRESENTED POSITIONS**

July 1, 2015

<b><u>EXEMPT</u></b>	<b><u>MINIMUM</u></b>	<b><u>MAXIMUM</u></b>	<b><u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u></b>
SALARY GRADE U1.E	\$4271	\$5488	\$5761
SALARY GRADE U2.E	\$4413	\$5700	\$5985
SALARY GRADE U3.E	\$4555	\$5913	\$6209
SALARY GRADE U4.E	\$4697	\$6139	\$6446
SALARY GRADE U5.E	\$4840	\$6367	\$6686
SALARY GRADE U6.E	\$5006	\$6614	\$6945
SALARY GRADE U7.E	\$5167	\$6858	\$7200
SALARY GRADE U8.E	\$5335	\$7126	\$7483
SALARY GRADE U9.E	\$5497	\$7387	\$7756
SALARY GRADE U10.E Customer Service Supervisor	\$5681	\$7667	\$8051
SALARY GRADE U11.E Senior Accountant Financial Analyst	\$5863	\$7951	\$8349
SALARY GRADE U12.E	\$6054	\$8256	\$8667
SALARY GRADE U13.E Senior Human Resources Analyst Senior Analyst GIS Supervisor	\$6249	\$8556	\$8982

<u>EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE U14.E District Secretary Assistant Facilities/Fleet Manager	\$6453	\$8886	\$9329
SALARY GRADE U15.E Senior Programmer/Analyst Senior Network Administrator Applications Analyst Assistant Field Services Manager Laboratory Supervisor	\$6657	\$9218	\$9677
SALARY GRADE U16.E Assistant Operations Manager Principal Analyst Natural Resources Manager Collection Systems Manager Laboratory Manager Water Use Efficiency Manager	\$6879	\$9567	\$10045
SALARY GRADE U17.E District Safety and Security Manager Customer Service Manager Purchasing Manager Construction Inspection Manager Construction & Field Services Manager Water Maintenance Manager Facilities/Fleet Manager	\$7099	\$9918	\$10413
SALARY GRADE U18.E Public Affairs Manager Human Resources Manager Treasury Manager Manager of Contracts Admin & Risk Senior Applications Analyst Senior Applications Developer Senior Database Administrator Chief Plant Operator Water Quality Manager Regulatory Compliance Manager	\$7328	\$10296	\$10810
SALARY GRADE U19.E Operations Manager Electrical and Automation Manager Mechanical Services Manager Recycled Water Development Manager Water Resources Manager	\$7561	\$10676	\$11211

<u>EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE U20.E Controller Manager of Strategic Planning and Analysis Applications Manager Networking & Support Manager Senior Engineer	\$7796	\$11071	\$11625
SALARY GRADE U21.E	\$8034	\$11471	\$12045
SALARY GRADE U22.E	\$8292	\$11897	\$12494
SALARY GRADE U23.E Governmental Relations Officer Principal Engineer Assistant Director of Water Operations Assistant Director of Recycling Operations Assistant Director of Maintenance	\$8555	\$12329	\$12946
SALARY GRADE U24.E	\$8786	\$12825	\$13466
SALARY GRADE U25.E	\$9058	\$13311	\$13975
SALARY GRADE U26.E	\$9471	\$14014	\$14715
SALARY GRADE U27.E Director of Public Affairs Director of Human Resources Treasurer/Director of Risk Management Director of Administrative Services Director of Water Resources	\$9905	\$14756	\$15494
SALARY GRADE U28.E	\$10360	\$15534	\$16311
SALARY GRADE U29.E	\$10832	\$16356	\$17174
SALARY GRADE U30.E Executive Director of Finance Executive Director of Engineering & Water Quality Executive Director of Operations Executive Director of Water Policy	\$11333	\$17224	\$18085

<u>EXEMPT</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>EXCEPTIONAL PERFORMANCE TOP OF RANGE</u>
SALARY GRADE U31.E	\$11896	\$18201	\$19111
SALARY GRADE U32.E	\$12493	\$19238	\$20200
SALARY GRADE U33.E	\$13114	\$20330	\$21347
SALARY GRADE U34.E General Manager	\$13772	\$21484	\$22557

*Effective Date 07/01/2015*

August 24, 2015

Prepared by: E. Akiyoshi

Submitted by: K. Burton *REK*

Approved by: Paul Cook *[Signature]*

## ACTION CALENDAR

### SYPHON RESERVOIR DRY LAKEBED GEOTECHNICAL EXPLORATION

#### SUMMARY:

Syphon Reservoir is currently drained and the lakebed is drying out. Staff solicited a proposal from GEI Consultants, Inc. to perform geotechnical explorations in the dry lakebed to characterize the sediment and alluvium that will be removed during the proposed Syphon Expansion project. Additionally, a topographic survey of the dry lakebed will be performed. Staff recommends that the Board approve an Expenditure Authorization in the amount of \$150,000 for geotechnical explorations and surveying services for the Syphon Reservoir Expansion, Project 30382.

#### BACKGROUND:

Syphon Reservoir is currently drained to complete interim maintenance repairs on the outlet gate structure. Design plans have been submitted to the Division of Safety of Dams (DSOD) and staff anticipates completing the work by late fall of 2015. This repair work revealed approximately three to five feet of sediment around the outlet gate structure and surrounding areas. Staff anticipates removing the sediment during the proposed Syphon expansion project or future maintenance activities.

In January 2010, IRWD purchased Syphon Reservoir from the Irvine Company. In August 2012, GEI Consultants completed an Engineering feasibility study to expand Syphon Reservoir from approximately 350 acre-feet to approximately 5,000 acre-feet. The feasibility study included:

1. Site characterization and optimization;
2. Geotechnical exploration of the dam and areas above the water;
3. Non-potable water facility onsite and offsite improvements; and
4. Cost estimate and phasing.

An optional task that has not yet been performed was the sampling and characterizing the lakebed sediments. This work will provide more accurate estimates of the quantity and quality of the lakebed sediments. Performing this work when the Syphon Reservoir contained water would increase the expenses substantially since a barge would be needed to retrieve samples. Since IRWD recently drained reservoir for maintenance work, the lakebed now appears to be dry enough to conduct geotechnical exploration operations.

Staff solicited a proposal from GEI Consultants, attached as Exhibit "A", to characterize both the lakebed sediment and underlying alluvium. This information will be useful for future maintenance activities, environmental documentation and design phases of the proposed expansion project. The scope of the proposed exploration work, to be completed for an amount of up to \$75,000, consists of the following:

1. *Quantify the thickness of the sediment in Syphon Reservoir:* GEI will probe the thickness of the sediment and calculate the volume of the sediment currently in the reservoir.
2. *Conduct borings in the lake bed alluvium:* GEI will conduct boring operations in the lakebed alluvium to better determine the quantity and quality of the alluvium located below the proposed Syphon Reservoir expansion.
3. *Characterize the sediment in Syphon Reservoir:* As an optional task, GEI will take samples of the sediment and conduct geotechnical and analytical testing on the sediment.

In 2011, topographic and bathymetric surveys of the Syphon Reservoir site were performed by Stantec. With the reservoir drained, staff solicited a proposal from Stantec to provide aerial topography and field surveying services for the previously underwater portion of the reservoir. Stantec submitted a proposal in the amount of \$5,500 to provide the surveying services, and staff recommends proceeding with the work.

FISCAL IMPACTS:

Project 30382 (3808), Syphon Reservoir Expansion, is included in the FY 2015-16 Capital Budget as a “flagged” project. The Expenditure Authorization will cover the geotechnical exploration, topographic survey, and staff time.

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
30382 (3808)	\$60,169,200	-\$0-	\$60,169,200	-\$0-	\$150,000	\$150,000

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) in conformance with California Code of Regulation, Title 14, Chapter 3, Section 15306. Section 15306 provides exemption for projects that consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Staff will file a Notice of Exemption with the Orange County Clerk/Recorder.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on August 20, 2015.

RECOMMENDATION:

THAT THE BOARD APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$150,000 FOR GEOTECHNICAL EXPLORATIONS AND SURVEYING SERVICES FOR THE SYPHON RESERVOIR EXPANSION, PROJECT 30382 (3808).

LIST OF EXHIBITS:

- Exhibit “A” – Scope of Work and Fee
- Exhibit “B” – Expenditure Authorization



Geotechnical  
Environmental  
Water Resources  
Ecological

July 27, 2015  
P620375

Mr. Eric Akiyoshi, P.E.  
Senior Engineer  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Re: Syphon Reservoir  
Proposal for Soil Sampling and Testing**

Dear Mr. Akiyoshi:

As requested by you, this letter is a proposal to perform sampling and testing of soils located at Syphon Reservoir in Irvine, California. Syphon Reservoir is owned and operated by Irvine Ranch Water District (IRWD).

### **Background**

GEI Consultants, Inc. (GEI) performed an engineering feasibility study for expansion of Syphon Reservoir for IRWD and documented the results in an August 2012 Engineering Summary Report. Expansion of the reservoir would require the removal of lake bottom sediments (referred to in this proposal as "sediments") that have accumulated in the reservoir since its construction in 1949, as well as removal of natural alluvium soils in the reservoir area that are susceptible to liquefaction. Samples of the sediments and alluvium in the reservoir area were not obtained as part of the feasibility study due to the expense of mobilizing a barge-mounted drilling rig to perform sampling. Because the drainage basin was formerly used for agriculture, there is a possibility that the sediments may contain pesticides, herbicides, fertilizers, or other contaminants that were transported by runoff into the reservoir.

Syphon Reservoir was drained for maintenance of the outlet works system in May 2015 and is expected to remain empty until late fall of 2015. GEI observed conditions of the reservoir floor during a July 15, 2015 site visit with IRWD personnel. A stiff surface crust has developed in the sediments over large portions of the reservoir area, allowing foot access on the sediments. Continued drying of the sediments is expected to increase the reservoir area accessible by foot. The material immediately below the surface crust

at several locations probed on July 15 consisted of very soft, black, high plasticity clay with an organic odor.

The empty reservoir condition provides an opportunity to collect samples of the sediments and alluvium in the reservoir without the expense of mobilizing a barge. In addition, sampling from “dry land” allows for more control of the sampling process and the ability to obtain higher quality samples of the materials. The empty reservoir condition also provides an opportunity to measure the thickness of the sediments at numerous locations at a relatively low cost.

Our proposal contains three tasks for investigation of the sediments and alluvium. These tasks are summarized below.

Task 1 – Sediment Thickness Measurements

Task 2 – Alluvium Sampling, Testing, and Thickness Measurements

Task 3 – Sediment Screening (Optional Task)

Our proposed scope of work and fee estimate for each task is presented below. In all cases, we have assumed that IRWD will provide environmental assessments and monitoring, if required. We have assumed that a topographic survey of the lake bottom will be provided by IRWD, or that the existing bathymetric survey will be used as a topographic map.

### **Proposed Scope of Work**

#### Task 1 – Sediment Thickness Measurements

Sediment thickness measurements consist of obtaining data to allow calculation of the estimated volume of sediments that would need to be removed for new dam construction.

Task 1 work items consist of the following:

- Measurement Plan – A site-specific Measurement Plan will be prepared to identify target locations for measuring sediment thickness, and site logistics for making the measurements. A Draft Measurement Plan will be provided to IRWD for review and comment prior to the start of any field work.
- Health & Safety Plan – A site-specific Health and Safety Plan (HASP) will be prepared to identify appropriate personnel protective equipment to be worn by field staff during performance of the work, and identify potential risks associated with the work. The HASP will include specific job hazard analyses for various scope-related tasks.
- Field Measurements – Sediment thickness measurements will generally be obtained on a grid pattern throughout the reservoir area during one working day. The measurement locations will be limited to the areas that can be accessed by

foot. We anticipate that measurements will be made by pushing or hammering a section of rebar to refusal, presumed to be the bottom of the soft sediments. Access to measurement locations may require trampling of vegetation growth on the floor of the reservoir. Measurement locations will be documented by the use of a hand-held GPS device.

- Evaluation – Information on the thickness of sediment will be used to estimate the volume of sediment that will need to be removed for new dam construction.
- Technical Memorandum – The results of the investigation will be presented in a technical memorandum that will include a summary of measurement locations and measurement methods, table of measurements, and interpretation of the data. A draft technical memorandum will be submitted to IRWD for review, and finalized based on IRWD comments.

#### Task 2 – Alluvium Sampling, Testing, and Thickness Measurements

The alluvium investigation consists of drilling and sampling (boring) through the alluvium in the reservoir area, geotechnical laboratory testing of selected samples from the borings, evaluation of results, and documentation of the investigation in a technical memorandum.

Task 2 work items consist of the following:

- Sampling Plan – A site-specific alluvium sampling plan will be prepared to identify target boring locations, sample collection methodologies, and site logistics. A draft sampling plan will be provided to IRWD for review and comment prior to the start of any field work.
- Health & Safety Plan – The HASP developed for Task 1 will be updated as necessary for performance of Task 2.
- Field Exploration – GEI will engage a drilling firm to perform borings from the dried lake bottom surface for a period of three working days. We anticipate that between three and six borings through alluvium up to 35 feet deep can be completed within this timeframe, depending on the time required to move between boreholes. The drilling rig will be a specialized lightweight track-mounted rig to allow for easier travel over the soft sediments. Plywood sheets may be used to distribute the track loads while moving on the lake bottom surface, and plywood will be used at the drilling locations to provide stable working surfaces. We anticipate that borings will be advanced using hollow-stem augers. Split spoon samples of the alluvium will be obtained at approximate five-foot vertical intervals using ASTM procedures. We do not plan on obtaining samples of the soft sediments above the alluvium. Completed boreholes will be backfilled with soil cuttings. Disturbance to the lake bottom caused by drilling operations will not be repaired; some plywood sheets may remain in the reservoir bottom if too difficult to remove from the soft sediments. Sampling locations will be documented by the use of a hand-held GPS device.

- Geotechnical Testing – Five selected samples will be tested for the following geotechnical parameters: water content, Atterberg Limits (plasticity), and grain size.
- Evaluation – Information on the bottom depth of alluvium will be used to estimate the volume of alluvium that will need to be removed for new dam construction. The general geotechnical character of the alluvium will be evaluated from the standpoint of excavatability and handling.
- Technical Memorandum – The results of the investigation will be presented in a technical memorandum that will include a summary of boring locations and sampling methods, boring logs, laboratory testing results, and geotechnical interpretations. A draft technical memorandum will be submitted to IRWD for review, and finalized based on IRWD comments.

### Task 3 (Optional) – Sediment Screening

Sediment screening consists of obtaining three representative samples of the sediment at different locations in the reservoir by hand, and the performance of a suite of analytical (chemical) tests and geotechnical index tests on each sample. The intent of the analytical testing is to determine what types of agricultural-related constituents of concern, if any, may be present within the sediments in Syphon Reservoir. The purpose of the geotechnical testing is to obtain information on the character of the sediment with regard to its excavation and handling characteristics.

Task 3 work items consist of the following:

- Sampling Plan – A site-specific Sediment Sampling Plan will be prepared to identify target sample locations, anticipated sample collection methodologies, and sample handling and testing protocols. A Draft Sediment Sampling Plan will be provided to IRWD for review and comment prior to the start of any field work.
- Health & Safety Plan – The HASP developed for Task 1 will be updated as necessary for performance of Task 3.
- Field Sampling – Samples will be obtained via hand collection techniques in areas that are accessible via foot traffic within the lakebed at the time of the proposed work. For budgeting purposes, we have assumed that all sampling will be completed within one working day and that the sediment thickness to be sampled will not exceed five feet. Samples will be obtained at three discrete locations spread throughout the lakebed. One sample will consist of a composite of the material over the full thickness of sediment at the sampling location. In addition to obtaining composite samples for analytical testing, representative samples will be placed in sealed plastic buckets for storage and possible future use by IRWD in later phases of the Syphon Reservoir Expansion Project. Access to sampling locations may require trampling of vegetation

growth on the floor of the reservoir. Sampling locations will be documented by the use of a hand-held GPS device.

- Analytical Testing – Each composite sample of sediment will be tested for the analytes identified in Table 1:

**TABLE 1  
ANALYTICAL TESTING METHODS**

<b>EPA Method</b>	<b>Analytes</b>
8081A	Organochlorine Pesticides
8141	Organophosphorus Pesticides
8151B	Chlorinated Herbicides
6010/7471	California 17 Metals
9060	Total Organic Carbon
9045	pH

GEI will engage a State-licensed laboratory to perform the analytical testing, using a standard seven-day turnaround time.

- Geotechnical Testing – Each composite sample will be tested for the following geotechnical parameters: water content, Atterberg Limits (plasticity), and grain size.
- Evaluation – The results of analytical testing of sediment samples will be compared to California Regional Water Quality Control Board Environmental Screening Levels (ESLs), and EPA Regional Screening Levels (RSLs) for contaminated soil. The general geotechnical character of the material will be evaluated from the standpoint of excavatability and handling.
- Technical Memorandum – The results will be presented in a technical memorandum that will include a summary of sample collection locations and methodologies, laboratory testing results and interpretations, summary tables of data, and a photolog of the sampling. A draft technical memorandum will be submitted to IRWD for review, and finalized based on IRWD comments. Specific recommendations for the disposition of contaminated sediments, if found, are not part of this scope of work, but could be provided if necessary.

### **Fee Estimate**

Our fee estimate for performing the scope of work described above is presented in Table 2. The fee estimates for Tasks 2 and 3 are contingent upon Task 1 being performed. Our fee estimate will not be exceeded unless authorized to do so in writing by IRWD.

**TABLE 2  
FEE ESTIMATE**

<b>Task</b>	<b>GEI Labor \$</b>	<b>Direct Expenses \$</b>	<b>Subcontractors \$</b>	<b>Total \$</b>
1 – Sediment Thickness Measurements	10,500	300	0	10,800
2 – Alluvium Sampling, Testing, and Thickness Measurements	22,100	500	20,000	42,600
3 – Sediment Screening (Optional)	16,300	300	5,000	21,600
All Tasks Combined	48,900	1,100	25,000	75,000

Please contact me if you have any questions or require additional information.

Sincerely,

**GEI CONSULTANTS, INC.**

*Thomas O. Keller*

Thomas O. Keller, P.E., G.E.  
Vice President

TOK/drm

# IRVINE RANCH WATER DIST

# EXHIBIT "B"

## Expenditure Authorization

**Project Name:** SYPHON RESERVOIR EXPANSION  
**EPMS Project No:** 30382 **EA No:** 1  
**Oracle Project No:** 3808  
**Project Manager:** HOOLIHAN, MICHAEL  
**Project Engineer:** AKIYOSHI, ERIC  
**Request Date:** July 30, 2015

**ID Split:** Regional RW w/LAWD w/ Enhance (11/08)

**Improvement District (ID) Allocations**

ID No.	Allocation %	Source of Funds
211	.7	CAPITAL FUND
212	4.3	BONDS YET TO BE SOLD**
213	1.6	BONDS YET TO BE SOLD**
215	.2	CAPITAL FUND
221	4.3	BONDS YET TO BE SOLD**
230	3.2	BONDS YET TO BE SOLD**
235	2.6	PREVIOUSLY SOLD BONDS
240	2.5	BONDS YET TO BE SOLD**
250	10.3	BONDS YET TO BE SOLD**
261	3.0	BONDS YET TO BE SOLD**
299	67.3	CAPITAL FUND ENHANCEMENT**
<b>Total</b>	<b>100.0%</b>	

**Summary of Direct Cost Authorizations**

Previously Approved EA Requests:	\$0
This Request:	\$150,000
<b>Total EA Requests:</b>	<b>\$150,000</b>
Previously Approved Budget:	\$60,169,200
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$60,169,200</b>
<b>Budget Remaining After This EA</b>	<b>\$60,019,200</b>

**Comments:** Reduced by multi-zone ps and 8,100 ft of 36-inch pipe in the amounts of \$8.33 million and \$3.35 mill respectively: see projects 30408, 30409, 30410, and Dev.Serv. projects for newly added projects.

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING IRWD	35,000	0	35,000	0	60,000	60,000	6/15	7/17
ENGINEERING - PLANNING OUTSIDE	32,800	0	32,800	0	60,000	60,000	6/15	7/17
ENGINEERING DESIGN - IRWD	0	0	0	0	200,000	200,000	7/16	7/17
ENGINEERING DESIGN - OUTSIDE	0	0	0	0	4,000,000	4,000,000	7/16	7/17
ENGINEERING - CA&I IRWD	0	0	0	0	200,000	200,000	8/17	12/20
ENGINEERING - CA&I OUTSIDE	0	0	0	0	900,000	900,000	8/17	12/20
CONSTRUCTION	75,000	0	75,000	0	51,644,000	51,644,000	8/17	12/20
LEGAL	0	0	0	0	40,000	40,000	6/15	12/20
ENGINEERING ENVIRONMENTAL-OUTS	0	0	0	0	200,000	200,000	1/16	12/20
Contingency - 5.00% Subtotal	\$7,200	\$0	\$7,200	\$0	\$2,865,200	\$2,865,200		
<b>Subtotal (Direct Costs)</b>	<b>\$150,000</b>	<b>\$0</b>	<b>\$150,000</b>	<b>\$0</b>	<b>\$60,169,200</b>	<b>\$60,169,200</b>		
Estimated G/A - 185.00% of direct labor*	\$64,800	\$0	\$64,800	\$0	\$851,000	\$851,000		
<b>Total</b>	<b>\$214,800</b>	<b>\$0</b>	<b>\$214,800</b>	<b>\$0</b>	<b>\$61,020,200</b>	<b>\$61,020,200</b>		
Direct Labor	\$35,000	\$0	\$35,000	\$0	\$460,000	\$460,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

**EA Originator:** *Eric Akiyoshi* 7/30/15  
**Department Director:** *Kevin T. Burton* 8/3/15  
**Finance:** \_\_\_\_\_  
**Board/General Manager:** \_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$62,241,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

August 24, 2015

Prepared by: J. Moeder/R. Mori

Submitted by: K. Burton

Approved by: Paul Cook

RKM



## ACTION CALENDAR

### IRVINE LAKE PIPELINE NORTH CONVERSION RESERVOIR VARIANCE

#### SUMMARY:

Kleinfelder is completing the preliminary design phase for the Irvine Lake Pipeline (ILP) North Conversion Reservoir project and is ready to begin the final design. Kleinfelder's scope of work for the project has increased from the scope originally described in the Request for Proposals and includes additional efforts required to complete the preliminary design report and the final design. Staff recommends that the Board authorize the General Manager to execute Variance No. 2 in the amount of \$198,126 with Kleinfelder for additional efforts required to complete the preliminary design report and final design for the ILP North Conversion Reservoir project.

#### BACKGROUND:

The ILP North Conversion project will convert the Rattlesnake Reach of the ILP, which is located between Rattlesnake Reservoir and the proposed Zone C+ Reservoir, from untreated to recycled water service. The project includes constructing a new 2.4 million gallon (MG) buried concrete reservoir at the site of IRWD's existing 6.0 MG Santiago Hills Zone 5 Reservoir and various modifications at the Rattlesnake Reservoir Complex including the Zone A-C booster pump station. Preliminary design, final design, and construction phase services of the ILP North Conversion Reservoir project were awarded to Kleinfelder in November 2014 in the amount of \$723,654.

#### Variance No. 2:

Kleinfelder submitted Variance No. 2, attached as Exhibit "A", which included in its scope additional work related to adding surge tanks at the Zone A-C booster pump station, developing the strainer backwash pump and recovery system, developing multiple air gap facility alternatives, refining site grading alternatives, and optimizing the reservoir site layout. The nearly-completed preliminary design report includes a surge study that recommends adding surge tanks at the Zone A-C booster pump station, a task that was not originally included in Kleinfelder's scope of work. During the preliminary design phase Kleinfelder provide additional efforts, and in the design phase will develop a strainer backwash pump and recovery system that will reduce construction costs by avoiding the need to construct a sewer line from the reservoir site to Jamboree Road. Kleinfelder also expended additional efforts optimizing the site layout by exposing the front face of the reservoir and shortening the height of the reservoir, which will reduce the depth and ultimately the construction cost of onsite buried structures and the reservoir inlet and outlet pipelines.

Kleinfelder and staff reviewed the variance request and agree on those tasks outside the original scope of work. Staff recommends approval of Variance No. 2 in the amount of \$198,126 which brings the total Professional Services Agreement contract total to \$971,773. Kleinfelder is

scheduled to complete the preliminary design report by the end of August and proceed with final design. Staff anticipates completing the final design by February 2016.

FISCAL IMPACTS:

The ILP North Conversion Reservoir, Project 30496 (5407) is included in the FY 2015-16 Capital Budget. The existing budget is sufficient to fund Variance No. 2.

ENVIRONMENTAL COMPLIANCE:

The project is subject to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration (IS/MND) is being prepared in conformance with CEQA, California Code of Regulations Title 14, Chapter 3, Article 6, Section 15070.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on August 20, 2015.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 IN THE AMOUNT OF \$198,126 WITH KLEINFELDER TO PROVIDE ADDITIONAL EFFORTS REQUIRED TO COMPLETE THE PRELIMINARY DESIGN REPORT AND THE FINAL DESIGN FOR THE ILP NORTH CONVERSION RESERVOIR, PROJECT 30496 (5407).

LIST OF EXHIBITS:

Exhibit "A" – Kleinfelder Variance No. 2

**IRVINE R EXHIBIT "A" ISTRICT  
PROFESSIONAL SERVICES VARIANCE**

Project Title: ILP North Conversion Reservoir

Project No.: 30496 (5407)

Date: August 5, 2015

Purchase Order No.: 522806

Variance No.: 2

Originator:      IRWD      ENGINEER/CONSULTANT      Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*):

*Additional preliminary and final design work at Santiago Hills Reservoir Site and Rattlesnake Complex. See cover letter for more background information and labor breakdown.*

Engineering & Management Cost Impact:

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
SUBTASK 2.C.1 – CFD Modeling (Removed)			(\$17,066)	(\$22)		(\$17,088)
SUBTASK 2.C.2 – Revised Reservoir Design	56		\$7,585			\$7,585
SUBTASK 2.G.1 – Addl Strainer Alternatives	216		\$23,189		\$3,180	\$26,369
SUBTASK 2.H.1 - Addl Air Gap Design	334		\$27,620			\$27,620
SUBTASK 2.K.7 – Incorporate Geotech Recommenations	109		\$15,156			\$15,156
SUBTASK 2.L.1 – Revised Grading Plan	126		\$13,666			\$13,666
SUBTASK 3.C – Addl Construction Plans	786		\$8,358			\$124,818
					<b>Total \$ =</b>	<b>\$198,126</b>

Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
3	Final Design	Submit 100% Design in November 2015	3 weeks	Submit 100% Design in February 2016

Required Approval Determination:

Total Original Contract	\$ <u>723,654</u>	<input type="checkbox"/> Director: Cumulative total of Variances less than or equal to \$50,000.
Previous Variances \$	<u>49,993</u>	<input type="checkbox"/> Executive Director: Cumulative total of Variances less than or equal to \$75,000.
This Variance	\$ <u>198,126</u>	<input type="checkbox"/> General Manager: Cumulative total of Variances less than or equal to \$100,000.
Total Sum of Variances	\$ <u>248,119</u>	<input checked="" type="checkbox"/> Board: Cumulative total of Variances greater than \$100,000.
New Contract Amount	\$ <u>971,773</u>	
Percentage of Total Variances to Original Contract	<u>34</u> %	

ENGINEER/CONSULTANT: Kleinfelder  
Company Name

IRVINE RANCH WATER DISTRICT

Jacob Moador  
Project Engineer/Manager

8/6/15  
Date

Kari L. Bunker  
Department Director

8/6/15  
Date

\_\_\_\_\_  
Engineer's/Consultant's Management

\_\_\_\_\_  
Date

\_\_\_\_\_  
General Manager/Board

\_\_\_\_\_  
Date

# IRVINE RANCH WATER DISTRICT

## PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: ILP North Conversion Reservoir

Project No.: 30496 (5407) Project Manager: Jacob Moeder

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Additional work to investigate geotechnical conditions at Santiago Hills Reservoir Site.	3/5/15	3/5/15	\$49,993
2	Additional preliminary and final design work at Santiago Hills Reservoir Site and Rattlesnake Complex.	8/5/15		\$198,126



August 5, 2015  
 IRWD Reference No.: 30496 (5407)  
 Kleinfelder Project No.: 20153742.001A

Mr. Jacob Moeder  
 Irvine Ranch Water District  
 15600 Sand Canyon Avenue  
 Irvine, CA 92618

**Subject: Professional Services Variance No. 2: Request for Additional Engineering Services Related to IRWD Zone C+ Reservoir and Rattlesnake Complex Improvements for the Irvine Lake Pipeline North Conversion Project**

Dear Mr. Moeder:

Kleinfelder is in the process of completing the preliminary design phase for the ILP North Conversion Reservoir project. As we have progressed through the preliminary design phase, and at the direction of IRWD, we have undertaken several design activities that are over and above our original scope of services. Through this preliminary engineering services effort we have also identified additional design effort that will be required for the final design which was not originally part of the scope for the final design phase.

Attachment 1 identifies in detail the additional scope of service for the tasks in the preliminary and the final design phases.

Attachment 2 (Attachment 2a and Attachment 2b) provides the detailed level of effort fee estimate for the preliminary design and final design phases. The final design spreadsheet identifies the original level of effort proposed for a subtask that requires a change from the original scope, and then indicates the revised level of effort required to complete the subtask during final design. The table below provides a summary of the two aforementioned fee estimates for the requested variance related to the tasks that are currently authorized; only the preliminary and final design phases are impacted.

Task*	Current SOW and Budget, \$	Revised Design SOW and Budget, \$	Variance 2, \$
Task 1 Project Management	52,368	52,368	--
Task 2 Preliminary Design	316,434	389,742	73,708
Task 3 Final Design	302,902	427,720	124,818
Totals	671,704	869,830	198,126

\*List of Tasks does not include Task 4 Construction Phase Services

Our current authorized budget for these three tasks is \$671,704, which includes Variance No. 1 in the amount of \$49,993. As indicated above, the total design variance amount is \$198,126 with \$73,308 for preliminary design services and \$124,818 for final design services. The **total requested amount for Variance No. 2 is \$198,126**. The new total authorized budget for Tasks 1, 2 and 3 is be \$869,830. A budget summary is provided below:

Current Authorized Budget (Tasks 1 - 3)	\$671,704
<u>Design Variance from Table</u>	<u>\$198,126</u>
<b>Total Revised Authorized Budget</b>	<b><u>\$869,830</u></b>

### SCHEDULE IMPACTS

The additional efforts described herein resulted in the delay of the submission of the Final Site Master Plan and the Preliminary Design Report (PDR). The baseline schedule indicated that the PDR would be submitted on May 22; however that submission date was adjusted by a month and a half to July 6, 2015. The original schedule indicated the final design would begin in June 2015 and conclude at the end of December 2015. It is anticipated that authorization to begin final design will occur after the second August 2015 Board meeting, therefore we request that the schedule for final design be extended through February of 2016. This schedule adjustment is based on similar six month design period as the original schedule.

Thank you for your consideration of this request. If you have any questions about our scope, assumptions or level of effort, please do not hesitate to contact me at us at (949) 585-3111 or (619) 831-4536. Upon your review of this variance request, we will prepare the Professional Services Variance form pertaining to Project Number 30496 (5407).

Sincerely,

**KLEINFELDER**

Bart Patton, PE  
Client Account Manager

Dan Smith, PE  
Senior Principal Civil Engineer/VP

BP:DS:lam

**Zone C+ Reservoir and Rattlesnake Complex Improvements for the Irvine Lake Pipeline North  
Conversion Project**

**Variance 2**

**Additional Scope of Work**

**Task 2 – Preliminary Design Services**

Task 2.C – Santiago Hills Reservoir

**Original Scope:** *It is anticipated that a buried cast-in-place DN Tank will be utilized for the reservoir. The concrete tank will be designed for lateral seismic loads and hoop stresses created by static and dynamic water pressure according to the current AWWA D110 Type I design standard.*

*The preliminary design will evaluate performance and ways to reduce concrete shrinkage and cracking, and will explore proposed reservoir features including overflow provisions, venting, interior column sizing and spacing, subgrade preparation, foundation and footing requirements, pipe penetrations, and an evaluation of the need for a reservoir sub-drain system. Any pipe penetrations will be through the floor except the inlet pipe will be designed to penetrate the roof slab through a chimney style air gap structure.*

*KLF/SWE's project team will incorporate the tank design into the construction documents and will provide a full design specification for the tank as opposed to a performance specification.*

*Due to the site constraints for potential inlet/outlet piping configurations, a circulation optimization study will be performed with recommendations on how to optimize the circulation within the reservoir. This will entail creating a CFD model of the reservoir inlet and outlet configurations and run 1-2 scenarios for optimizing the circulation pattern within the reservoir.*

**Revised scope:** After submission of the Draft Site Master Plan PDTM, IRWD requested that Kleinfelder evaluate adjustments to the site grading to allow for an exposed reservoir face. This required revisions to the reservoir design and coordination with the site design layout.

Kleinfelder also evaluated the impacts of changing the reservoir dimensions from 118-foot diameter to 139-foot diameter which would allow for a reduction in the reservoir depth and the on-site piping depth. Kleinfelder coordinated with DN Tank to resize the reservoir, as well as develop a comparative cost estimate for evaluation of the proposed change in reservoir dimensions. Revisions to the reservoir design plans were required as a result of these changes.

### Task 2.G - Strainer Facility

**Original Scope:** *Due to the use of untreated water (UW) strainer facilities will be required to strain the flow from Irvine Lake prior to its delivery to the proposed Zone C+ reservoir. The existing ILP strainers located at Rattlesnake currently strain UW from the ILP before it is delivered to Zone A and Rattlesnake Park. KLF/SWE will develop design criteria for the strainer facility and evaluate the feasibility of relocating the existing ILP strainers at Rattlesnake to the proposed Zone C+ reservoir site or providing new strainers. Our team will also evaluate strainer backwash handling options including, at a minimum, conveying the backwash water to sewer, to a containment tank, or recycling it back into the RW system. As part of the pipeline improvements project (performed by a different consultant), a new sewer line in Santiago Canyon Road will be constructed to allow for disposal of strainer backwash water, if needed.*

**Revised scope:** In addition to the work described above, Kleinfelder's additional services include evaluation of alternative strainer locations (Irvine Park and Jamboree at Chapman) in addition to the Santiago Hills site, as well as hydraulic considerations for each. This effort also included development of preliminary opinions of probable construction costs which were used to compare the alternatives. In addition, the development of design criteria (i.e. Establishment of available flow to Zone C+ reservoir) required additional model runs to verify the available flow and size the proposed strainers required at each of the three alternative strainer locations.

This effort also included the design of strainer backwash pumping system that was not initially identified, but necessary due to the minimal pressure at the Zone C+ reservoir site. Kleinfelder performed additional calculations and evaluation, including analysis of the recharge potential of the site to infiltrate the backwash water. Ultimately, Kleinfelder recommended an onsite strainer backwash system which included a settling basin and pump system to return the water to the ILP inlet. Kleinfelder advanced this design, at the request of IRWD, to include a preliminary layout including sizing of the settling basin and selection of the pumps proposed for this backwash handling alternative.

The additional efforts described above also resulted in an increase in the level of effort to prepare the Preliminary Design Technical Memorandums (PDTM) and the Preliminary Design Report (PDR).

### Task 2.H - Air Gap Facility

**Original Scope:** *A new reservoir influent air gap facility will be required to provide a physical break between the UW delivered into the tank and the water stored within the tank. As requested by IRWD, KLF/SWE will develop an air gap structure concealed from view, in lieu of a typical air gap gooseneck type approach into the top of the reservoir. Our team will identify and evaluate various alternatives for accomplishing the air gap and will recommend a preferred alternative.*

**Revised scope:** In addition to the work described above, additional services included evaluation of additional air gap alternatives. In response to IRWD's request, the four (4) initial air gap alternatives were revised entirely after the Draft Site Master Plan PDTM. Further modifications to the design were made following IRWD's direction to revise the finished grading concept. Kleinfelder performed additional work to vet each of the four (4) additional alternatives from a hydraulic and design standpoint, as well as developing estimates of probable construction costs for each for comparison purposes. The revised alternatives required sizing of weirs, overflow options, and piping, which were submitted through email to IRWD and reflected in the Draft Final and Final Site Master Plan PDTM.

Following the PDR workshop, IRWD instructed Kleinfelder to prepare preliminary design level engineering details for another alternative based on an air gap in use at an IRWD facility. The new concept (tenth alternative total) was presented in the PDR. Due to elevation constraints, this air gap design required significant hydraulic effort to size and design a feasible structure and its interaction with the reservoir.

#### Task 2.K - Incorporation of Additional (Variance 1) Geotechnical Recommendations

**Original Scope:** *Not in original Scope of Work*

**Revised scope:** Kleinfelder performed additional geotechnical investigations as described in the Variance 1 request. As a result of those findings, Kleinfelder performed additional work to incorporate the findings and recommendations into the overall site design. The results of the additional investigation required revision of the proposed reservoir locations (affected all alternatives except alternative along southerly property line) as well as additional structural coordination to identify requirements for the slab foundation design over differing geologic units. Revising the reservoir locations affected the alignments of the inlet/outlet piping, equipment locations and impacted the grading scenarios for each alternative.

#### Task 2.L Revised Reservoir Finished Grading Concept

**Original Scope:** *KLF/SWE will develop grading concepts for the reservoir site, access road, and pipelines, incorporating any geotechnical issues and minimizing environmental and aesthetic impacts. The grading plan will utilize findings in the GIR and shall focus on the balance of cut and fill for the reservoir site.*

**Revised scope:** After submission of the Draft Site Master Plan PDTM, IRWD requested that Kleinfelder evaluate adjustments to the site grading to allow for an exposed reservoir face in lieu of completely burying the reservoir. The additional effort included reevaluation of the reservoir site from a grading and site improvement perspective requiring effort on the part of civil, geotechnical and structural engineers to revise and evaluate the site layout and pipeline impacts. The additional items of work include revisions to grading alternatives and earthwork

calculations, surface drainage preliminary design, hardscape for reservoir access and perimeter drainage, retaining wall evaluation, vault dimensions for valve and ring drain sump, location of electrical equipment, and access road from existing access to the Zone 5 Reservoir. Drainage concept changes included revisions to the paved surface drainage, slope of underground piping to outfall structure, addition of slope drains (increased height of slope), and ribbon gutters around most of the reservoir's perimeter. Further, this change required re-work of the site master plan layout as well as additional consideration of geotechnical and structural challenges associated with the larger reservoir diameter.

## Task 2 – Final Design Services

Original Scope: *see contract. Final Design includes:*

- *Design Coordination*
- *Project Manual*
- *Construction Plans*
- *Electrical/Instrumentation*
- *Project Schedule*
- *Liquidated Damages Spreadsheet*
- *Opinion of Probable Construction Cost*
- *Final Design Deliverables*
- *Addenda Preparation and Pre-Bid Meeting*

*The original scope includes final design of facilities identified in the preliminary design task.*

**Revised scope:** The preliminary design effort identified modifications to the project sheet list and identification of new facilities which were not previously accounted for in the final design scope. The revised scope includes development of details, plans and specifications to support the final design as described in the Final Preliminary Design Report, including the development of additional sheets not previously identified. An updated final design sheet list with additional design drawings typed in bold letters is presented below.

Original Sheet List	Identified Changes for Final Design		Comments
G-1 Cover Sheet	No Change		
G-2 Sheet Index, Legend and Vicinity Map	No Change		
G-3 General Notes, Abbreviations, Symbols and Project Key Plan/Index	No Change		
G-4 Construction Phasing	No Change		
C-1 Pipeline Notes	No Change		
C-2 Pipeline Plan and Profile I	No Change		
C-3 Pipeline Plan and Profile II	No Change		
C-4 Civil/Site Notes	No Change		
C-5 Site Layout Plan	<b>Update to include Strainer Backwash Recovery System, Strainer Pumps, Air Gap, Ring Drain</b>		
C-6 Excavation Grading Plan	No Change		
C-7 Grading Plan	No Change		
C-8 Civil Details I	<b>Update to include Ring Drain Pump Station Details</b>		

C-9 Civil Details II	No Change		
C-10 Rattlesnake Complex Site Plan	No Change		
C-11 Civil Details III	No Change		
C-12 Civil Details IV	No Change		
C-13 Inlet/Outlet Vault Details	No Change		
C-14 Overflow/Drain/Site Drainage Plan and Profile	No Change		
C-15 Reservoir Subdrain Plan	No Change		
	<b>C-16 Retaining Wall Plan/Profile</b>		
	<b>C-17 Pipe Connection at Zone 5 BPS</b>		<b>Including specifications</b>
	<b>C-18 Portola Parkway Pipeline Design</b>		<b>Including specifications</b>
	<b>C-19 Surge Tank Site Plan</b>		
D-1 Demolition Plan for Orchard Hills Strainer	No Change		
EC-1 Erosion control Plan for Construction Grading	No Change		
EC-2 Erosion Control Plan for Precise Grading	No Change		
M-1 Mechanical – Strainer Facility	No Change		
M-2 Mechanical – Flow Control and Metering Facility Modifications	No Change		
M-3 Mechanical Details I	No Change		
M-4 Mechanical Details II	No Change		
M-5 Mechanical Details III	No Change		
M-6 Rattlesnake Strainer Modifications	No Change		
M-7 Rattlesnake Sleeve Valve Modifications	<b>M-7 Rattlesnake Complex Mechanical Improvements</b>		<b>Remove valve and install blind flange, Add tee to replace bend</b>
M-8 Rattlesnake PRV Modifications	<b>M-7 Pipeline to Rattlesnake Reservoir</b>		
M-9 Zone A-C BPS/Surge Protection Modifications I	<b>M-9 Zone A-C BPS Modifications</b>		<b>Replace Impellers</b>
M-10 Zone A-C BPS/Surge Protection Modifications II	<b>M-10 Surge Protection Modifications I</b>		
	<b>M-11 Surge Protection Modifications II</b>		
	<b>M-12 Strainer Backwash Pumps</b>		<b>Including specifications</b>
	<b>M-13 Strainer Backwash Recovery System I</b>		<b>Including specifications</b>
	<b>M-14 Strainer Backwash Recovery System II</b>		<b>Including specifications</b>
	<b>M-15 Ring Drain Pump Station</b>		<b>Including specifications</b>
CP-1 Cathodic Protection Plan and Notes			
CP-2 Cathodic Protection Details I	No Change		
CP-3 Cathodic Protection Details II	No Change		
S-1 Structural Notes	No Change		
S-2 Structural Foundation Plan	No Change		
S-3 Structural Roof Framing Plan	No Change		
S-4 Structural Reservoir Section	No Change		
S-5 Structural Stair Sections and Details	No Change		
S-6 Structural Typical Details	No Change		
S-7 Structural Wall and Wall Footing Details	No Change		

	No Change		
S-8 Structural Roof Reinforcing Details	No Change		
S-9 Structural Details I	No Change		
S-10 Structural Details II	No Change		
S-11 Structural Details III	No Change		
S-12 Structural Roof Slab Reinforcing	No Change		
S-13 Structural Sump Plan And Sections	No Change		
S-14 Structural Valve Vault Plan and Sections	No Change		
	<b>S-15 Retaining Wall Structural Details</b>		<b>Including specifications</b>
	<b>S-16 Backwash Recovery System Structures</b>		<b>Including specifications</b>
	<b>S-17 Air Gap Structural Details</b>		<b>Including specifications</b>
	<b>S-18 Surge Tank Structural Details</b>		
E-1 Standard Symbols and Abbreviations	No Change		
E-2 Electrical Site Plan - Rattlesnake Complex	No Change		
E-3 Electrical Site Plan - Santiago Hills Zone C+ Reservoir	No Change		
E-4 Rattlesnake Complex PRV Power and Signal Plan	No Change		
E-5 Rattlesnake Complex MOV Power and Signal Plan	No Change		
E-6 Rattlesnake Complex Demolition Plan	No Change		
E-7 Santiago Hills Zone C+ Reservoir Inlet Power and Signal Plan	No Change		
E-8 Santiago Hills Zone C+ Reservoir Strainer Power	No Change		
E-9 Santiago Hills Zone C+ Reservoir Outlet Power and Signal Plan	No Change		
E-10 Santiago Hills Zone C+ Reservoir Metering Structure Power and Signal Plan	No Change		
E-11 Conduit Schedule - Rattlesnake Complex	No Change		
E-12 Conduit Schedule - Santiago Hills Zone C+ Reservoir	No Change		
E-13 Electrical Details	No Change		
	<b>E-14 Strainer Backwash Pumps Power</b>		<b>Including specifications</b>
	<b>E-15 Strainer Backwash Recovery System Pumps Power</b>		<b>Including specifications</b>
	<b>E-16 Surge Tank Power</b>		
I-1 P&ID Standard Symbols and Abbreviations	No Change		
I-2 P&ID Rattlesnake Complex	No Change		
I-3 P&ID Santiago Hills Zone C+ Reservoir	No Change		
	<b>I-4 P&amp;ID Santiago Hills Strainer Backwash and Backwash Recovery System</b>		<b>Including control description</b>
	<b>I-5 P&amp;ID Zone A-C Booster Pump Station</b>		<b>Including surge tank mods</b>

For the additional project facilities, not included in the original project scope of work, the additional Final Design effort includes:

- Design coordination
- Development of additional specification sections for
  - Retaining wall
  - Precast concrete structures
  - Strainer backwash system with reference specification sections
  - FRP Grating
  - Impeller replacement
  - Control description for BRS system
  - Compressors
  - Surge tanks with bladders
- Preparation of probable construction cost
- Project construction scheduling

### **Revised Project Schedule**

Following authorization to Kleinfelder by IRWD to proceed with Task 3 on August 25, 2015, the final design shall be completed with the following schedule of the project delivery milestones:

- 60% design completed and submittal to IRWD for review on October 9, 2015
- 60% design review completed on October 23, 2015
- 90% design completed and submitted to IRWD for review on January 4, 2016
- 90% design review completed on January 18, 2016
- 100% design completed and submitted on February 25, 2016

In a case of a delay of the Task 2 work authorization, schedule of the deliveries will be adjusted for a proportional number of days.

IRWD-Santiago Hills Zone C+ Reservoir and Rattlesnake Complex Improvements for ILP North Conversion Project  
 Variance 2  
 Attachment 2a - Task 2 Preliminary Design

Fee Estimates

#	Variance and Activities	Princ. E.	Additional Labor, h							Additional Fee, \$		Comment
			PM	APM	SE	PE	SEII	CAD/Graph	Total	KLF Labor, \$	Subs, \$	
<b>1</b>	<b>Task 2.C - Exposed and Revised Reservoir Dimensions</b>											Orig. SOW - 117 ft dia revised to 138 ft dia
	Reevaluation of Reservoir for Partially exposed reservoir	1	4	2	3	10			4	24	3,227	
	Revise structural layout drawings	1			2				8	11	1,109	
	Evaluate geotechnical conditions for larger footprint	3	4	2		8				17	2,673	
	Coordination with DN		2				2			4	576	
	<b>Total Fee for Exposed and Revised Reservoir Dimensions</b>	<b>5</b>	<b>10</b>	<b>4</b>	<b>5</b>	<b>18</b>	<b>2</b>	<b>12</b>	<b>56</b>	<b>56</b>	<b>7,585</b>	
<b>2</b>	<b>Task 2.G - Additional Strainer Facility Alternatives</b>											Orig. SOW: Relocate rattlesnake strainer New alternative
<b>1.1</b>	<b>Irvine Park Alternative</b>											
	Site Visit to Irvine Park		2	2			2			6	826	
	Coordination/Review of Hydraulic Profile (by Psomas)		1	2			4	2	9	946		
	Coordination with Electrical Engineer			1				2	3	301		
	Sizing of strainers (discussion with Psomas)		1	1			2	4	4	501	1,590	
	Confirmation of design flow rate		1	2			4	7	7	802		
	Calculate Backwash and evaluate Discharge options		1	1			1	3	3	413		
	Development of alternative cost estimate		0.5	2			4	2	8.5	846		Table 4-1 in PDTM
	Develop Schematic Figure			1			1	2	2	213		
	Draft Strainer PDTM narrative			2			4	2	8	746		
	QAQC/Produce Strainer PDTM		0.5	1				2	3.5	369		
	Address PDTM comments			2			4	6	6	602		
	Address Draft Final PDTM comments			1			2	3	3	301		
	QAQC/Produce Final Strainer PDTM		0.5	1				2	3.5	369		
<b>2</b>	<b>Jamboree Alternative</b>											New alternative
	Coordination/Review of Hydraulic Profile (by Psomas)		1	2			4	2	9	946	1,590	
	Coordination with Electrical Engineer			1				1	2	197		
	Sizing of strainers (discussion with Psomas)		1	1			2	4	4	501		
	Confirmation of design flow rate		1	2			2	2	7	770		
	Calculate Backwash and evaluate Discharge options		1	1			1	3	3	413		Table 4-1 in PDTM
	Evaluate Land Acquisition			1			1	2	2	213		
	Development of alternative cost estimate		0.5	2			4	2	8.5	846		
	QAQC/Produce Strainer PDTM		0.5	1				1	2.5	297		
	Address PDTM comments			2			1	3	3	338		
	QAQC/Produce Draft Final Strainer PDTM		0.5	1				1	2.5	297		
	Address Draft Final PDTM comments			1			1	2	2	213		
	QAQC/Produce Final Strainer PDTM		0.5	1				1	2.5	297		
<b>3</b>	<b>Santiago Hills Alternative</b>											
	Strainer concept development and siting								0	0		
	Hydraulic considerations/analysis								0	0		
	Documenting and reporting								0	0		
<b>4</b>	<b>Strainer Backwash Pumps</b>											SBP not in original SOW
	Review geotechnical data and discuss on-site infiltration			1			2	3	3	301		
	Investigate environmental permitting for discharge offsite			2			2	4	4	426		
	Develop figures for backwash discharge options (4)		1	2		4	4	4	15	1,570		
	Develop figures for Settling Basin Concept		1	2			6	2	11	1,122		
	Development of alternative cost estimate		1	2			4	2	9	946		
	Pump/Structure Selection		2	2			6	8	8	1,178		
	Draft Strainer PDTM narrative			1			6	7	7	653		
	QAQC/Produce Strainer PDTM		1	1				1	3	397		
	Address PDTM comments			1			2	3	6	517		
	QAQC/Produce Draft Final Strainer PDTM		1	1				1	3	397		
	Address Draft Final PDTM comments			1			2	3	3	301		
	QAQC/Produce Final Strainer PDTM		0.5	1				1	2.5	297		
	Draft PDR narrative and update figures		0.5	3			14	17.5	17.5	1,707		
	<b>Total Fee for Additional Strainer Facility Alternatives</b>		<b>23</b>	<b>57</b>		<b>4</b>	<b>96</b>	<b>38</b>	<b>216</b>	<b>216</b>	<b>26,369</b>	
<b>3</b>	<b>Task 2.H - Revised Air Gap Facility Design</b>											6 new alternatives and 4 in orig. SOW
	Develop Air Gap concepts for Draft PDTM								0	0		
	Develop new air gap concepts for Final PDTM		4	4			10	8	26	2,756		
	Coordination with IRWD on Air Gap concepts (email)		2	6			4	4	12	1,502		
	Redesign of site master plan to accommodate air gap changes		2	2		4	2	6	16	1,738		
	Development of alternative cost estimates		2	4		2	6	4	18	1,956		
	Hydraulic design of overflow/weir for preferred air gap (PDTM)		4	6			12	6	28	3,038		

	Redesign of reservoir overflow based on air gap redesign		4	2			4	6	16		1,834	
	Review of air gap and overflow with Structural Engineer			2			2		4		426	
	Draft/QAQC Revised PDTM narrative		2	4			6	4	16		1,716	
	Develop new air gap concept for Draft PDR		3	4			6	6	19		2,060	
	Review site design to accommodate overflow on site		1	2		4		2	9		1,074	
	Hydraulic design of overflow/weir for preferred air gap (PDR)		4	6			16	6	32		3,390	
	QAQC of Air Gap/Overflow hydraulics		8				2		10		1,776	
	Develop Hydraulic Profile		2	2			4		8		1,002	
	Coordination with IRWD on PDR Air Gap concepts		2	4			2		8		1,076	
	Update/Review Air Gap Cost Estimate			2			2	2	6		570	
	Draft PDR narrative		2	2		2	6	4	16		1,706	
	<b>Total Fee for Revised Air Gap Facility Design</b>		<b>56</b>	<b>74</b>	<b>0</b>	<b>12</b>	<b>114</b>	<b>78</b>	<b>334</b>		<b>27,620</b>	
<b>4</b>	<b>Task 2.K Incorporation of Geotechnical Recommendations</b>											<b>Not included in Original SOW</b>
	Review Grading/Stockpile Requirements in Landslide area		2	2	4		6		14		2,062	
	Review and Identify Structural Fill Soil Reuse Quantities		2	2	4		8		16		2,302	
	Adjust Site Master Plan layout after Draft GIR		2	2	4		8	8	22		2,564	
	Review of adjusted Site Master Plan with Geotech Eng		2	2	2		4		10		1,572	
	Update/QAQC Final Site Master Plan narrative		2	2	4		8	5	21		2,742	
	Identify overexcavation limits for reservoir foundation		4		2		8		14		2,094	
	ReDesign of Foundation Diff Settlement		2	2	2	2	2	2	12		1,820	
	<b>Total Fee for Incorporation of Geotechnical Recommendations</b>		<b>14</b>	<b>12</b>	<b>22</b>	<b>2</b>	<b>44</b>	<b>15</b>	<b>109</b>		<b>15,156</b>	
<b>5</b>	<b>Task 2.L Revised Reservoir Finished Grading</b>											<b>Orig. SOW - 117 ft dia revised to 138 ft dia</b>
	Evaluation of Alternative Size (cost/benefit)		2	2			8	6	4	22	2,426	
	Coordination with IRWD		2	2				2		6	826	
	Revise Site Grading		2	2		12	24	8	48		4,778	
	Revised Earthwork calculations/Cost Estimate		2	2		8	6		18		2,138	
	Revise OnSite Piping Design		2	2		12	16		32		3,498	
	<b>Total Fee for Revised Reservoir Finished Grading</b>		<b>0</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>40</b>	<b>54</b>	<b>12</b>	<b>126</b>	<b>13,666</b>	
	Credit for the CFD modeling										<b>(17,088)</b>	
<b>Total for Variance 2 Task 2 Preliminary Design</b>										<b>841</b>	<b>73,308</b>	

IRWD-Santiago Hills Zone C+ Reservoir and Rattlesnake Complex Improvements for ILP North Conversion Project  
 Variance 2  
 Attachment 2b - Task 3 Final Design Variance

Fee Estimates

#	Variance and Activities	Updated SOW & Fee Estimates									Design Variance		Comment	
		Princ. E.	PM	APM	SE	PE	SEII	CAD	Labor, h	Labor, h	Cost, \$			
1	<b>Retaining Wall Design</b>													Assumed split retaining wall
	Design Coordination	2	2	4	6	8				22	22	3,238		PM, meetings, discipline coordination
	Develop Specifications for Project Manual			2	6					8	8	1,186		One spec section for masonry concrete retaining wall
	Develop Structural Design	4	1		17			24	46	46	5,464			1 new S design drawing
	Develop Civil Design	2	2	10		16		24	54	54	5,740			1 new C design drawing
	<b>Total Fee for Retaining Wall</b>	<b>8</b>	<b>5</b>	<b>16</b>	<b>29</b>	<b>24</b>		<b>48</b>	<b>130</b>	<b>130</b>	<b>15,628</b>			
2	<b>Strainer Backwash Pumps and Backwash Recovery System</b>													
	Design Coordination	2	4	20	6	20	20			72	72	8,838		PM, meetings, subs and discipline coordination
	Develop Specifications for Project Manual		2	4			16			22	22	2,308		Reference specs
	Develop Structural Design	2	2		10			18	32	32	3,698			Specs and design for 2 precast structures equivalent to 1 new S drawings
	Develop Mechanical Design										17,970			3 new M drawings & system spec section (not template)
	Develop Electrical Design										6,200			2 new equivalent E drawings
	Develop I&C Design		2	2		4			8	8	4,630			1 new I&C drawing and control description
	Incorporate into Civil Design		2	3		6	9	9	28	28	2,773			Equivalent to 1/4 of C design drawings
	Backwash water, 200 ft sewer connection pipeline										13,000			200 ft pipeline design from original SOW and budget
	<b>Total Fee for Strainer Backwash and Recovery System</b>		<b>12</b>	<b>29</b>	<b>16</b>	<b>30</b>	<b>45</b>	<b>27</b>	<b>162</b>	<b>162</b>	<b>43,417</b>			
3	<b>Air Gap Design</b>													
	Design Coordination	2	2	6	4	4	4			22	22	3,048		PM, meetings, discipline coordination
	Develop FRP Grate Specifications for Project Manual			4	4	4				8	8	1,104		1 new spec section for grating
	Develop Structural Design	2	2	5	16			32	58	58	3,706			1 new S drawings
	Develop Air Gap Pipe Design		2	6		8		8	24	24	2,686			Equivalent to 1/4 of a M drawings
	Incorporate into Civil Design		2	2		8		8	20	20	2,086			Equivalent to 1/4 of C design drawings
	<b>Total Fee for Air Gap</b>	<b>4</b>	<b>8</b>	<b>20</b>	<b>24</b>	<b>24</b>	<b>4</b>	<b>48</b>	<b>132</b>	<b>132</b>	<b>12,630</b>			
4	<b>Pipe Connection at Existing Booster Pump Station</b>													
	Design Coordination		2	4		4				10	10	1,380		PM, meetings, design coordination
	Develop Civil Design	2	4	8		18		22	54	54	5,986			1 new C design drawing
	<b>Total Fee for Piping Connection, Existing PS</b>	<b>2</b>	<b>6</b>	<b>12</b>		<b>22</b>		<b>22</b>	<b>64</b>	<b>64</b>	<b>7,366</b>			
5	<b>Ring Drain and Pumps</b>													
	Design Coordination		2	4			4	4	14					
	Develop Specifications for Project Manual		2	4			16		22	22	2,308			1 new spec sections - not standard template
	Develop Mechanical Design	2	5	12			20	24	64	64	6,630			
	Incorporate into Civil Design		2	2		2	4	6	14					
	<b>Total Fee for Ring Drain and Pumps</b>	<b>2</b>	<b>10</b>	<b>22</b>		<b>2</b>	<b>44</b>	<b>34</b>	<b>114</b>	<b>86</b>	<b>8,938</b>			
6	<b>Design of Pipeline at Portola Parkway</b>													
	Design Coordination			4		6				10	10	1,220		
	Develop Pipeline Design										7,060			1 new C design drawing
	<b>Total Fee for Pipeline at Portola Parkway</b>			<b>4</b>		<b>6</b>				<b>10</b>	<b>10</b>	<b>8,280</b>		
7	<b>Miscellaneous Improvements at Rattlesnake Complex</b>													
	Design Coordination	2	2	6		6				16	6	490		PM, meetings, subs and discipline coordination
	Remove valve and install blind flange													Replace existing sheet
	Design 12-inch pipe to Rattlesnake Park							32	32	32	2,304			Replace existing sheet
	Add a tee to replace the 90 degree bend.							20	20	20	1,440			Replace existing sheet
	Sleeve Valve Modifications										(5,550)			
	PRV Replacement										(5,550)			
	<b>Total Fee for Revised Reservoir Dimensions</b>	<b>2</b>	<b>2</b>	<b>6</b>		<b>6</b>		<b>52</b>	<b>68</b>	<b>58</b>	<b>(6,866)</b>			
8	<b>Design of Surge Tank at BPS</b>													
	Design Coordination	2	2	8	4	6	6			28	18	2,314		PM, meetings, subs and discipline coordination
	Develop Structural Design	4	2		8			20	34	34	3,972			1 new S drawings
	Develop Civil Design	2	4	14		12		24	56	56	6,160			1 new C drawings
	Develop Electrical Design		2	6					8	8	5,120			1 new E drawing
	Develop I&C Design, Drawings and Control Desc.	2	2			2		2	10	10	4,676			1 new I&C Drawing and control description
	Develop Mechanical Design		2	2		4		4	12	12	7,033			1 new M drawing
	<b>Total Fee for Surge Tank at BPS</b>	<b>10</b>	<b>14</b>	<b>32</b>	<b>12</b>	<b>24</b>	<b>6</b>	<b>50</b>	<b>148</b>	<b>138</b>	<b>29,275</b>			
9	<b>Impeller Modifications</b>													
	Design Coordination		2	4						6				PM, meetings, subs and discipline coordination
	BPS Modifications													
	<b>Total Fee for Additional Surge Analysis</b>		<b>2</b>	<b>4</b>						<b>6</b>				
10	<b>Additional Surge Analysis Modeling</b>													
	Design Coordination		2	4						6	5	900		PM, meetings, subs and discipline coordination
	Surge Analysis										5,250			Surge analysis and reporting
	<b>Total Fee for Additional Surge Analysis</b>		<b>2</b>	<b>4</b>						<b>6</b>	<b>6</b>	<b>6,150</b>		
<b>Total Variance 2b</b>											<b>786</b>	<b>124,818</b>		

August 24, 2015

Prepared by: J. Smyth/M. Cortez

Submitted by: K. Burton

Approved by: Paul Cook 

## ACTION CALENDAR

### PIEZOMETER AUTOMATION CONSTRUCTION AWARD

#### SUMMARY:

This project will automate the collection of piezometer data at the dams of Rattlesnake, Sand Canyon and Syphon Reservoirs. Staff recommends that the Board authorize the General Manager to execute a construction contract with Halcyon Electric in the amount of \$110,000 for the Piezometer Automation, Project 30572.

#### BACKGROUND:

Currently, staff manually reads open standpipe piezometers at the dams of Rattlesnake, Sand Canyon and Syphon Reservoirs. The piezometers are located on steep slopes and walking access is difficult. The project will install vibrating wire piezometers (VWPs) at the dams of Rattlesnake, Sand Canyon and Syphon Reservoirs, similar to the VWPs at the upstream dam face of the San Joaquin Reservoir. At this reservoir, the VWPs are hardwired to a datalogger installed in an enclosure at the dam crest access road. Staff collects piezometer readings by simply downloading the data from the datalogger which mitigates the fall risk by eliminating the need for staff to traverse the steep slopes of the dams.

The project will also replace the existing corroded enclosure and datalogger at the San Joaquin Reservoir to upgrade and standardize this equipment with the new datalogger.

#### Construction Award:

The project was advertised on July 15, 2015 to a select list of seven electrical contractors. Three contractors attended the pre-bid meeting held on July 21, 2015. The bid opening was held August 6, 2015 with bids received from Johnson-Peltier, Halcyon Electric, and Leed Electric. Halcyon Electric is the apparent low bidder with a bid amount of \$110,000. The Bid Summary is attached as Exhibit "A". The engineer's estimate, prepared by staff, was \$59,000. Staff attributes the discrepancy between the engineer's estimate and the apparent low bid to an underestimation of the labor effort associated with installation, testing, and startup activities. Leed Electric submitted a bid in the amount of \$160,636, and Johnson-Peltier submitted a bid in the amount of \$119,360. The bid submitted by Johnson-Peltier did not include the required Performance Bond, and based on consultation with legal counsel, it was determined Johnson-Peltier's bid was non-responsive. Staff reviewed Halcyon Electric's bid and has determined that it is responsive. Staff recommends awarding the construction contract to Halcyon Electric in the amount of \$110,000.

#### FISCAL IMPACTS:

Project 30572 (6298) is included in the FY 2015-16 Capital Budget. The existing budget is sufficient to fund this work.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15301 which provides exemption for minor alterations of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. A Notice of Exemption for the project was filed with the County of Orange on June 3, 2015.

COMMITTEE STATUS:

Construction awards are not routinely taken to Committee prior to submittal to the Board.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH HALCYON ELECTRIC IN THE AMOUNT OF \$110,000 FOR THE PIEZOMETER AUTOMATION, PROJECT 30572 (6298).

LIST OF EXHIBITS:

Exhibit "A" – Bid Summary

## EXHIBIT "A"

Bid Opening: Thursday, August 6, 2015  
@ 1:00 p.m.

Irvine Ranch Water District Bid Summary For  
Piezometer Automation  
PR 30572 (6298)

Entered By: J.K. Irey

Item No.	Description	Qty	Unit	Engineer's Estimate		1 Halcyon Electric, Inc. Placentia, CA		2 Leed Electric, Inc. Santa Fe Springs, CA	
				Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
1	Mobilization, Demobilization, Cleanup and Soil Disposal	1	LS	\$10,000.00	\$10,000.00	\$6,000.00	\$6,000.00	\$8,400.00	\$8,400.00
2	Install automated vibrating wire (VBW) piezometer system at Rattlesnake Canyon Dam including but not limited to VBW piezometers, VBW barometer, conduit, cable, enclosure, unistrut, datalogger with rechargeable battery, solar panel, lightning protection, grounding, and all other appurtenant work.	1	LS	\$8,000.00	\$8,000.00	\$19,000.00	\$19,000.00	\$26,508.00	\$26,508.00
3	Install automated vibrating wire (VBW) piezometer system at Syphon Canyon Dam including but not limited to VBW piezometers, VBW barometer, conduit, cable, enclosure, unistrut, datalogger with rechargeable battery, solar panel, lightning protection, grounding, and all other appurtenant work.	1	LS	\$15,000.00	\$15,000.00	\$35,000.00	\$35,000.00	\$61,787.00	\$61,787.00
4	Install automated vibrating wire (VBW) piezometer system at Sand Canyon Dam including but not limited to VBW piezometers, VBW barometer, conduit, cable, enclosure, unistrut, datalogger with rechargeable battery, solar panel, lightning protection, grounding, and all other appurtenant work.	1	LS	\$12,000.00	\$12,000.00	\$30,000.00	\$30,000.00	\$51,746.00	\$51,746.00
5	Remove existing enclosure and install new enclosure, datalogger with rechargeable battery, solar panel, and connect existing VBW piezometers at San Joaquin Dam.	1	LS	\$6,000.00	\$6,000.00	\$5,600.00	\$5,600.00	\$6,675.00	\$6,675.00
6	Eight (8) hours operator training in two four (4) hour sessions.	1	LS	\$2,000.00	\$2,000.00	\$1,000.00	\$1,000.00	\$2,400.00	\$2,400.00
7	Startup, Testing, and Commissioning	1	LS	\$3,000.00	\$3,000.00	\$12,000.00	\$12,000.00	\$2,400.00	\$2,400.00
8	Operation & Maintenance Manuals	1	LS	\$1,000.00	\$1,000.00	\$1,200.00	\$1,200.00	\$360.00	\$360.00
9	Final Record Drawings	1	LS	\$2,000.00	\$2,000.00	\$200.00	\$200.00	\$360.00	\$360.00
	Subtotal				\$59,000.00		\$110,000.00		\$160,636.00
	Adjustment (+ or - )				\$0.00		\$0.00		\$0.00
	<b>TOTAL AMOUNT OF BID</b>				<b>\$59,000.00</b>		<b>\$110,000.00</b>		<b>\$160,636.00</b>
						<b>Manufacturer</b>		<b>Manufacturer</b>	
	*A Bid was received from Johnson-Peltier, but was determined to be Non-Responsive					Vibrating wire piezometers: Geokon		Vibrating wire piezometers: Geokon	
						Vibrating wire barometers: Geokon		Vibrating wire barometers: Geokon	
						Solar Panels: Amersco Solar		Solar Panels: Geokon	
						Dataloggers with rechargeable batteries: Geokon		Dataloggers with rechargeable batteries: Geokon	
						Stainless Steel Enclosures: Hoffman		Stainless Steel Enclosures: Hoffman	
						<b>Subcontractors:</b>		<b>Subcontractors:</b>	
						None Listed		None Listed	