AGENDA

IRVINE RANCH WATER DISTRICT BOARD OF DIRECTORS REGULAR MEETING

November 25, 2019

PLEDGE OF ALLEGIANCE

<u>CALL TO ORDER</u> 5:00 p.m., Board Room, District Office

15600 Sand Canyon Avenue, Irvine, California

ROLL CALL Directors Reinhart, Matheis, Swan, and 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 three 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.

COMMUNICATIONS TO THE BOARD

- 1. A. Written:
 - B. Oral:
- 2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Recommendation: Determine the need to discuss and/or take immediate action on item(s).

PRESENTATIONS

Resolution No. 2019-29

3. RESOLUTION RECOGNIZING JOHN WITHERS FOR HIS 30 YEARS OF SERVICE TO IRWD AS A DIRECTOR OF THE BOARD

Recommendation: Adopt a resolution by title recognizing John Withers for his 30 years of service to IRWD as a Director of the Board.

Res. No. 2019-29

4. RESOLUTION RECOGNIZING PEER A. SWAN FOR HIS 40 YEARS OF SERVICE TO IRWD AS A DIRECTOR OF THE BOARD

Recommendation: Adopt a resolution by title recognizing Peer A. Swan for his 40 years of service to IRWD as a Director of the Board.

Res. No. 2019-30

PUBLIC HEARING

5. CHANGES TO IRWD'S RULES AND REGULATIONS

Recommendation:

- a. Open the hearing.
- b. Inquire of the Secretary how the hearing was noticed.
- c. Receive and file the affidavit of posting and proof of publication.
- d. Inquire of the Secretary if there have been any written notifications.
- e. Request the Executive Director of Finance and Administration to provide a report.
- f. Hear any person who wishes to address the Board concerning the amended resolution.
- g. Inquire of the Board if it has any comments or questions.
- h. Close the hearing, introduce the resolution for First Reading, read by title only, waive further reading of the resolution, and direct the Secretary to place the resolution on the agenda for the December 16, 2019 meeting of the Board of Directors for a second reading, hearing and adoption.

CONSENT CALENDAR

Resolution No. 2019-29

Items 6-12

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

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

7. <u>MINUTES OF BOARD MEETINGS</u>

Recommendation: That the minutes of the November 11, 2019 Special Board meeting and the November 11, 2019 Regular Board meeting be approved as presented.

8. OCTOBER 2019 TREASURY REPORT

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Summary of Fixed and Variable Rate Debt, and Disclosure Report of Reimbursements to Board members and staff; approve the October 2019 Summary of Payroll ACH payments in the total amount of \$2,117,028; and approve the October 2019 Accounts Payable Disbursement Summary of warrants 402586 through 403540, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$32,181,115.

CONSENT CALENDAR

Resolution No. 2019-29

Items 6-12

9. PLANNING AREA 51 HERITAGE FIELDS CAPITAL FACILITIES

Recommendation: That the Board authorize the General Manager to execute a Supplemental Reimbursement Agreement with Heritage Fields for Planning Area 51, Great Park Neighborhoods, Districts 2, 3, 5, 6, 9, Domestic Water, Sanitary Sewer and Recycled Water Capital Improvements; authorize the General Manager to accept Heritage Fields' construction contract with Leatherwood Construction Inc. in the amount of \$1,615,806.60 for the Reach B East Sanitary Sewer Improvements, Project 10576; authorize the General Manager to accept Heritage Fields' construction contract with Leatherwood Construction Inc. in the amount of \$875,564.70 for the Reach C Sanitary Sewer and Recycled Water Improvements, Projects 10574 and 10734; authorize the General Manager to accept Heritage Fields' construction contract with Leatherwood Construction Inc. in the amount of \$225,835.00 for the Reach B East "P" Street Sanitary Sewer Improvements, Project 10868; and approve Contract Change Order No. 11 to Project 10117 in the amount of \$163,839.00 for the addition of deep sewer facility demolition and relocation tasks to the scope of the Reach B Sanitary Sewer Improvements.

10. PLANNING AREA 12 INNOVATION PARK CAPITAL FACILITIES

Recommendation: That the Board authorize the addition of the Planning Area 12 Innovation Park Capital Domestic Water Improvements, Project 11395 in the amount of \$410,000 to the FY 2019-20 Capital Budget, authorize the General Manager to execute a Supplemental Reimbursement Agreement with Irvine Community Development Company for Planning Area 12, Innovation Park, Domestic Water and Recycled Water Capital Improvements, and authorize the General Manager to accept Irvine Community Development Company's construction contract with Paulus Engineering, Inc. in the amount of \$560,844 for the Innovation Park Domestic Water and Recycled Water Improvements, Projects 11395 and 03734.

11. <u>SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT</u> PERMITTING SERVICES VARIANCE NO. 2

Recommendation: That the Board authorize the General Manager to execute Variance No. 2 in the amount of \$160,970 to the Professional Services Agreement with ESA for additional environmental permitting work associated with the Syphon Reservoir Geotechnical Investigations Project.

12. <u>KERN FAN GROUNDWATER STORAGE PROJECT VARIANCE FOR</u> PROFESSIONAL SERVICES WITH THE HALLMARK GROUP

Recommendation: That the Board authorize the General Manager to execute Variance No. 3 in the amount of \$77,060 to the Professional Services Agreement with Hallmark Group for the development of terms for an agreement with the California Department of Water Resources for the construction of a turnout from the California Aqueduct and the operation of the Kern Fan Groundwater Storage Project.

ACTION CALENDAR

13. SAN JOAQUIN RESERVOIR FILTRATION VARIANCE NO. 2

Recommendation: That the Board authorize the General Manager to execute Variance No. 2 in the amount of \$347,129 to Carollo Engineers for the San Joaquin Reservoir Filtration, Project 10379.

14. <u>TURTLE RIDGE NATURAL TREATMENT SYSTEM FACILITY</u> SEDIMENT REMOVAL CONTRACT AWARD

Recommendation: That the Board authorize the General Manager to execute a contract with New Dimension General Construction, Inc. in the amount of \$158,800 for sediment removal at the Turtle Ridge Natural Treatment System Facility.

15. REVISED TERMS FOR A 4-FOR-1 PILOT EXCHANGE PROGRAM WITH MOJAVE WATER AGENCY

Recommendation: That the Board authorize the General Manager to execute a 4-for-1 pilot exchange letter agreement and a side agreement to compensate Mojave Water Agency for the water delivered into storage that incorporates the proposed exchange and compensation terms, both agreements subject to substantive changes approved by the Supply Reliability Programs Committee or subject to non-substantive changes.

16. AMENDMENTS TO LANDOWNER AND PLANNING AGREEMENTS FOR COMPLIANCE WITH SUSTAINABLE GROUNDWATER MANAGEMENT PLAN

Recommendation: That the Board authorize the General Manager to execute Amendment No. 1 to the Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District and the First Amended Groundwater Sustainability Planning Agreement between Rosedale Rio Bravo Water Storage District and Irvine Ranch Water District, subject to substantive changes approved by IRWD's legal counsel and the Supply Reliability Programs Committee or subject to non-substantive changes.

OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, and 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.

OTHER BUSINESS (Continued)

- 17. General Manager's Report
- 18. Directors' Comments
- 19. Receive oral update(s) from District liaison(s) regarding communities within IRWD's service area and provide information on relevant community events.
- 20 Adjourn

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.

November 25, 2019 Prepared and submitted by: L. Bonkowski Approved by: Paul A. Cook

PRESENTATION

RESOLUTION RECOGNIZING JOHN WITHERS FOR 30 YEARS AS A MEMBER OF THE IRWD BOARD

SUMMARY:

Irvine Ranch Water District recognizes Board Member John Withers for 30 years of service. A resolution, attached as Exhibit "A", noting this achievement is recommended for approval by the Board.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2019-28

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA, RECOGNIZING JOHN WITHERS FOR HIS 30 YEARS OF SERVICE TO IRWD AS A DIRECTOR OF THE BOARD

LIST OF EXHIBITS:

Exhibit "A" - Resolution

No. 3 - Dir Withers Reso 30 Yrs.doc

Exhibit "A"

RESOLUTION 2019-29

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT,
ORANGE COUNTY, CALIFORNIA, RECOGNIZING JOHN WITHERS FOR HIS 30 YEARS OF SERVICE AS A DIRECTOR OF THE BOARD

WHEREAS, John Withers was appointed to the Irvine Ranch Water District Board of Directors on December 18, 1989 and has been appointed / elected in subsequent years; and

WHEREAS, Mr. Withers served as President of the Board in 2004 and Vice President in 2012; and

WHEREAS, Mr. Withers currently serves on the Water Resources Policy and Communications Committee, is the lead representative for the District at the Orange County Sanitation District and the National Water Research Institute, is the alternate representative for the District at the Santiago Aqueduct Commission, the City of Orange / Orange Park Acres, the Independent Special Districts of Orange County, the California Association of Sanitation Agencies, and the Orange County Business Council; and

WHEREAS, Mr. Withers served as Commissioner to the Orange County Local Agency Formation Commission for over 20 years, and served as Chairman of the Santa Ana Regional Water Quality Control Board, having been appointed by Gov. Pete Wilson in 1992.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Irvine Ranch Water District commends John Withers for his dedicated years of service and expresses its gratitude for his leadership, vision and the significant contributions he has rendered to the community and the water industry as a member of the Irvine Ranch Water District Board of Directors.

ADOPTED, SIGNED AND APPROVED this 25th day of November, 2019.

		NCH WATER rectors thereof	
Secretary,	IRVINE RAI	NCH WATER	DISTRIC

November 25, 2019 Prepared and submitted by: L. Bonkowski Approved by: Paul A. Cook

PRESENTATION

RESOLUTION RECOGNIZING PEER SWAN FOR 40 YEARS AS A MEMBER OF THE IRWD BOARD

SUMMARY:

Irvine Ranch Water District recognizes Board Member Peer A. Swan for 40 years of service. A resolution, attached as Exhibit "A", noting this achievement is recommended for approval by the Board.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:

RESOLUTION NO. 2019-28

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA, RECOGNIZING PEER A. SWAN FOR HIS 40 YEARS OF SERVICE TO IRWD AS A DIRECTOR OF THE BOARD

LIST OF EXHIBITS:

Exhibit "A" – Resolution

No. 4 - Dir Swan Reso 40 Yrs.doc

Exhibit "A"

RESOLUTION 2019-30

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA, RECOGNIZING PEER A. SWAN FOR HIS 40 YEARS OF SERVICE AS A DIRECTOR OF THE BOARD

WHEREAS, Peer A. Swan was elected to the Irvine Ranch Water District Board of Directors on November 6, 1979; and

WHEREAS, after serving two terms as Vice President of the Board in 1980 and 1981, Mr. Swan was elected President, a position he held from 1982 through 1995 and again during 2006. He further served as as Vice President in 1980, 1981, 1998, 2002, 2003, 2009, 2010, 2014 and 2017; and

WHEREAS, Mr. Swan currently serves as chair of the Finance and Personnel Committee and the Supply Reliability Programs Committee, a member of the Serrano Water District Committee; the District's representation for the Municipal Water District of Orange County, and the Association of California Water Agencies/Joint Powers' Insurance Authority; and

WHEREAS, Mr. Swan has served on the Board of Directors for the Association of California Water Agencies (ACWA) as its chair of ACWA Region 10 that encompasses Orange and San Diego Counties; and

WHEREAS, Mr. Swan has served as President of the Water Advisory Committee of Orange County (WACO) and is currently a member, is the President of the Board and founding member of the San Joaquin Wildlife Sanctuary, and is a member of the Steering Committee of the Southern California Water Dialog Committee; and

WHEREAS, Mr. Swan has been an active participant in the California Association of Sanitation Agencies, and the Newport Chamber of Commerce; and

WHEREAS, Mr. Swan was a member of the Board of the Metropolitan Water District of Southern California representing the residents and agencies within the Municipal Water District of Orange County; and

WHEREAS, Mr. Swan served as a Director of the Orange County Sanitation District, where he was Vice Chairman for six years and was a founding Director on the Board of the National Water Research Institute where he was Chairman for four years. He is also a long-time member of the National Audubon Society and its local chapter, Sea and Sage.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Irvine Ranch Water District commends Peer A. Swan for his dedicated years of service and expresses its gratitude for his leadership, vision and the significant contributions he has rendered to the community and the water industry as a member of the Irvine Ranch Water District Board of Directors.

ADOPTED, SIGNED AND APPROVED this 25th day of November, 2019.

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

November 25, 2019

Prepared by: C. Clary/C. Smithson

Submitted by: Cheryl Clary
Approved by: Paul A. Cook

PUBLIC HEARING

CHANGES TO IRWD'S RULES AND REGULATIONS

SUMMARY:

Staff has compiled proposed changes to the District's Rules and Regulations for Water, Sewer, Recycled Water, and Natural Treatment System Service. The proposed changes include both substantive and non-substantive changes. The substantive changes proposed in this update are highlighted as follows:

- Updates definitions, responsibilities and requirements associated with the Fats, Oils and Grease Program;
- Updates monitoring and inspection requirements for the recycled water system; and
- Updates discontinuance of water service requirements consistent with new state law.

Non-substantive changes consist of expanded, clarified and updated definitions.

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 December 16, 2019 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

November 10, 2019. The notice was also posted in the District office on

November 11, 2019. The Secretary presents an Affidavit of Posting and Proof

of Publication for the Board to receive and file.

Board: <u>RECOMMENDED MOTION:</u> RECEIVE AND FILE THE AFFIDAVIT OF

POSTING AND 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 and Administration.

Action Calendar: Changes to IRWD's Rules and Regulations

November 25, 2019

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Exec. Dir. of Report and describe the proposed revisions and indicate that the

Finance and clarifications and revisions to the Rules and Regulations are summarized in

Adm. 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.

President: Ask for a motion to Close the hearing, that the resolution be read by title only

by the Secretary, that further reading of the resolution be waived, and that the Secretary be directed to place the resolution on the agenda for the December 16,

2019 meeting of the Board of Directors for a second reading, hearing and

adoption.

RECOMMENDATION:

THAT THE HEARING BE CLOSED, THAT THE RESOLUTION BE 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 DECEMBER 16, 2019 MEETING OF THE BOARD OF DIRECTORS FOR A SECOND READING, HEARING AND ADOPTION.

Secretary: Read the title of the proposed Resolution:

RESOLUTION RESCINDING RESOLUTION NO. 2018-14
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. In this process, formatting and presentation changes are included and some wording and definitions have been updated to promote consistent and conforming nomenclature throughout the document. Recommended changes are included in the attached redlined document provided in Exhibit "A" and will be adopted by resolution as provided in Exhibit "B". Recommended changes include the following:

Action Calendar: Changes to IRWD's Rules and Regulations

November 25, 2019

Page 3

<u>Updates definitions, responsibilities and requirements associated with the Fats, Oils and Grease Program:</u>

Updates responsibilities and requirements in the event of sewer system overflows, private lateral sewer discharges and requirements for transferability, duration and modification of terms and conditions on permits.

Updates monitoring and inspection requirements for the recycled water system:

Updates include monitoring program, entry, inspections and testing, supervisor training and duties, notification process, compliance, enforcement process and penalties.

<u>Updates discontinuance of water service requirements:</u>

A new law SB 998 is effective February 2020. The law specifies that water service discontinuance can be suspended if an adult living at the facility appeals the water bill or when acceptable proof of medical and financial circumstances are submitted to the District and the customer agrees to an alternative payment schedule.

IRWD's General 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

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



Irvine Ranch Water District Orange County, California

Board
ApprovedPROP
OSED May 29,
2018

<u>December 16,</u> <u>2019</u>

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
 - A.2 Sewer Improvement Districts
 - A.3 Cities within IRWD Boundaries
- B. Rates and Charges for Water, Sewer, and Recycled Water Service (Separate Document)
- C. Maximum Allowable Local Limits

SECTION 1: GENERAL

Availability of Service Subject to these Rules and Regulations. 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 fees and charges established under Exhibit B, Schedule of Rates and Charges. Service will be made 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.

Boundaries. The boundaries of the District and its Improvement Districts are depicted on Exhibits A-1 (Potable Water System Improvement Districts) and A-2 (Sewer System Improvement Districts). The cities and villages within the District's boundaries are depicted on Exhibit A-3. Upon a change in the boundaries of the District or any of its Improvement Districts, Exhibits A-1, A-2, and A-3 will be revised and replaced as necessary. The area served by the District is discussed further in Section 1.

Improvement Districts. The 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. The Board may consolidate or form additional Improvement Districts or annex additional areas to any Improvement District.

Contracts. 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.

Facilities Plan. The plans for facilities to be constructed within the District and any Improvement District 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, and are referred collectively to as ""the Plan.""

Recycled Water. The State of California mandates conservation of water resources whenever possible, and accordingly the Plan includes collecting, treating, and reclaiming sewage and wastewater and beneficially reusing the resulting recycled water. The District intends that recycled water use comply with any and all applicable Federal, State, and local laws, regulations, and other governmental requirements. If the District determines that recycled water service is feasible under Section 4.12, the applicant, owner, or customer will be required to utilize recycled water service.

Urban Runoff – Natural Treatment System. The District also intends, in cooperation with the County and Cities, to treat certain urban runoff through the operation, maintenance and monitoring of constructed water quality wetlands and bioretention cells, known as Natural Treatment Systems will be sited in various locations in the District, as outlined in the Natural Treatment System Master Plan or as otherwise determined by the District. Use of the Natural Treatment System for urban runoff treatment is subject to the

requirements of these Rules and Regulations. The District will determine the level of treatment. Property owners and developers will be 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.

Land Use. The District constructs facilities 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.

Sewer Service Requires Water Service. In most instances, sewer service is provided only where the District has determined that it will also be providing permanent water service to the applicant, customer, or property owner.

Variances. The District may modify by special contract the requirements of these Rules and Regulations, including but not limited to applicable rates and charges, only upon the determination that unique circumstances exist.

SECTION 2: DEFINITIONS

For the purpose of these Rules and Regulations, the following terms, phrases, words, and their derivations will 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.

- AIR-GAP SEPARATION means 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.
- APPLICANT means any person, firm, corporation, association, or agency who desires to obtain water, sewer, recycled water and/ or natural treatment system service from the District.
- APPLICATION RATE means the rate at which irrigation water, expressed in inches per hour, is applied to a DESIGN AREA.
- APPROVED CHECK VALVE means 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. *
- APPROVED DOUBLE CHECK VALVE ASSEMBLY means 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.

APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE means 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 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.

^{*} 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.

- AUTOMATIC SYSTEM means 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.
- AUXILIARY WATER SUPPLY means any water supply on or available to the premises other than the District's potable water and recycled water supplies.
- BACKWATER DEVICE means 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.
- BASE INDEX means a water budget applicable for commercial, industrial or public authority usage.
- BUILDING SEWER see "UPPER LATERAL."
- BOARD means the Board of Directors of the District.
- COMMODITY CHARGE means 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.
- CONNECTION FEE means a charge imposed by the District for obtaining water, sewer, recycled water or natural treatment system service from the District, including charges for capacity. Connection fees are set forth in Exhibit B, Schedule of Rates and Charges.
- CONSTRUCTION MANUAL means the District's "Construction Manual for the Construction of Water, Sewer, and Recycled Water Facilities," as amended from time to time.
- CONTINGENCY PLAN is the Water Shortage Contingency Plan adopted by the District, as amended from time to time.
- CROSS CONNECTION means 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 not or cannot be approved as safe, wholesome, and potable for human consumption.
- CUSTOMER means any person, firm, corporation, association, or agency that has a permit to obtain water, sewer, recycled water and/or natural treatment system service from the District.
- DESIGN AREA means the specific land area or facilities designated to be served through on-site facilities when used in reference to recycled water systems.

- DISTRICT means the Irvine Ranch Water District.
- IMPROVEMENT DISTRICT means any of the Improvement Districts of the District existing or hereafter established.
- INFILTRATION RATE means the rate at which the soil will accept water, expressed in inches per hour, during the irrigation period.
- IRRIGATION SYSTEM means 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.
- LATERAL CONNECTION means the point of connection of the customer's upper lateral with the lower lateral of the District.
- LOWER LATERAL means the District's facility between its collection system and the lateral connection, which is normally the exterior boundary of the easement or the street or access road right-of-way.
- LOWER LATERAL CHARGE means a charge imposed by the District for installation by the District of a lower lateral.
- MANAGER or GENERAL MANAGER means the General Manager of the District or the person authorized by the Board or the General Manager to act for him.
- NATURAL TREATMENT SYSTEM means the network of constructed water quality wetlands and bioretention cells providing treatment of urban runoff. Natural treatment systems are not flood control facilities.
- NON-POTABLE WATER means 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 California, non-potable well water, and water collected in the District's reservoirs from natural runoff.
- NON-RECYCLABLE SEWAGE means 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 includes 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.
- NON-RECYCLABLE WASTEWATER SEWAGE FACILITIES means 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 sewage 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.
- NTS DESIGN GUIDELINES means the District's "Natural Treatment System Design Guidelines," as amended from time to time
- OFFSITE FACILITIES means 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.
- ONSITE FACILITIES means facilities under the control of the applicant, owner, or customer including but not limited to residential, commercial, and industrial building water and sewage 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.
- ONSITE RECYCLED WATER SUPERVISOR means 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.
- PERMIT means a processed and approved application and agreement with the District for service.
- PERSON means any individual, firm, partnership, association, company, or organization of any kind
- PLAN means 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.
- POTABLE WATER means that water furnished to the customer which meets applicable local, state and federal standards for drinking water.
- PRETREATMENT means treatment that the District may require prior to permitting discharge of sewage into any District sewage facility if necessary to insure compliance by the District with these Rules and Regulations and any and all applicable Federal, State, or local statues, 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.
- PROCEDURES GUIDE means the District's "Procedural Guidelines and General Design Requirements," as amended from time to time.

- PROPERTY OWNER or OWNER means 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.
- RECLAMATION PLANT means District treatment facilities that receive and treat wastewater for beneficial uses.
- RECYCLABLE SEWAGE means wastewater that can be treated and recycled by the District's facilities so as to be usable for beneficial purposes.
- RECYCLED WATER means 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.
- RECYCLED WATER DISTRIBUTION SYSTEM means 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.
- RECYCLED WATER FACILITIES means 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.
- RECYCLED WATER SERVICE CONNECTION means the point of connection of the customer's recycled water line with the recycled water service line of the District, which will normally be the downstream end of the recycled water meter tailpiece.
- RECYCLED WATER SERVICE LINE means the District's facility between its recycled water distribution system and the recycled water service connection.
- RECYCLED WATER SERVICE LINE CHARGE means a charge imposed by the District for installation by the District of recycled water meters and service lines.
- RECORD DRAWINGS means drawings that correctly show the completed facilities as constructed or modified (as-built).
- RULES AND REGULATIONS means these "Rules and Regulations for Water, Sewer, Recycled Water and Natural Treatment System Service," as amended from time to time.
- SECURITY DEPOSIT means 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.

SELF-REGENERATIVE WATER SOFTENER means a unit that in removing minerals from water produces a waste containing minerals in greater amounts than those in the influent water.

SEWAGE – see WASTEWATER

- SEWER COLLECTION SYSTEM means 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.
- SEWER [SEWAGE] FACILITIES means any facilities used in the conveyance, pumping, and treatment of wastewater.
- SERVICE CHARGE means 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.
- SURCHARGE means 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.
- TRUNK SEWERS means 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.
- UNAUTHORIZED DISCHARGE means 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.
- UPPER LATERAL means the line from the lateral connection to the building or improvements of the applicant, owner, or customer.
- URBAN RUNOFF means dry and wet weather low flow runoff from urban spaces and small storm flow.
- WASTEWATER means liquid and water carried waste and water, whether treated or untreated, discharged into or permitted to enter a District sewer. Also sometimes called SEWAGE.

- WASTEWATER CONSTITUENTS AND CHARACTERISTICS means 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.
- WATER means, in the general usage of these Rules and Regulations, potable water.
- WATER BUDGET means a reasonable amount of water for a given customer's needs and property characteristics, including: the number of occupants, lot size, size of irrigated area, any business requirements, and climate. See also BASE INDEX.
- WATER DISTRIBUTION SYSTEM means (individually or collectively) any water facilities that 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 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 will be final and conclusive.
- WATER FACILITIES means any facilities used in the treatment, storage, pumping, and conveyance of water.
- WATER SERVICE CONNECTION means the point of connection of the customer's building water line with the water service line of the District, which will normally be the downstream end of the water meter tailpiece.
- WATER SERVICE LINE means the District's facility between its distribution system and the water service connection.
- WATER SERVICE LINE CHARGE means a charge imposed by the District for installation by the District of water meters, service lines, and connections for private fire protection facilities.

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, within the boundaries of the District, and to service outside of its boundaries pursuant to contract. If water, sewer, recycled water, or natural treatment system facilities and/or capacity do not exist in the immediate area, then the applicant, owner, or customer must provide or finance those facilities and/or that 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 therefor, must cause all such facilities and/or capacity or funds to be transferred to the District.

Annexation. 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.

Improvement Districts. The District, 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.

SECTION 4: GENERAL REQUIREMENTS

4.1 SERVICE CONDITIONS

Service by Permit Only. The District will provide water, sewer and natural treatment system service only if a permit for that service is obtained in the manner described below, unless otherwise determined by the Board. Furthermore, if the District has determined that recycled water will be provided in accordance with the provisions of Section 4.12, the service will be provided only if a permit for recycled water service is obtained in the manner described below, unless otherwise provided by the Board.

Service Subject to These Rules & Regulations. Water, sewer, recycled water and natural treatment system service is available only in accordance with these 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 Boards, and state and local health departments, as well as the terms of any service agreement and permit issued by the District. The District may revoke any permit at which time all water, sewer, recycled water and natural treatment system service under that permit will cease in the manner provided for in these Rules and Regulations (see Sections 7 and 14).

4.1.1 Water Supply Sufficiency

- (1) 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.
- (2) The California statutes enacted by that legislation include:
 - (a) Water Code Section 10910 et seq. (the "Water Supply Assessment Law"), which requires a water supply assessment in conjunction with the California Environmental Quality Act ("CEQA") process. The Water Supply Assessment Law applies to subdivisions of more than 500 units and certain other categories of projects defined by the Assessment Law.
 - (b) Government Code Section 66473.7 (the "Water Supply Verification Law"), which requires a water supply verification in conjunction with the tentative map approval process. The Water Supply Verification Law applies to subdivisions of more than 500 units, subject to specified exemptions.
- (3) The Water Supply Assessment Law and the Water Supply Verification Law require the District to determine, based on the record, whether the District's currently available and under-development water supplies are sufficient to meet

the demands of applicant's project and the District's existing and planned uses over a 20-year projection during normal, single-dry and multiple-dry years.

- (4) Applicant's Duties in Connection with Water Supply Assessments. 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.
- (5) **No Entitlement to Service**. Any water supply assessment or verifications prepared by the District will not entitle the applicant's 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 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

- 4.2.1 **Application**. An application for water, sewer, recycled water and natural treatment system service must be made in writing, via the telephone, the District website, or in person. The District may require an application be signed by the applicant, and the owner or customer, if they are not one and the same. The Manager may provide an abbreviated form of application for permits if he determines that no unusual facts exist.
- 4.2.2 **Information Required**. The applicant may be required to provide the following information per account:
 - (1) Name of applicant(s)
 - (2) Date service is required
 - (3) Location of service
 - (4) Mailing address
 - (5) Purpose for which service is to be used (e.g. residential, commercial or irrigation)
 - (6) Contact phone number
 - (7) Social Security Number or Tax Identification Number
 - (8) Driver License Number, Passport, or State Identification
 - (9) Such other information as the District may reasonably require.
- 4.2.3 **Application Fees and Deposits**. The applicant shall pay a non-refundable, one-time service establishment fee. A security deposit may be assessed in lieu of providing a Social Security Number or Tax Identification Number or based on prior credit history with the District. See Exhibit B, Schedule of Rates and Charges for fee and deposit amounts.
- 4.2.4 **Additional Discharge Permit**. An applicant for sewer service may be required to obtain a discharge permit for use of the District's sewage facilities in addition to the permit required for all applicants for sewer service. The conditions under which the additional permit is required are based on quantities and constituents of wastewater discharged into the District's sewage facilities. Section 7 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.

- 4.2.5 **Compliance with Law; Additional Approvals.** By applying for service, the applicant for a water, sewer, recycled water, or natural treatment system service permit 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.
- 4.2.6 Additional Requirements. Upon receipt of an application, the Manager shall review the application and make any investigation 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, sewage, 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.

4.3 PERMITS

- 4.3.1 **Compliance**. 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.
- 4.3.2 **Payment Prior to Permit Issuance**. The applicant shall pay the District's specified fees and charges prior to the issuance of a permit. These charges are set forth in Exhibit B, Schedule of Rates and Charges, and may be changed by the District from time to time. If assessment bond proceeds finance facilities normally funded by connection fees or by a developer subject to reimbursement, then those assessments must be paid concurrently with the payment of the associated connection fees. The Board may defer in its discretion the payment of any such assessment bonds in instances when an interim nonresidential use is to occur.

- 4.3.3 **Termination of Service**. 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, the District may terminate service under the conditions set forth below:
 - (1) 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 at any time the applicant's, owner's, or customer's operations do not conform to the applicable requirements, as provided for herein.
 - (2) 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 that case, be restored when the recycled water at the terminal point of the reclamation plant again meets the requirements of regulatory agencies or when the District supplements the recycled water system from sources other than the reclamation plant.
- 4.3.4 **Limit of Liability**. 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 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. 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 may determine the size of the water and recycled water service lines, the service connections, and the meters and will also 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 may 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. The design must be in accordance with the District's Procedures Guide, Construction Manual, and NTS Design Guidelines.

4.5 LIMITATIONS ON SERVICE CONNECTIONS

Permits will be issued according to 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 must be supplied by a single water meter. A separate landscape irrigation meter is required for a property under the 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 must 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, that connection and meter will 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 will be held responsible and charged for all water passing through their meters.
- (7) Every water service will be equipped with an angle curb stop or wheel valve on the inlet side of the meter; that valve or angle curb stop is 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, that replacement will 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.
- (9) Fire protection systems must not be supplied through District meters that serve more than one residential unit.
- (10) As of July 1, 2018, water meter service lines must not be combined, connected or looped on the customer side. Private or customer side service lines must be kept independent from other service lines and supply independently plumbed zones within the same building. Any water meter service lines that were combined, connected, or looped on the customer side and permitted by the District prior to July 1, 2018 will be considered legal non-conforming uses and may remain (subject to permit) unless and until the property is redeveloped.

4.5.2 Lower Laterals

- (1) For single family detached unit residential development a separate and independent lower lateral must be provided for every individual parcel or building under individual ownership.
- (2) For condominium developments the following minimum number of lower laterals must be provided:
 - (a) *Non Stacked*: 1 lower lateral per every two units Minimum 4" size.
 - (b) Two-Story Stacked: 1 lower lateral per every four units Minimum 6" size.
 - (c) *Multi-Story*: 2 lower laterals per building Minimum 6" size.
- (3) For commercial, industrial, hotel, and For apartment developments the following minimum number of lower laterals must be provided: 1 lower lateral per building Minimum 86 BRII" size, except under special conditions as determined by the District. 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, that lower lateral will 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 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

If 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 is of the wrong size or installed at a wrong location, then the cost of all changes required must 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 will be considered temporary and the costs for all repairs or changes required to be performed by the District must be paid by the applicant, owner, or customer.

4.7 ILLEGAL CONNECTIONS, DIVERSIONS, OR TAMPERING

4.7.1 **Definitions**

- (1) "**Divert**" means to change the intended course or path of water or wastewater into or out of the District's system without the authorization or consent of the District. Any unpermitted discharge into the District's facilities, and any unpermitted withdrawal of potable or recycled water from the Districts' facilities is a "**diversion**."
- (2) "Tampering" means the unauthorized entering, breaking, damaging, destroying, uncovering, defacing, rearranging, injuring, altering, or interference with any temporary or permanent structure (including any pipeline), equipment (including any pumps or back-flow devices), or appurtenance owned by the District or that is part of the District's water, wastewater, recycled water, or natural treatment systems. Any unpermitted connection to the District's facilities is "tampering."

Installation by anyone other than the District of aAny equipment installed in any District facility, including a meter box or pressure regulating valve (PRV) vault or onto any meter or PRV, is "tampering". This includes but is not limited to leak detection equipment, flow sensors, batteries or antennas. If any unpermitted equipment is installed it will be removed by District staff.

Tampering also includes but is not limited to diverting from the District's system eonsuming any water which has not been correctly registered, reconnecting water service that has been disconnected or shut-off by the District for nonpayment or other reasons, removing the meter register so flow is not detected and removing the meter tampering tag.

(2)

- 4.7.2 **Prohibition**. Diversion and tampering are prohibited.
- 4.7.3 **Specific Prohibited Diversions to Sewers**. The following must not 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): roof downspouts, exterior foundation drains, areaway drains, car wash pads not covered by a roof, or other sources of surface runoff or ground water.
- 4.7.4 **Penalties for Diversion or Tampering**. Diversion and tampering are crimes under the California Penal Code and are violations of the Water Code and the Civil Code. Diversion and tampering may be subject to charges and penalties, as well as referral to the District Attorney for criminal prosecution. All charges and penalties shall be applicable and collected in accordance with section 14 and Exhibit B, Schedule of Rates and Charges and pursuant to all other applicable laws and regulations.

4.8 METER TESTING

4.8.1 If a water or recycled water meter fails to register during any period or is known to register inaccurately, the customer shall be charged using a reasonable average

daily consumption based on prior consumption or other reasonable calculation in the absence of historical consumption data. Upon the customer's written demand and payment of a testing deposit, the District will examine and test the meter through which water or recycled water is being furnished to determine whether it is correctly registering the amount of water or recycled water being delivered through it.

4.8.2 If the District determines the meter to register over two percent (2%) more water than actually passes through it, then the District shall properly adjust the meter or replace the meter, return the deposit, and adjust the customer's bill accordingly. If the meter registers not more than two percent (2%) more water than actually passes through it, then the District will retain the deposit as the testing cost.

4.9 FIRE HYDRANTS

- 4.9.1 Fire hydrants connected to the District's mains and fire hydrants that are served by an applicant, owner, or customer fire line 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. If the District permits the use of hydrants for purposes other than extinguishing fire, that permit will 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 a hydrant for temporary construction use or other purposes will be in accordance with the applicable schedule contained in Exhibit B, Schedule of Rates and Charges.
- 4.9.2 Unpermitted hydrant use is hereby deemed a waste of water, and is subject to interim or permanent revocation of the underlying connection permit and fees or fines pursuant to Section 14 and Exhibit B, Schedule of Rates and Charges. Interim and or permanent revocation of water service provided for the sole purpose of fighting fires may require, pursuant to Orange County Fire Authorities regulations, the applicant, owner, or customer to provide sufficient fire protection and or fire watch at no cost to the District.

4.10 WATER BACKFLOW PREVENTION

4.10.1 **General**

- (1) 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."
- (2) 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.

(3) 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.

- (4) 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.
- (5) 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.
- (6) 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.
- (7) 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.
- (8) 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. Additional monitoring and inspection rules are in Section 8 of these Rules and Regulations.
- 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.
- (6) Premises being served water through a temporary above ground water service connection.
- 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.

4.10.4 Inspection and Maintenance of Protective Devices

- (1) 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.
- (2) 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.
- (3) 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.

(4) 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

- (1) 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.
- (2) 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."
- (3) 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.
- 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

- (1) If 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:
 - (a) Refusal to install a required backflow prevention device.
 - (b) Refusal to test a backflow prevention device.
 - (c) Refusal to repair a faulty backflow prevention device.
 - (d) Refusal to replace a faulty backflow prevention device.
 - (e) Direct or indirect connection between the District's water system and a sewer.

- (f) Unprotected direct or indirect connection between the District's water system and a system or equipment containing contaminants.
- (g) Unprotected direct or indirect connection between the District's water system and an auxiliary water system.
- (h) A situation which presents an immediate health hazard to the District's water system, as determined by the health agency or the District.
- (i) At single-family residences which contain water systems, the installation of any piping shall be in conformance with IRWD's Procedures Guide.
- (2) For conditions 4.10.7(1)a, b, c, d or i above, the District will terminate service to a customer's premises as follows:
 - (a) First Notice. 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.
 - (1) The completed, original forms shall be returned to the District. Copies of the completed forms shall also be sent to the local health department.
 - (2) The applicant, owner or customer shall notify the District any time the device is repaired, replaced or relocated.
 - (b) Second Notice. A second notice shall be sent to each water user that does not have the 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 <u>fifteen</u> (15) -day period to have the backflow prevention device tested or take other corrective action.
 - (c) Third Notice. 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 ten(10) -day period to have the device tested or take other corrective action.
 - (d) Notice of Service Termination. 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 time period

stated in the District's *Notice of Service Termination*, then water service may be terminated in accordance with Section 14, ENFORCEMENT AND PENALTIES.

(3) For conditions 4.10.7(1)e, f, g, or h 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

- 4.11.1 Residences and other buildings served by the District's sewage 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.
- 4.11.2 Backwater devices required by this section must be located where they will be readily and easily accessible for inspection and repair at all times and, unless continuously exposed, must be enclosed in a watertight masonry pit fitted with an adequately sized removable cover.
- 4.11.3 The applicant, owner, or customer must provide and maintain, at his expense, backwater devices and appurtenances as required in this section. Each such device must be located on the property it protects and must not be allowed in the public right of way.

4.12 USE OF RECYCLED WATER

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 must 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 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:

- (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:
 - (a) Recycled water is served to an available location. "Available location" means (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;
 - (b) The District can provide recycled water in the needed volume, quality, pressure and flow rate;
 - (c) The anticipated use(s) at the subject site are allowed for in Title 22 of the California Code of Regulations;
 - (d) The construction/retrofit can be accomplished in compliance with Federal, State, County and District requirements;
 - (e) The anticipated use(s) will not negatively impact public health;
 - (f) The use of recycled water will not diminish water rights; and
 - (g) Recycled water is available at a reasonable cost, meaning:
 - (1) The commodity cost for recycled water is less than the commodity cost for a like quantity of potable water; and
 - (2) 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.

- (2) District will contact potential recycled water use site representative to discuss the use of recycled water.
- (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) District staff will review documentation provided by customer supporting why recycled water cannot be used.
 - (a) 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
 - (b) 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.
- (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.
- (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 ("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 as set forth in Exhibit B, Schedule of Rates and Charges. 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.
- 4.12.74.12.8 Temporary Use of Potable Water in lieu of Recycled Water. If the District determines that a recycled water customer can't reasonably be served recycled water due to issues caused by the District's recycled water system, then the District may serve the customer potable water and the customer will be billed using the recycled water rate until the issue is resolved by the District.
- 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. 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 a temporary connection is made, the portion without recycled water must 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. Unless otherwise specified on an approved IRWD Construction plan, —Tthe 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. If damages to District facilities are a result of neglect of maintenance responsibilities or unapproved improvements within an IRWD easement, IRWD reserves the right to recover up-repair costs from the applicant, owner or customer.
- 4.15.3 Sewer Multi-Dwelling Units (Condominium Complexes and Townhomes).

 Unless otherwise specified on an approved IRWD Construction plan,

 Mmaintenance 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. If damages to District facilities are
 a result of neglect of maintenance responsibilities or unapproved improvements
 within an IRWD easement, IRWD reserves the right to recover up-repair costs
 from the applicant, owner or customer.

4.15.4 Sewer – Commercial and Industrial Properties

(1) <u>Unless otherwise specified on an approved IRWD Construction plan, I</u> 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 damages to District facilities are a result of neglect of maintenance responsibilities or unapproved improvements within an IRWD easement, IRWD reserves the right to recoverup repair costs from the applicant, owner or customer.

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

- (1) 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.
- (2) 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 maintenance during the construction and establishment period as specified in the Procedures Guide and the NTS Design Guidelines.

4.16 WATER EFFICIENCY, CONSERVATION AND MANAGEMENT PRACTICES

- 4.16.1 As stated in Section 1, it is the desire of the District to effect conservation and efficient use 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.
- 4.16.2 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 and installed in such a way as to meet or exceed the water efficiency requirements of any applicable local or State standards.

4.16.3 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.

- 4.16.4 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.
- 4.16.5 Rate and extent of application of water shall be controlled by the user so as to minimize run-off from the irrigated areas.
- 4.16.6 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.
- (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 day 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.

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, 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.

5.6 ALTERNATE FINANCING FOR AFFORDABLE AND/OR LOWINCOME HOUSING PROJECTS

- **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 5.65.1 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 5.65.1.
- 5.6.2 **Initiation of Public Financing.** Upon receiving a request pursuant to Section 5.6.1, the District shall, unless it makes the findings set forth in Section 5.6.3, 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 5.65.1 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 5.65.3, the District shall render a written decision which identifies the evidence it relied upon and the reasons supporting its decision.
- 5.6.4 **Time for Acting on Request**. The District shall act upon a request made pursuant to Section 5.65.1 within 60 days of the receipt of the request.
- 5.6.5 **Affordable and/or Low Income Housing.** "Affordable and/or Low Income Housing" has 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" means 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 5.65.1, 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.

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

- (1) 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.
- (2) 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.
- (3) 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.

- (4) 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.
- (5) 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:
 - (a) To make sure that all operations personnel are trained and familiarized with the use of recycled water.
 - (b) 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.
 - (c) To prepare and submit to the District one (1) set of record drawings.
 - (d) 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 Procedures Guide and Construction Manual which document is on file at the office of the District, and by this reference is incorporated herein 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.
 - (e) 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:
 - (1) Cross-connections between potable water facilities and onsite recycled water facilities are forbidden.
 - (2) Hose bibs on recycled water facilities are forbidden.

- (3) Drinking fountains shall be protected from the spray of recycled water.
- (4) 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.
- (f) 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:
 - (1) 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.
 - (2) 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.
 - (3) 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.
 - (4) 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.
- (g) 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

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.

- (h) 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.

SECTION 7: USE OF DISTRICT SEWAGE FACILITIES

7.1 GENERAL

- 7.1.1 The provisions established in Section 7 shall pertain to all discharges into any District sewage 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 sewage collection facilities that transport wastewater to facilities other than the Michelson Water Recycling Plant.
- 7.1.2 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 sewage 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 sewage 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.
- 7.1.3 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.
- 7.1.4 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.

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:

- ADMINISTRATIVE COMPLAINT means a document used by the District to initiate a proceeding to impose civil penalties pursuant to Section 7.6.9 2.7.(2).
- BIOCHEMICAL OXYGEN DEMAND (BOD) means 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.
- BUILDING DRAIN SANITARY means 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.
- BUILDING DRAIN STORM means 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.
- BUILDING SEWER SANITARY means 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.
- BUILDING SEWER STORM means 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.

- BYPASS means the intentional diversion of waste streams from any location within an industrial users facility not approved in a user's permit.
- CALIFORNIA WATER DISTRICT LAW means the law of the State of California that governs the formation of California Water Districts and establishes procedures and powers of such Districts.
- CALIFORNIA TOXICS RULE means 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.
- CHEMICAL OXYGEN DEMAND (COD) means 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).
- CLASS I USER means any user who discharges wastewater 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 affect 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's or OCSD sewage facilities.
- CLASS II USER means 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 waste other than sanitary, and that is not otherwise required to obtain a Class I permit.
- CODE OF FEDERAL REGULATIONS (CFR) or FEDERAL REGULATIONS means the codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.
- COLIFORM means any number of organisms common to the intestinal tract of man and animals whose presence in sanitary sewage is an indicator of pollution.
- COLLECTION SEWER means a sewer whose primary purpose is to collect wastewaters from individual point source discharges.
- COMBINED SEWAGE means a combination of both wastewater and storm or urban runoff.
- COMBINED SEWER means a sewer intended to receive both wastewater and storm or urban runoff.
- COMPATIBLE POLLUTANT means 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.

- COMPOSITE SAMPLE means 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.
- DEPARTMENT HEAD means 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.
- DISCHARGER means 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".
- DISSOLVED SOLIDS means 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.
- DISTRICT CONNECTION CHARGE means a fee imposed by the District for connecting directly to a public sewer or to a sewer which ultimately discharges into the District sewage facility.
- DISTRICT'S SEWAGE FACILITIES means any property belonging to the District used in the treatment, reclamation, reuse, transportation, or disposal of wastewater or sludge.
- DOMESTIC WASTEWATER MEANS 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.
- DWELLING UNIT means one or more habitable rooms which are intended or designed to be occupied by one family with facilities for living, sleeping and cooking.
- EASEMENT means an acquired legal right or interest for the specific limited use of land owned by others.
- EFFLUENT means any liquid outflow that is discharged to the sewer.
- ENFORCEMENT COMPLIANCE SCHEDULE AGREEMENT (ECSA) means a mutual agreement between the District and permittee in accordance with Section 7.6.42.2.
- FEDERAL PRETREATMENT REQUIREMENT, NATIONAL PRETREATMENT STANDARD, PRETREATMENT STANDARD or STANDARD means any regulation containing 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.
- FLOOR AREA means 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.
- GARBAGE means solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage and sale of food.
- GRAB SAMPLE means 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.
- INDUSTRIAL USER means any user that discharges industrial wastewater.
- INDUSTRIAL WASTEWATER means all liquid wastes resulting from the processes employed in industrial manufacturing, trade, or business establishments, as distinguished from domestic wastes.
- INDUSTRY means 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.
- INFILTRATION means the water unintentionally entering the District's sewage 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.
- INFILTRATION/INFLOW means the total quantity of water from both infiltration and inflow without distinguishing the source.
- INFLOW means the water discharge into the District's sewage 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.
- INSPECTOR means a person authorized by the General Manager to inspect any existing or proposed wastewater generation, conveyance, processing and disposal facilities.
- INTERCEPTOR SEWER means a sewer whose primary purpose is to transport wastewater from collection sewers to a treatment facility.
- INTERFERENCE means 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.
- LOCAL SEWERING AGENCY means any public or private corporation duly authorized under the laws of the state of California to construct and/or maintain public sewers.
- MANIFEST means that receipt which is retained by the generator of wastes for disposing solid wastes, recyclable wastes or liquid wastes as required by the District.
- MASS EMISSION RATE means the weight of material discharged to the District's sewage facilities during a given time interval. Unless otherwise specified, the mass emission rate means pounds per day of a particular constituent or combination of constituents.
- "MAY" is permissive (see "Shall").
- MEMORANDUM OF UNDERSTANDING (MOU) means any memorandum of understanding or other agreement between the District and OCSD governing the administration of the joint industrial waste pretreatment program.
- MICROGRAMS PER LITER ($\mu g/l$) means 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.
- MILLIGRAMS PER LITER (mg/l) means 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.
- NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) means the Federal pollution regulation system as detailed in Public Law 92-500, Section 402, or a permit issued pursuant to such system.
- NEW SOURCE means those sources that are new as determined by 40 CFR 403.3 (k) as revised October 17, 1988.
- NON-COMPATIBLE POLLUTANT means any non-treatable waste product, including non-biodegradable dissolved solids, which is not a compatible pollutant as defined herein.
- NORMAL DOMESTIC WASTEWATER means 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.

- NORMAL WORKING DAY means the period of time during which the dischargers production or operation is taking place.
- NPDES PERMIT means 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.
- OCSD means the Orange County Sanitation District.
- OCSD ORDINANCE means OCSD's ordinance establishing wastewater discharge regulations, currently in effect from time to time.
- PASS THROUGH means 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.
- PERMITTEE means a discharger who has received a permit to discharge wastewater into the District's sewage facilities subject to the requirements and conditions established by the District and/or OCSD.
- pH means 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.
- POPULATION EQUIVALENT means 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.
- POLLUTANT means 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.
- POTW means Publicly Owned Treatment Works.
- PRETREATMENT means 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 sewage facilities. The reduction or alteration can be obtained by physical, chemical or biological process, or process changes by other means.
- PRETREATMENT FACILITY means any works or devices for the treatment or flow limitation of wastewater prior to discharge into a public sewer.

- PRETREATMENT STANDARDS means requirements for the quality of wastewaters discharged into the District's sewage facilities.
- PRIORITY POLLUTANTS means 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.
- PRIVATE SEWER means a sewer which is not owned by the District.
- PROBATION ORDER means 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.
- PUBLIC AGENCY means 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.
- PUBLIC SEWER means a sewer owned and operated by the District, or a sewer operated by a local public agency which is tributary to the District's sewage facilities.
- PUMPING STATION means a station positioned at a location in a sewer system at which wastewater is pumped to a higher level.
- REGIONAL ADMINISTRATOR means the Regional Administrator of Region IX of the EPA.
- REGIONAL BOARD means the California Regional Water Quality Control Board, Santa Ana Region or San Diego Region.
- 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 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.
- REGULATORY COMPLIANCE SCHEDULE AGREEMENT (RCSA) means 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.
- RULES AND REGULATIONS means 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 sewage facilities and other requirements, conditions and limitations, as may be amended and modified.

- SAMPLE POINT means 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.
- SAMPLING AND EVALUATION PROGRAM (S&E) means a program for the determination of mass emission of constituents or compliance or non-compliance with the conditions specified in the user's permit.
- SAMPLING FACILITIES means 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.
- SANITARY SEWER means a sewer which carries sanitary and industrial wastes, and to which storm, surface and groundwater are not intentionally admitted.

SEWAGE means wastewater.

SEWER means a pipe or conduit that carries wastewater or drainage water.

- SEWER LATERAL means 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.
- SEWAGE FACILITIES OR SYSTEM means any and all facilities used for collecting, conveying, pumping, treating, and disposing of wastewater and sludge.
- "SHALL" is mandatory; (see "May").
- SHREDDED GARBAGE means 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.
- SIGNIFICANT INDUSTRIAL USER means 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.
- SIGNIFICANT NON-COMPLIANCE means 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 7.6.82.6); 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.
- SLUDGE means any solid, semi solid or liquid decant, subnate or supernate from a manufacturing process, utility service, or pretreatment facility.
- SLUG LOAD means 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).
- SPENT SOLUTIONS means 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.
- SPILL CONTAINMENT means an approved protection system installed by the permittee to prohibit the accidental discharge to the sewer of non-compatible pollutants.
- STANDARD INDUSTRIAL CLASSIFICATION (SIC) means a system of classifying a user as identified in the 1987 or subsequent SIC manual as prepared by the Office of Management and Budget.
- STANDARD METHODS means 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 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.
- STORM WATER means all water directly derived from rainwater which has not been utilized in domestic, agricultural, industrial or other beneficial use.
- SUSPENDED SOLIDS (SS) means 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.
- TECHNICAL REVIEW CRITERIA means 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.
- TOTAL ORGANIC CARBON (TOC) means the measure of total organic carbon in domestic or other wastewater as determined by the appropriate testing procedure.

- TOTAL SOLIDS means the sum of suspended and dissolved solids.
- TOXIC SUBSTANCES means 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.
- UNPOLLUTED WATER means water to which no constituent has been added either intentionally or accidentally.
- USER means 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".
- USER CHARGE means 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.
- WASTE means 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.
- WASTE MINIMIZATION PRACTICES means plans or programs intended to reduce or eliminate discharges to the District's sewage 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.
- WASTEHAULER means 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.
- WASTEWATER DISCHARGE PERMIT means 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".
- WASTEWATER TREATMENT means 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 sewage 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 sewage facilities that cause or are capable of causing, either alone or by interaction with other substances, interference with the operation of the District's sewage 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 sewage 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 sewage facilities or to the operation of the Districts sewage facilities. At no time shall the discharge into the District's sewage 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.
- (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 sewage 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 sewage facilities.
- (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 sewage 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 sewage 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 sewage 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**. 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).
- 7.3.7 **Point of Discharge**. No person, except 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

- (1) No person shall discharge wastewater containing substances in excess of the quantities or concentrations listed in Exhibit B, Schedule of Rates and Charges 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 sewage facilities.
- (2) 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.
- (3) 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

- (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 sewage 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 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 sewage 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 sewage 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 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:

- (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 sewage 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;
- (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.
- **Pretreatment.** Users shall make sewage acceptable under such limitations as may be established herein before discharging to the District's sewage 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 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.

(1) 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 within 24 hours as soon asof he or his agents have knowledge ofto the incident, but within 24 hours. Confirmation of this notification shall be made in writing within two weeks (14 calendar days) 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.

- (2) 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 sewage facilities, then that discharger may be responsible for any costs or expenses, including assessments by other agencies or the court, incurred by District.
- 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 a Class I Permit, a Class II Permit, and a Special Purpose Permit.
 - (1) Class I Permit. All Class I Users discharging or proposing to discharge into the District's sewage facilities must obtain a Class I Wastewater Discharge Permit jointly issued by the District and OCSD before discharging.
 - (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 sewage facilities must obtain a Class II Wastewater Discharge Permit by filing an application pursuant to Section 7.4.2.

(3) Special Purpose Permit

- (a) 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 sewage 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.
- (b) 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.
- (c) Discharge conditions and limitations shall be no less stringent than Section 7.3 of these Rules and Regulations and Article 2 of the OCSD Ordinance. For constituents not listed in Section 7.3 of these Rules and Regulations or in 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.
- (d) 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 sewage 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 sewage 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 sewage 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**.

- (1) 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:
 - (a) The effect of the discharger's wastewater on the District's sewage facilities;

- (b) The degree of toxic materials which may pass through the treatment plant;
- (c) The need to ensure that any pretreatment standards are met;
- (d) The size, nature, and type of the industrial wastewater discharge;
- (e) The extent to which the user could contribute to violation of the District's discharge requirements.
- (2) Self-monitoring programs include, at minimum, the following:
 - (a) A minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics.
 - (b) For all other pollutants, 24-hour composite samples must be obtained through flow-proportional composite sampling techniques where feasible.
 - (c) 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.
- (3) 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 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 sewage 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 OCSD 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.

- 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

(1) 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.

- (2) 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.
- 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 noncompliance, 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 sewage service from the District pays its reasonably proportionate share of all the costs of providing that sewage 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 sewage 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 sewage service use will be 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 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 these Rules and Regulations. Additional fees will be levied by the District for compatible or non-compatible pollutants in excess of those amounts specified in the user permit.

- Alternative Service Charge Dischargers may request the application of an Alternative Service Charge for use. The acceptance of such requests and the formation and continuing application of an Alternative Service Charge shall be at the sole discretion of the District. The Alternative Service Charge shall be based on the 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.
 - (1) **Determination of Flow**. There are three methods for determining the volume of wastewater 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 sewage 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.
 - (a) **Direct Measurement**. Direct Measurement reports the volume of industrial wastewater determined by a full time flow meter, measuring the wastewater leaving the plant.
 - (b) **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 water bills or flow measuring device which measures the intake of water from either the District, water wells, or other sources.
 - (c) 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.

(2) Determination of Biological Oxygen Demand (BOD) and Suspended Solids (SS).

- (a) 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.
- (b) 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 "Guidelines Establishing Test Procedures for the Analysis of Pollutants", 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.
- (3) The Alternative Service Charge for District approved dischargers shall be computed by the following formula:

Charge for use = VRv + BRb + SRs

Where V = total volume of flow, in hundred cubic feet

 \mathbf{B} = total discharge of biochemical oxygen demand, in pounds

S = total discharge of suspended solids, in pounds

Rv,Rb,Rs = 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.)
 - 7.5.3 Special Purpose Discharge Permit Charge for Use. A charge for use to cover all costs of the District for providing sewage 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.

7.5.4 Charges for Non-Compliance

- (1) 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.
- (2) 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 7.5.48.
- (3) 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.

7.5.5 Damage to Facilities or Interruption of Normal Operations

When a discharge of wastes causes an obstruction, <u>corrosion</u>, 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 the District.

(1) 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 sewage 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.

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 sewage 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.
- (2) 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.
- (3) 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.

7.6.3 **Probation Order**

(1) 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.
- (2) 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.
- (3) If at any time while a Probation Order is in effect, a user discharges wastewater to the District's sewage 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.
- (4) 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.

7.6.4 Enforcement Compliance Schedule Agreement (ECSA)

- (1) 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.
- (2) 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.

- (3) 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, deposit of performance guarantee, or other provisions to ensure compliance with these Rules and Regulations.
- (4) 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 7.5.38 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 7.6.62.4 and 7.6.72.5.
- (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.
- (6) 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 7.6.62.4 and 7.6.72.5.
- (7) 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.
- (8) 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.

7.6.5 Regulatory Compliance Schedule Agreement (RCSA)

(1) 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.

- (2) 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 practices or other provisions to ensure compliance with these Rules and Regulations.
- (3) 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.
- (4) 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.

7.6.6 **Permit Suspension**

- (1) **Conditions for Suspension**. The District may suspend any permit when a permittee:
 - (a) Fails to comply with the terms and conditions of either an ECSA or RCSA.
 - (b) Knowingly provides a false statement, representation, record, report, or other document to the District.
 - (c) 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.
 - (d) Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or sample collection method.
 - (e) Fails to report significant changes in operations or wastewater constituents and characteristics.
 - (f) Violates a Probation Order.
 - (g) Refuses reasonable access to the permittee's premises for the purpose of inspection and monitoring.
 - (h) 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.

- (i) Violates any condition or limitation of its discharge permit or any provision of the District's Rules and Regulations.
- (j) Discharges effluent that causes pass through or interference with the District's collection, treatment, or disposal facilities.
- (k) Fails to submit oral notice or written report of bypass occurrence.
- (2) 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.
 - (a) 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.
 - (b) 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.
 - (c) 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.
- (3) 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 sewage 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.

7.6.7 **Permit Revocation**

(1) **Conditions for Revocation**. The District may revoke any permit when it is determined that the permittee:

- (a) Knowingly provided a false statement, representation, record, report, or other document to the District.
- (b) Refuses to provide records, reports, plans, or other documents required by the District to determine permit terms, conditions, or other limitations, discharge compliance, or compliance with these Rules and Regulations.
- (c) Falsifies, tampers with, or knowingly rendered inaccurate any monitoring device or sample collection method.
- (d) Failed to report significant changes in operations or wastewater constituents and characteristics.
- (e) Failed to comply with the terms and conditions of an ECSA, permit suspension, or probation order.
- (f) Discharged effluent to the District's sewage facilities while its permit is suspended.
- (g) Refused reasonable access to the permittee's premises for the purpose of inspection and monitoring.
- (h) Did 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.
- (i) Discharged a batch dump to the District's sewage facilities.
- (j) Discharged effluent that causes pass through or interference with the District's collection, treatment, or disposal facilities.
- (k) Failed to submit oral notice or written report of bypass occurrence.
- (l) Violated any condition or limitation of its discharge permit or any provision of the District's Rules and Regulations.
- (2) **Notice of Hearing.** 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.
- (3) **Hearing Procedure**. 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.

- (4) **Hearing Report**. 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.
- (5) Manager's Determination. 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 sewage 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 7.6.112.9.

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.

7.6.8 **Emergency Suspension**. The District may, by order of the General Manager without notice or hearing, suspend sewage 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 sewage facilities, or may cause the violation of any State or Federal Law or Regulation. An emergency suspension order is final and not appealable.

7.6.9 Civil Penalties

(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 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.

- (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.
 - (a) The District may proceed under Section 7.6.9(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.
 - (b) 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.
 - (c) 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.
 - (d) A person dissatisfied with the decision of the General Manager may appeal to the Board of Directors within thirty (30) days of notice of the General Manager's decision, in accordance with Section 7.6.11.

- (e) 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.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) 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.

7.6.10 Appeals To The General Manager

- (1) 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.
- (2) 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 or inactions of the appellant, then the original decision shall be deemed final.

- (3) 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.
- (4) 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.
- (5) 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 7.6.112.9.

7.6.11 Appeals To The Board Of Directors

- (1) 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.
- (2) 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.
- (3) The Board of Directors shall grant all requests for a hearing on appeals concerning administrative civil penalties, 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.
- (4) 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.
- (5) 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. 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.

- (6) 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.
- (7) 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.
- (8) 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.
- (9) 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.
- (10) 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.
- 7.7 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.
- 7.8 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.
- 7.9 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.
- 7.10 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.
- 7.11 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.
- 7.12 CONFLICT. If 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 will take precedence.

7.13 FATS, OILS AND GREASE CONTROL

7.13.1 **Purpose**

- (1) 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.
- (2) This FOG regulation shall use the general definitions set forth in Section 7.2 and the additional definitions set forth in Section 7.1113.2. 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.
- (3) 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.
- (4) 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.
- (5) For convenience of reference, the District's regulations concerning discharges containing FOG are set forth in this Section 7.143. Notwithstanding compliance with this Section 7.4413, 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.
- 7.13.2 **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 7.134 and not defined below shall be as defined in Section 7.2.
- BEST MANAGEMENT PRACTICES means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the introduction of FOG to the sewer facilities.

CALIFORNIA PLUMBING CODE means Uniform Plumbing Code, with California State amendments.

- CHANGE IN OPERATIONS means any change in the ownership, food types, <u>equipment</u> 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.
- EFFECTIVE DATE of this FOG Regulation means December 30, 2004.
- ENHANCED MAINTENANCE AREAS means areas in sewer lines that have experienced sanitary sewer overflows or that must be cleaned or maintained frequently to avoid blockages of sewer system.
- EMULSIFY means to disperse (as an oil) in an emulsion or to convert two or more immiscible liquids into an emulsion.
- FATS, OILS, AND GREASE ("FOG") means any substance such as a vegetable or animal product that is used in, or is a byproduct of, the cooking, or food preparation or clean-up processesprocess, and that turns or may turn viscous or solidifies with a change in temperature or other conditions.
- FOG CONTROL PROGRAM means the program required by and developed pursuant to RWQCB Order No. R8-2002-0014, Section (c)(12)(viii); subsequently updated pursuant to Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, Water Quality Order No. 2006-0003, Section D.13(vii)).
- FOG CONTROL PROGRAM MANAGER means 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.
- FOG WASTEWATER DISCHARGE PERMIT means 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.
- FOOD SERVICE ESTABLISHMENT means a facility defined in California Uniform Retail Food Service Establishments Law (CURFFL), Health and Safety Code Section 113785, and any establishment or 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.

FOOD WASTEaste DISPOSALisposal UNITnit means any device installed in the plumbing or sewage system for the purpose of grinding, pulping, macerating, or flushing food waste or food preparation by--products for the purpose of disposing -all or portions of it to the sewer system.

GENERAL PERMIT CONDITIONS means the FOG Control Program General Permit Conditions.

GENERAL PERMIT CONDITIONS means the FOG Control Program General Permit Conditions.

FOOD GRINDER means 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.

- GREASE CONTROL DEVICE means 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.
- GREASE INTERCEPTOR or INTERCEPTOR means a multi-compartment grease control device that is constructed in different sizes and is generally required to be located outdoors, according to the California Plumbing Code, underground between a Food Service Establishment and the 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. Referred to in the California Plumbing Ceode as a Ggravity Ggrease Iinterceptor or (GGI).
- GREASE TRAP means an alternativea grease control device that is used to serve individual or multiple fixtures and have limited effect and shouldshall only be used in those cases where the use of a grease interceptor or other grease control device is determined by the District to be impossible or impracticable or infeasible. Referred to in the California Plumbing Ceode as a Hhydro-mechanical Ggrease Iinterceptor-or (HGI).-

HOT SPOTS means Areas in sewer lines that have experienced sanitary sewer overflows or that must be cleaned or maintained frequently to avoid blockages of sewer system.

- NEW CONSTRUCTION means any structure planned or under construction for which a sewer connection permit has not been issued.
- PRIVATE LATERAL SEWER DISCHARGE ("PLSD)" means any uncontrolled discharge or overflow of untreated or partially treated wastewater from a privately owned sewer system or lateral connected to the District's sanitary sewer system.
- REMODELING means a physical change or operational change <u>eausing resulting in the</u> generation of <u>the amount of FOG that exceedin excess of</u> 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.

<u>SANITARY SEWER OVERFLOW ("SSO)"</u> means sewer system overflow.any, overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from the public

sanitary sewer collection system.

7.13.3 FOG Discharge Limitations, Prohibitions and Requirements – General

(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.

- (2) <u>Food Service Establishment Prohibitions</u>. The following prohibitions shall apply to all Food Service Establishments:
 - (a) Installation of food grinders waste disposal units in the plumbing system of new constructions of Food Service Establishments is prohibited. Furthermore, all food grinders waste disposal units 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 District.
 - (b) 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 District is obtained.
 - (c) 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.
 - (d) Discharge of wastewater from dishwashers to any grease trap or grease interceptor except as permitted in the FOG Control Program. F is prohibited.
 - (e) 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.
 - (f) The use of <u>chemical or</u> biological additives for grease remediation or as a supplement to interceptor maintenance, without prior authorization from the <u>FOG Control Program ManagerDistrict</u>, is prohibited.
 - (g) 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.
 - (h) 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 periodically waste-hauled pursuant to local, and state waste hauling regulations wastehauled periodically as part of the operation and maintenance requirements for grease interceptors.
 - (i) 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 7.143 and the FOG Wastewater Discharge Permit is prohibited.

- (j) Any other prohibited practice identified in the FOG Control Program from time to time, is prohibited.
- (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 7.413.6.
- (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.
- 7.13.4 **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 7.143. 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 of FOG discharges shall be connected to the grease interceptor. Compliance shall be established as follows:
 - (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.

(2) Existing Food Service Establishments

- (a) 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 waived, that is, delayed in its implementation by the FOG-Control Program Manager District for a maximum period of three years from the effective date of this FOG regulation (3-year Amortization Period) [JK3]. Terms and conditions for application of such a waiver 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.

(b)

Program Manager, shall install grease interceptors within 180 days of the effective date of this FOG regulation.

- (c) 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.
- (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 or infeasible 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 District's determination to grant a variance will be based upon, but not limited to, evaluation of the following conditions:
 - (a) There is no adequate space for installation and/or maintenance of a grease interceptor.
 - (b) 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.
 - (c) 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 six 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.
- (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' District's Manager's determination to grant or revoke a conditional waiver shall be based upon, but not limited to, evaluation of the following conditions:
 - (a) 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.
- (b) Adequacy of implementation of Best Management Practices and compliance history.
- (c) 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.
- (d) Changes in operations that significantly affect FOG discharge.
- (e) Any other condition deemed reasonably related to the generation of FOG discharges by the FOG Control Program-Manager District.

(5) Reserved.

(6)(5) 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 District Manager. The Food Service Establishment bears the burden of demonstrating, to the FOG Control Program Manager District's Manager's reasonable satisfaction, that the installation of a grease interceptor is not feasible or applicable. Upon determination by the FOG Control Program Manager District 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)(6) 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.

7.13.5 Sewer System Overflows, <u>Private Lateral Sewer Discharges</u>, Public Nuisance, Abatement Orders and Cleanup Costs[FS4]

(1) Food Service Establishments found to have caused or contributed to a-SSOs, PLSDs, or any sewer system interference resulting from the discharge of wastewater or waste containing FOG, may be ordered to install and maintain a grease control device, and may be subject to a plan to abate the nuisance and prevent any future health hazards created by sewer line failures and blockages, SSOs, PLSDs, or any other sewer system interferences. SSOs or PLSDs 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, SSOs, and PLSDs 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.

(8) 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 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.

(2) FOG related PLSDs, Seewer blockages 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 staff operational District expenses, or suffering losses or damage to the facilities shall be subject to cost recovery by the District, shall be subject to Section 7.5.8.

(9)

7.13.57.13.6 FOG Wastewater Discharge Permits for Food Service Establishments

(1) FOG Wastewater Discharge Permit Required

- (a) 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.
- (b) FOG Wastewater Discharge Permits shall be expressly subject to all provisions of this Section 7.11-13 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 7.11-13 and applicable State and Federal Regulations.
- (c) If applicable, Class I and Class II dischargers may have requirements established under Section 7.1113.6 incorporated in their permits, in which event the Class I or Class II Permit shall take precedencet and also serve as a FOGthe required FOG Wastewater Discharge Permitcontrol mechanisimmechanism.

(2) FOG Wastewater Discharge Permit Application

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

- (b) The applicant shall submit two (2) copies of all drawings for review. All drawings shall include, but not be limited to 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, kitchen (c) 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 7.413.3(-2) and the requirements specified in Section 7.1113111.6(-8) and Section 7.413.6(-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 13 or any requirements of other Regulatory Agencies.
- (3) **FOG Wastewater Discharge Permit.** A FOG Wastewater Discharge Permit may contain any of the following conditions or limits:
 - (a) Limits on discharge of FOG and other priority pollutants.
 - (b) Requirements for proper operation and maintenance of grease interceptors and other grease control devices.
 - (c) Grease interceptor maintenance frequency and schedule.
 - (d) Requirements for implementation of best management practices and installation of adequate grease interceptor and/or grease control device.

- (e) Requirements for maintaining and reporting status of best management practices.
- (f) Requirements for maintaining and submitting logs and records, including <u>waste hauling</u> records and waste manifests.
- (g) Requirements to self-monitor.
- (h) Requirements for the permittee to construct, operate and maintain, at its own expense, FOG control device and sampling facilities.
- (i) Additional requirements as otherwise determined to be reasonably appropriate by the FOG Control Program Manager District to protect the District's systems or as specified by other Regulatory Agencies.
- (j) Other terms and conditions, which may be reasonably applicable to ensure compliance with this Section 7.1113.
- Wastewater Discharge Permit Fee. The <u>initial</u> 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 <u>plan approval and</u> issuance of <u>either</u> a new permit. -All ongoing FOG permit and program fees shall be assessed through the monthly sewer service charges associated with the Food Service Establishment or property owner. <u>collected using the associated monthly sewer account of the food service establishment.</u>
- Conditions. FOG Wastewater Discharge Permits do not expire. JK5 FS6 Permits are issued to a specific operation. They shall not be reassigned, transferred, or sold to a new owner, lessee, new user, different premises, or a new or changed operation. Permits do not expire. However, I in the event that there is a change in name, operation, ownership, or control of the food service establishment or the grease control device operation itself, the owner/operator shall notify the Delistrict within 90 days of the change. The Delistrict may require the new owner or operator to submit a new permit application
- (4)(6) The Permittee may request a modification to the terms and conditions of an issued permit. The request shall be in writing stating the requested change, and the reasons for the change. The District shall review the request, make a determination on the request, and respond in writing. Permit modifications are subject to the requirements set forth in Ssection 7.13.or a renewed permit. A permittee shall also pay any delinquent invoices for sewer, service, fines or penalties in full prior to permit renewal.
- (5) Duration; Modification of Terms and Conditions; Renewal
- (a) 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.

- (b) 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. 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.
- (6)(7) Exemption for Limited Food Preparation Establishments. A limited food preparation establishment (as defined in the definition of Food Service Establishment), (as determined by the District) is not considered a Food Service Establishment and is exempt from obtaining a FOG Wastewater Discharge Permit.

(7) Non-Transferability of Permits. FOG Wastewater Discharge Permits are restricted as to transferability, in accordance with Section 7.4.5.

(8) Pretreatment - Grease Interceptor Requirements

- (a) In accordance with Section 7.4.7 and 7.4.8, aAllall Food Service Establishments shall provide wastewater acceptable to the District, under the requirements and standards of established Exhibit C, the District's Maximum Allowable Local Limits, and those 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 wastewater objectives prior to discharging waste to any public sewer. of this Section 7.11.
- (b) Grease interceptor sizing and installation shall conform to the current edition of the <u>California</u> Uniform Plumbing Code. Grease interceptors shall be constructed and located in accordance with the requirements and criteria set forth in the FOG Control Program.
- (c) 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 District pursuant to said Program.
- (d) Food Service Establishments with grease interceptors may be required to submit data and information necessary to establish the maintenance frequency grease interceptors.

(9) Grease Trap Requirements

- (a) When a Variance is granted pursuant to section 7.13.4 (3), 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.
- (b) 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.
- (c) 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

 ManagerManageDistrictrManager pursuant to said Program.

(10) **Monitoring Facilities Requirements**. To ensure proper operation and maintenance of the grease control device or grease interceptor and compliance

with the this Section 7.11FOG Control Program, 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.

(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

7.13.67.13.7 Monitoring, Reporting, Inspection and Sampling

- (1) Monitoring for Compliance with Permit Conditions and Reporting Requirements
 - (a) The FOG Control Program Manager District may require periodic reporting of the status of implementation of Best Management Practices, in accordance with the FOG Control Program.
 - (b) The FOG Control Program Manager District 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.
 - The FOG Control Program Manager District may require reports (c) 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 7.143. 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 District 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 District shall constitute a violation of this Section 7.41-13 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., this Section 7.11the requirements and standards of Exhibit C, the District's Maximum Allowable Local Limits, or those established herein.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.

(d) 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 District to ensure compliance with this Section 7.143.

(2) Record Keeping Requirements

- (a) 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.
 - (2) A record of Best Management Practices being implemented including employee training.
 - (3) Copies of records and manifests of <u>all wastehaulingwastehauling</u> 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 District to ensure compliance with this Section 7.1±3.
- (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 7.143.

(4) Inspection and Sampling

(a) The wastewater discharges of Food Service Establishments are subject to inspection and sampling in accordance with the requirements of Section 7.4.14.13.7 to ascertain whether the intent of this Section 7.11-13 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.

(b) In order for the FOG Control Program Manager District 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 7.1113. All such records shall be subject to inspection and shall be kept by the Permittee in accordance with Section 7.413.7-(2).15.

(5) Notification of Spill

- (a) 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 7.113, 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, PLSDs, or SSOs, the discharger shall immediately notify the local Health Department, City or County, and the District.
- (b) Confirmation of this notification shall be made in writing to the FOG Control Program Manager District 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.
 - 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 the FOG Control Program, this Section _7.143 or other applicable law.

- and the provisions of any FOG Wastewater Discharge Permit shall be governed by Section 7.41-13 and for such purpose the District may utilize any one, combination or all enforcement remedies provided in Section 7.6-136 [JK8] FS9] to the extent determined by the District to be applicable to a violation under this Section 7.113. For this purpose, "Department Head" as used in Section 7.6 means the FOG Control Program ManagerRegulatory Compliance Manager. In addition to the non-compliance fees specified under Section 7.6, The Permittee shall be subject to all FOG Control Program non-compliance, and cost recovery fees fees for FOG Program as non-compliance as specified in Exhibit B, Schedule of Rates and Charges.
- 7.13.87.13.9 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 7.11-13 from the State Building Standards and Housing Laws, more particularly the 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 7.1113.4 and 7.1113.6 modify the authority and discretion of the "Administrative Authority" of <u>Chapter 10 Section 1014.1</u> 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 7.143.6 modifies the general maintenance requirements for grease interceptors of Section 1014.6 of the 2001Chapter 10 of the California Plumbing Code and establishes more stringent maintenance requirements.
 - (3) With respect to the foregoing differences (1) and (2), 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-Statewide General WDR for Sanitary Sewer Systems, 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.
 - (4) 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.
 - (5) A copy of this Section 7.11-13 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).

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 reasonable 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 M10 M11] M12 M13 M14 M15

Water Quality Control Board to conduct visual inspections at all recycled water use sites.

The District is also required to conduct cross-connection tests at various recycled water use sites.

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 records as deemed necessary, and provide reports as requested by regulatory agencies including the California Regional Water Quality Control Board.

8.2.2 Entry. 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 <u>facilitiessystems</u> and areas of recycled water use <u>and</u> to ensure compliance with these Rules and Regulations, including the <u>provisionrequirement</u> that runoff be controlled and limited, and the <u>provisionrequirement</u> that cross-connections between potable water <u>facilitiessystems</u> and recycled water <u>facilitiessystems</u> do not exist. <u>Failure to allow timely entry to a District representative may result in termination of recycled water service</u>.

For sites receiving 8.2.3 Inspections and Testing. Every recycled water, customer must provide the permit holder shall be responsible for providing District with access to the site and ecoperation must cooperate with the District's Inspector or designeer epresentative so that the District's Inspector or designeer epresentative can perform a periodic visual inspection of the onsite recycled water system and/or a cross-connection test, site evaluations and. Whenever the customer changes, the District's representative may perform an inspection and/or test to verify compliance with these Rules and Regulations. For additional information on Inspection and Maintenance of Protective Devices, Marking Safe and Unsafe Water Lines, Reporting of Pollution and Contamination and Water Service Termination, see Sections 4.10.4-4.10.7 of the Rules and Regulations.

(A) Visual inspection means an inspection of the visible portions of the on-site water systems to check for: the presence of the proper backflow prevention device-test.(s), accurate and adequate system identification (e.g., tags, purple pipe, signage, etc.), the proper use of non-potable water (including recycled water), the absence of runoff or ponding of non-potable water (including recycled water), and the presence or absence of appurtenances.

- (B) Cross-connection test means the physical operation of the water systems to detect a possible inter-connection between a potable water system and a non-potable water system (including a recycled water system). This evaluation typically includes closing valves on each system independently as well as operating the fixtures. Consistent with Section 60316 of Title 22 of the California Code of Regulations, a Cross-connection test at a dual-plumbed site (as defined in Section 60301.250 of Title 22) can only be administered by an American Water Works Association (California-Nevada section) certified Cross-Connection Control Specialist or equal.
- (C) The cross-connection test 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 <u>uses</u> exist. The <u>permit holdercustomer or their designee</u> will be required to operate the various systems during the test.
- 8.2.4 On-Site Recycled Water Supervisor Training. At least one individual at each recycled water use site, who will be known as the "On-Site Recycled Water Supervisor" or "Supervisor," must have sufficient training to manage the systems in compliance with State, County, and local requirements. The District will provide training for the Supervisor, which training will focus on describing the things the Supervisor can and cannot do, also referred to as the "Do's and Don'ts." The Supervisor shall certify that he or she has received the training by signing the inspection form, and shall keep a copy of the signed form and produce it to the District upon request. See Section 6.2.2 for additional requirements.
- 8.2.5 Supervisor's Duties. The Supervisor is responsible for correctingmaking sure the onsite recycled water systems are being maintained and identified properly, there are no cross-connections, signage is present and properly located, that recycled water is used properly, recycled water does not leave the use site, recycled water is used during the appropriate times, and to contact IRWD if any work which changes to the on-site systems are being considered.
- 8.2.6 Notification Process. The District shall notify its recycled water customers when an inspection and/or test (either or both of which are the "Work") is required. Notification is commonly accomplished by sending a letter to the customer, although the District may also utilize electronic mail if necessary. The District shall send up to three notifications, followed by a *Notice of Violation*, as described below:
 - (A) First Notice. The District will notify the customer when an inspection, test, or both are required. The customer will be asked to contact the District representative identified in the Notice within thirty (30) calendar days after the First Notice date to schedule the inspection and/or test, and the Work must be completed within 60 calendar days after the First Notice date.
 - (B) Second Notice. If the customer does not schedule or complete the Work by the deadline referenced in the First Notice, the District will send a Second Notice to the customer requesting they contact the District to schedule the Work. The customer will have fifteen (15) calendar days after the Second Notice date in which to schedule the Work, and the Work must be completed within and forty-five (45) calendar days after the Second Notice date.
 - (C) *Third and Final Notice*. If the customer does not schedule or complete the Work by the deadline referenced in the Second Notice, the District will send a Third and Final

- Notice to the customer requiring the Work to be scheduled immediately. The customer will have ten (10) calendar days from the date of the Third and Final Notice in which to schedule the Work, and the Work must be completed within thirty (30) calendar days after the Third and Final Notice date. If customer has not scheduled or allowed the Work to be completed within the time allotted in the Third Notice, the District may issue a *Notice of Violation*.
- (D) Computing Dates. In computing calendar days, the time period will run from the date the notice is sent, and if the deadline falls on a weekend or District holiday, then the deadline will be extended to the next business day.
- 8.2.7 Notice of Violation. If the customer has not scheduled or allowed the Work to be completed within the time required in the Third and Final Notice, the District will notify the customer that recycled water service will be suspended after ten (10) calendar days if the actions described in the First Notice have not been taken. If no action is taken within the time period stated in the District's *Notice of Violation*, recycled water service may be suspended or terminated in accordance with Section 14 of these Rules and Regulations.
- 8.2.8 Compliance, Enforcement and Penalties. The customer must correct any part of the recycled water system that violates the DistrictState regulations at their, County requirements, or District Rules and Regulations, at the customer's sole expense including any costs associated with repair and re-testing the and within a reasonable time. If at any time the District determines that recycled water use site conditions do not comply with State, County, or local requirements or could jeopardize public health, the District may institute the procedure for suspending recycled water service immediately. Conditions that can create a basis for suspending recycled water service shall include, but are not limited to, the following:
 - (A) Refusal to install or test the required backflow prevention device should the;
 - (B) Refusal to repair or replace a faulty backflow prevention device fail to pass the required test. Additionally, at such times that the permit holder changes;
 - (C) Direct or indirect connection between a potable water system and recycled water system;
 - (D) Unprotected direct or indirect connection between a potable water system and a system or equipment containing contaminants;
 - (E) Unprotected direct or indirect connection between the District's <u>Inspector or designee will perform aan and evaluation and test</u>testrecycled water system and an auxiliary water system, without prior approval of District;
 - (F) A situation which presents an immediate health hazard to verifythe District's potable water system, as determined by the health agency or the District;
 - (G) Failing to verifydesign, install, operate and use recycled water system in compliance with these Rules and Regulations. State, County, or local requirements;
 - (H) Failing to cooperate and comply with District's requirements for periodic visual inspection and periodic cross-connection testing of the water and recycled water systems at recycled water use sites;
 - (I) Failing to comply with District's requirements to make necessary improvements to achieve compliance with State, County, or local requirements for recycled water use sites; or
 - (J) Failing to identify an On-Site Recycled Water Supervisor for the recycled water use site.

8.2.9 Immediate Action. The District reserves the right to make an immediate determination as to the public health risk associated with any of the non-compliant conditions listed above in section 8.2.8. The District may take immediate action to suspend service if, in the sole judgment of the District, public health is at risk.

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.

SECTION 9: CONNECTION FEES

9.1 GENERAL

- 9.1.1 Connection fees applicable to all property to be served will be established from time to time by the Board and set forth in Exhibit B, Schedule of Rates and Charges. The property to be served must be legally described in the application for service.
- 9.1.2 If, subsequent to the issuance of the initial permit, there is a change in owner, applicant, tenant, customer, class of use, or consumption, then the District may determine that additional connection fees are required. These additional charges will be computed on the basis of the resulting increase in service capacity and flow, or on any reclassification of user type.
- 9.1.3 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.
- 9.1.4 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.
- 9.1.5 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) will 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.

9.2 INTERPRETATION OF CONNECTION FEES

- 9.2.1 **Manager's Determination**. 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, Schedule of Rates and Charges, the Manager shall interpret them to establish a reasonable classification and fee. In making that interpretation, the Manager shall be guided by the policy of the District set forth herein.
- 9.2.2 Appeal. Any applicant, owner, or customer that does not concur in Manager's determination under Section 9.2.1 may appeal that determination to the Board. The appeal must be in writing and must set forth detail and facts supporting the differences between the request of applicant, owner, or customer and the Manager's determination. The appeal must include 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 must 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.
- 9.2.3 **Special Agreement**. If the Board grants the applicant, owner, or customer's appeal, then that connection fee charge will be implemented by a special agreement between the 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.

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

- 10.1.1 **Installation Charges**. The District shall impose charges for the installation of and perpetual maintenance of all service lines, water and recycled water meters, and appurtenances thereto, all of which facilities are the property of the District. These service line charges, 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 must be provided by the applicant, owner, or customer at his expense.
- 10.1.2 Charge for Meter Only. If the applicant provides (at no cost to the District) the water or recycled water service line and appurtenances, then the District shall impose a charge for the installation of the water or recycled water meter only. The meter will remain the property of the District. The meter charge, in addition to all other usual and regular charges of the District, including any connection fee, as set forth in Exhibit B, Schedule of Rates and Charges, must be paid before work will be performed.
- 10.1.3 **Fire Suppression Facilities Charges**. The District shall impose 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 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, Schedule of Rates and Charges, must be paid before work will be performed.
- 10.1.4 Extraordinary Work. 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, Schedule of Rates and Charges, 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, Schedule of Rates and Charges, 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.
- 10.1.5 **Relocation**. 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 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.

10.1.6 **Temporary Service Connection**. 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, Schedule of Rates and Charges. 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.

10.2 LOWER LATERAL CHARGE

- 10.2.1 **Installation Charge**. The District will impose a 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 must be provided by the applicant, owner, or customer at his expense.
- 10.2.2 **Relocation**. 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 will impose charges for modifications to natural treatment systems requested by the developer after the system has been constructed. Those charges, in addition to all other usual and regular charges of the District, including any specified connection fee, will be as determined by the District and must be paid to the District before work will be performed.

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. The security deposit amount will 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.

The District may return deposits after one year at the request of the applicant, owner, or customer, but only if all bills rendered during the twelve-month period prior to the request were paid within twenty-one (21) days after presentation.

A deposit determined by the District will be required for all construction water meters.

Upon termination of service, deposit amounts not previously returned will be applied to the final utility bill and any remaining amount refunded to the applicant, owner, or customer.

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, Schedule of Rates and Charges, 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 may estimate bills, based on prior consumption or other reasonable calculation in the absence of historical consumption data, and will back-bill the customer all service and other charges as set forth in Exhibit B, Schedule of Rates and Charges.

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.

The District may determine to purchase and install smart meters on any number of District owned meters for any purpose, including customer billing. Only District meters will be used to calculate charges for use in billing. Customer meters, sub-meters, or smart meters will not be used to calculate charges, unless determined to be a suitable alternative in the absence of other means, and at the sole discretion of the District. Customer owned smart metering equipment installed on District meters is prohibited as set forth in section 4.7 of these Rules and Regulations.

12.5 TIME AND MANNER OF PAYMENT

12.5.1 All bills and charges for water, sewer, recycled water and natural treatment system service hereunder are due and payable upon presentation and become delinquent twenty-five (25) days later. Bills and charges are 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.
- 12.5.2 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 if payment has been delinquent for at least sixty days. The District will provide required notice at least seven business days before discontinuance of service... 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. If a customer appeals the water bill by contacting IRWD Customer Service Department, then the District will not discontinue service while the appeal is pending.
- 12.5.3 Discontinuance of water service can be suspended if an adult living at the residence formally appeals the water bill with IRWD Customer Service Department or when acceptable proof of medical and financial circumstances are submitted to the District and the customer agrees to an alternative payment schedule with respect to all delinquent charges. If a customer fails to comply with the alternative payment schedule for sixty days or more or does not pay the current residential service charges for sixty days or more, then the District may discontinue water service. If a customer wishes to re-establish service after it has been disconnected, the customer must pay the past due amount plus the service restoration charge as outlined in Exhibit B, Schedule of the Rates and Charges prior to restoring service. If the customer demonstrates that someone in the customer's household is a current recipient of certain state or federal programs or declares that the household income is below 200% of the federal poverty level, then the District will limit the customer's reconnection fees to no more than \$50.00 during regular business hours and \$95.00 after normal working hours.
- 12.5.3 12.5.4 Discontinuance of service by reason of delinquent bill shall not automatically constitute revocation of permit. However, such delinquency may be considered as sufficient reason for revocation of permit in accordance with provisions of these Rules and Regulations. 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 BUDGETS; NONRESIDENTIAL ACREAGE AND BASE INDEX REVISIONS

- 12.6.1 Residential Variance Procedure
 - (1) Variance request forms must be 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
- (g) common area washing machines
- (h) other, as determined on a case by case basis
- (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 and must be re-confirmed on or before the expiration date to remain in effect.
- (4) Calculation of the increased budgets for approved variances will be made by the District pursuant to Exhibit B, Schedule of Rates and Charges.

12.6.3 Nonresidential Acreage, Base Index and Sewer Charge Revisions – Procedure

- (1) Acreage (landscape) revision requests will be made by submitting an acrechange request to the Water Efficiency Department.
- (2) Base index (water budget) and sewer charge revision requests for commercial industrial and public authority customers will be made by submitting a request for account evaluation to the District.
- (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 or their agent in writing (including email) 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 or agent 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, base index or sewer service charge revision or as otherwise required by law.

12.6.4 Nonresidential Acreage, Base Index and Sewer Charge Revisions – Determination

(1) 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).

(2) Commercial/Industrial/Public Authority - Grounds

- (a) **Base Index**. Relevant factors will include expansion of productive capacity, water efficiency or conservation practices that can be shown to have reduced water usage, severe economic hardship, and other factors determined on a case by case basis.
- (b) **Sewer Charges**. Relevant factors will include evaporation, product water, irrigation, or other uses that do not discharge to the sewer, and dual plumbed connections that discharge to a shared sewer line.

(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 "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 to bill the customer 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**. Calculation of the increased acreage, base index, or sewer charges will be made by the District pursuant to Exhibit B, Schedule of 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**. 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.

12.7.5 Leak Repair Adjustments – Grounds

(1) The IRWD budget-based 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-budget at the "Inefficient" 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", 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 budget, the District will authorize an adjustment, for residential customers, of no more than two bills affected by the leak. The District may, at its discretion, authorize additional bill adjustments on a case by case basis for customers who encounter circumstances that cause delays to a leak repair.

- (2) 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.
- 12.7.6 **Nonresidential Landscape Adjustments**. To be eligible for adjustment, an overbudget charge on a single bill must exceed the minimum amount specified in the Landscape Irrigation Adjustment Form ("LIAF") instructions available at www.irwd.com.
 - (1) Mainline breaks and leaks are eligible for adjustment.
 - (2) Other non-residential landscape adjustments shall be made on a case-bycase basis at the District's discretion, based on the request and supporting documentation submitted by the customer.
 - (3) Adjustment requests shall be submitted on an IRWD LIAF which is available online, 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.

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, that decision will 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.

SECTION 14: ENFORCEMENT AND PENALTIES

14.1 GENERAL

- 14.1.1 **Violation**. It is unlawful to violate any provision of these Rules and Regulations or a permit issued by the District.
- 14.1.2 **Notice of Violation**. The District shall notify any person found violating any of these Rules and Regulations, any permit issued by the District, or any applicable Federal, State, or local statutes, regulations, ordinances, or other requirement. The written notice of violation will state the nature of the violation and provide a reasonable time to correct that violation. The offender must, within the time stated in the 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 and Section 15.
- 14.1.3 **Misdemeanor; Fines**. Pursuant to Water Code Section 35424, any violation of these Rules and Regulations is a misdemeanor, the violation of which shall, upon conviction, be subject to a fine of not less than \$25.00 nor more than \$200.00. Pursuant to Water Code Section 377, any violation of Section 15 is a misdemeanor punishable by imprisonment in the County Jail for not more than 30 days or by fine of not more than \$1,000, and a violator may also be held civilly liable in an amount not to exceed \$10,000.
- 14.1.4 **Revocation**. Failure to permanently cease all violations within the time stated in the Notice of Violation will 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

14.3.1 **Notice; Public Hearing**. 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.

- 14.3.2 **Effectiveness of Revocation**. Any action to permanently revoke the permit shall be effective ten (10) calendar days after notice of the Board's decision. The District shall notify the applicant, owner, or customer by United States mail, postage prepaid, addressed to the applicant, owner, or customer.
- 14.3.3 **Surcharge**. In the alternative to revocation, the District may establish a fine or penalty amount 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.
- 14.3.4 **Application**. The foregoing provisions of these Rules and Regulations apply to all permits.
- 14.3.5 **Waiver/Modification**. 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.

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

- (1) 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.
- (2) Southern California is a semi-arid region. A growing population, climate change, environmental concerns and other factors in other parts of the State and western United States make the region susceptible to water supply reliability issues.
- (3) Careful water management that includes active water efficiency and conservation measures, not only in times of drought but at all times, is essential to ensure a reliable supply of water to meet current and future water supply needs.
- (4) 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.
- (5) 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.
- (6) The adoption and enforcement of a water conservation and supply shortage program is necessary to manage the District's water supply 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.
- (7) 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.
- 15.1.3 **Application.** The provisions of this section apply to all persons using water in any area of the District in which the District provides retail water service, regardless of whether any person using water has a permit or contract for service with the District, and applies to all potable and recycled water supplied by the District.

15.1.4 Water Shortage Contingency Plan. The District has adopted a Water Shortage Contingency Plan pursuant to Water Code Section 10632. 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

- 15.2.1 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.
- 15.2.2 This section establishes permanent water use efficiency standards intended to alter behavior related to water use efficiency for non-shortage conditions and further establishes six 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.
- 15.2.3 This section is intended to complement and be used in tandem with the budget-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 budget-based pricing structure encourages use within a water budget 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 budget-based pricing structure. Any modifications to the pricing structure must be consistent with the provisions of Proposition 218.

15.3 EXEMPTIONS

- 15.3.1 The General Manager may permit an exemption from 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, upon 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.
- 15.3.2 The General Manager of the District or his designee may require the use of any water conservation devices or practices as he deems appropriate as a condition of the exemption permit. He shall promulgate a list of approved devices.

15.3.3 Section 12.6 sets forth the procedures to apply for variances from water budgets under the budget-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.
 - (5) **Washing of Motor Vehicle** No person shall wash a motor vehicle with a hose not fitted with a shut-off nozzle.
 - (6) Use of Potable Water in a Fountain No person shall use potable water in a fountain or other decorative feature, except where the water is recirculated, or recirculation would cause a public health safety or sanitary hazard.
 - (7) **Application of Potable Water to Outdoor Landscapes** No person shall apply potable water to outdoor landscapes during and within 48 hours of measureable rainfall.
 - (8) **Irrigation of Public Street Medians** No person shall use potable water to irrigate ornamental turf on public street medians during a declared shortage or pursuant to any regulation adopted by the State Water Resources Control Board.
 - (9) **Single Pass Cooling** No person shall operate a single pass cooling system.
 - (10) Commercial Car Washes
 - (a) All new commercial car washes must be equipped with and operate recirculating systems.

- (b) Existing car washes with recirculating systems must maintain and operate the recirculation system.
- 15.4.2 **Demand Management.** When a declared shortage condition is not in effect, basic water budgets established by the District under the water budget-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 budgets to establish a reasonable amount during a declared shortage condition, as specified herein.

15.5 IRWD WATER SUPPLY SHORTAGE LEVELS

- 15.5.1 **General**. 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.
- 15.5.2 **Shortage Levels**. 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:
 - (1) <u>Level One (Shortage Warning): Up to 10% shortage</u>. Measures selected would be designed to achieve the following voluntary actions:
 - Increase public awareness of the water supply situation and conservation opportunities
 - Reduce over-irrigation
 - Reduce over-budget use
 - Encourage diligent repair of water leaks
 - (2) <u>Level Two (Significant Shortage Condition): 11-20% shortage</u>. Measures selected would be designed to incorporate the objectives listed under Level One, and achieve the following further reduction in use:
 - Discourage filling of fountains, pools and water features and other discretionary uses
 - Potential adjustments to outdoor water budgets to target discretionary uses for residential and landscape customers to be specified in the shortage declaration
 - Establish water waste reporting hotline
 - Expand conservation programs and projects, including workshops
 - (3) <u>Level Three (Severe Shortage): 21-30% shortage</u>. Measures selected would be designed to incorporate the objectives listed under Level Two, and achieve the following further reduction in use:

- Implement a public outreach campaign to increase public awareness
- Enhance incentives for water saving devices and programs
- Targeted outreach to high use non-residential customers
- Potential further reductions to outdoor water budgets to a level that sustains only drought-tolerant landscaping
- (4) <u>Level Four (Severe Shortage): 31%- 40% shortage</u>. Measures selected would be designed to incorporate the objectives listed under Level Three, and achieve the following further reduction in use:
 - Further reduce or eliminate discretionary uses
 - Implement direct install programs to retrofit inefficient devices and landscape equipment
 - Reductions to water budgets for commercial, industrial and public authority customers, while minimizing economic impacts
 - Elimination of specific municipal uses such as non-required hydrant flushing, street cleaning and water-based recreation
- (5) <u>Level Five (Crisis Shortage): 41%- 50% shortage</u>. Measures selected would be designed to incorporate the objectives listed under Level Four, and achieve the following further reduction in use:
 - Implement pay to save incentive programs for industrial customers
 - Potential adjustments to residential and landscape water budgets to the elimination of all non-recycled water outdoor uses
 - Cease all non-recycled water outdoor water uses for landscape and agriculture, subject to reserved rights relating to local wells
- (6) <u>Level Six (Crisis Shortage): More than 50% shortage.</u> Measures selected would be designed to incorporate the objectives listed under Level Five, and achieve the following further reduction in use:
 - Potential adjustments to water budgets to target all uses not required for health and safety
 - Use of flow restrictors on severely over-budget accounts that are non-responsive to outreach
 - Possible discontinuation of non-health and safety services in order to achieve the necessary demand reductions
 - Other mandatory restrictions and enforcement, as necessary
- 15.5.3 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 budget-based pricing structure. Any adjustments to the pricing structure would require conformance to the requirements of Proposition 218. Response measures during Levels Five and Six 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 budget tiers (all Levels)
- Reduction of basic water budgets (all Levels)
- Adjustment of pricing tier thresholds, shifting usage into higher tiers (Levels Two, Three, Four, Five and Six)
- Restriction of uses (Level Four)
- Prohibition of uses (Levels Four, Five and Six)

The demand management measures included in the list above will be implemented through changes in the District's budget-based tiered pricing structure designed to strengthen the pricing signal and achieve desired water savings in the declared shortage level, including changes in the budget 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, Schedule of Rates and Charges.

The general prohibitions specified in Section 15.4 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 budget-based tiered pricing structure. As described in Section 15.2, the District's budget-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 budget-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 budget-based tiered pricing structure, which is enforced through the District's billing procedures.

15.6.2 Enforcement of Restrictions

- (1) This Section 15 and Section 4 are part of the District's water conservation program and are adopted pursuant to Water Code Section 376. Subject to appeal to the Board of Directors, the General Manager may take any measures authorized under Water Code Section 377 to hold a person civilly liable for violation of the District's water conservation program.
- (2) Prior to enforcement of the restrictions pursuant to Section 15.4 (General Prohibitions) and 15.5 (Shortage Restrictions), 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 may immediately:
 - (a) disconnect service,
 - (b) install flow-restricting devices restricting non-health and safety related water service, or
 - (c) order issued a second preliminary notice.
- (3) Service disconnected or restricted pursuant to 1(a) or 1(b) above will 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.
- (4) 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.
- (5) 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.

SECTION 16: WATER WELLS

16.1 PURPOSE

- 16.1.1 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.
- 16.1.2 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

- 16.2.1 "**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.
- 16.2.2 "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 do not include:
 - (1) 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;

- (2) 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
- (3) Wells less than 50 feet in depth or 6 inches in diameter.
- (4) Other wells whose regulation is not necessary to fulfill the purpose of this chapter as determined by the Manager.
- 16.2.3 A well will 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

- 16.3.1 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.
- 16.3.2 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

- 16.4.1 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.
- 16.4.2 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.

16.5 PERMITS

- 16.5.1 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.
- 16.5.2 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.
- 16.5.3 Permits may be issued subject to any condition or requirement found by the Manager to be necessary to accomplish the purposes of this chapter.
- 16.5.4 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.
- 16.5.5 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 tendays.

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 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

- 16.9.1 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.
- 16.9.2 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.
- 16.9.3 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.
- 16.9.4 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 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.

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 are required, under the terms of their National Pollutant Elimination Discharge System 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

The applicant for Natural Treatment System service shall pay the fees and operational charges set forth in the Exhibit B, Schedule of Rates and Charges, as may be amended from time to time 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 that discharge, the provisions of this Section will take precedence.

Exhibit B

Rates and Charges for Water, Sewer, and Recycled Water Service

(Separate Document)

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

Constituent	Concentration Limit in Milligrams/Liter (mg/L)
1,4-Dioxane	1.0
Ammonia ⁽¹⁾	Mass
Arsenic	1.4
BOD ⁽¹⁾	Mass
Cadmium	0.25
Chromium (Total)	20.0
Copper	3.0
Lead	1.5
Mercury	0.03
Molybdenum	2.3
Nickel	3.2
Selenium	0.14
Silver	2.2
Zinc	9.2
Cyanide (Total)	2.4
Cyanide (Amenable)	1.0
pH (s.u.)	6.0 - 12.0
Polychlorinated Biphenyls	0.01
Pesticides	0.01
Sulfide (Total)	5.0
Sulfide (Dissolved)	0.5
Oil and grease of mineral or petroleum origin	100.0

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

⁽¹⁾ BOD and ammonia mass discharged will be tracked by OCSD and Users

Exhibit "B"

RESOLUTION NO. 2019-

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA RESCINDING RESOLUTION NO. 2018-14 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, by adoption of Resolution No. 2018-14 on May 29, 2018, the Board of Directors last 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 4: Clarifies meter tampering and responsibility for maintenance of water systems;

Section 7: Updates definitions, responsibilities and requirements associated with the Fats, Oils and Grease Program;

Section 8: Updates monitoring and inspection requirements for the recycled water system. Includes notifications and enforcement process; and

Section 12: Updates discontinuance of water service consistent with new law SB 998

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

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

Section 1. That Resolution No. 2018-14 be and hereby is rescinded in its entirety.

Section 2. That the amendments to the Rules and Regulations of the Irvine Ranch Water District for Water, Sewer, Recycled Water, and Natural Treatment System Service, as more specifically shown 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 the Rules and Regulations, as amended as shown on Exhibit A, 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 16th day of December 2019.

	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: LEWIS BRISBOIS Legal Counsel - IRWD	
Ву	

4851-4391-3901.1 -2-

November 25, 2019

Prepared and

submitted by: K. Swan

Approved by: Paul A. Cook

CONSENT CALENDAR

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

SUMMARY:

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

Events/Meetings

Steven LaMar

December 11 Orange County Supervisors' Hall of Administration Open House December 12 OCBC, ACC-OC, OC Forum, & OCHCC Holiday Reception

Mary Aileen Matheis

January 9, 2020 Greater Irvine Business Outlook

Douglas Reinhart

November 21 38th Annual Irvine Community Thanksgiving Breakfast

Peer Swan

November 20 OCWA Monthly Industry Insight Meeting January 21-23, 2019 CASA 2019 Winter Conference, Indian Wells

John Withers

December 11 Orange County Supervisors' Hall of Administration Open House December 12 OCBC, ACC-OC, OC Forum, & OCHCC Holiday Reception

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 HEREIN.

LIST OF EXHIBITS:

None.

No. 6 - Board Attendance.docx

Note: This page is intentionally left blank.

November 25, 2019

Prepared and

submitted by: K. Swan

Approved by: Paul A. Cook

CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the November 11, 2019 Special Board meeting, and the November 11, 2019 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE NOVEMBER 11, 2019 SPECIAL BOARD MEETING AND NOVEMBER 11, 2019 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – November 11, 2019 Special Board Minutes

Exhibit "B" – November 11, 2019 Regular Board Minutes

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EXHIBIT "A"

MINUTES OF SPECIAL MEETING – NOVEMBER 11, 2019

The special meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 4:30 p.m. by President LaMar on November 11, 2019 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Reinhart, Withers, Swan, Matheis, and LaMar.

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Finance and Administration Clary, Executive Director of Water Policy Weghorst, Executive Director of Operations Chambers, Director of Treasury and Risk Management Jacobson, Director of Water Operations Roberts, Natural Resources Manager Swift, Recycled Water Development Manager Tettemer, Director of Administrative Services Mossbarger, Director of Water Quality and Regulatory Compliance Colston, Engineering Manager Cortez, Engineering Manager Akiyoshi, Graphic Design Specialist Denhaan, Public Affairs Specialist Rivenburg, Legal Counsel Collins, Assistant Secretary Swan, and members of the public.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: None.

ITEMS TOO LATE TO BE AGENDIZED: None.

TOUR OF SAND CANYON PROFESSIONAL CENTER

At 4:34 p.m., the Board of Directors and staff left the Board Room to tour the construction site of the Sand Canyon Professional Center, 15550 Sand Canyon Avenue, Irvine, CA 92618.

ADJOURNMENT

There being no further business, President LaMar adjourned the special meeting at 5:04 p.m. to the regular meeting of the Board of Directors of the Irvine Ranch Water District.

APPROVED and SIGNED this 25th day of November, 2019.

President, IRVINE RANCH WATER DISTRICT
Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:
Claire Hervey Collins, Legal Counsel
– Lewis Brisbois

EXHIBIT "B"

MINUTES OF REGULAR MEETING – NOVEMBER 11, 2019

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:04 p.m. by President LaMar on November 11, 2019 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Reinhart, Withers, Swan, Matheis, and LaMar.

Directors Absent: None.

Also Present: General Manager Cook, Executive of Technical Services Burton, Executive Director of Finance and Administration Clary, Executive Director of Water Policy Weghorst, Executive Director of Operations Chambers, Director of Treasury and Risk Management Jacobson, Director of Water Resources Sanchez, Director of Water Recycling Operations Zepeda, Director of Water Operations Roberts, Director of Maintenance Operations Mykitta, Director of Public Affairs Beeman, Director of Human Resources Roney, Government Relations Officer Compton, Natural Resources Manager Swift, Director of Administrative Services Mossbarger, Director of Water Quality and Regulatory Compliance Colston, Public Affairs Manager Fabris, Engineering Manager Cortez, Engineering Manager Akiyoshi, Graphic Design Specialist Denhaan, Public Affairs Specialist Rivenburg, Legal Counsel Collins, Assistant Secretary Swan, and members of the public.

WRITTEN COMMUNICATIONS: None.

ORAL COMMUNICATIONS: None.

ITEMS TOO LATE TO BE AGENDIZED: None.

CONSENT CALENDAR

Prior to the consideration of the Consent Calendar, President LaMar provided comments on Item No. 6, <u>CHANGES TO GENERAL MANAGER'S COMPENSATION</u>. Mr. LaMar reported that on October 28, 2019, the Board conducted its annual performance evaluation of the General Manager. The Board was asked to consider changes to his compensation as a result of that performance review.

Mr. LaMar said that pursuant to Government Code Section 54953(c)(3), prior to taking final action on changes to the General Manager's compensation, he was providing a summary of the recommended action before the Board. The recommendation is to increase the annual base salary of the General Manager by 3.59%, or \$11,000, to \$317,800, effective October 1, 2019, to provide a one-time performance award of \$18,500 as a taxable lump sum cash payment, and to maintain the automobile allowance of \$725 per month. All other aspects of the General Manager's compensation would remain unchanged.

There being no further comments, on <u>MOTION</u> by Reinhart, seconded by Swan, and unanimously carried (Reinhart, Withers, Swan, Matheis, and LaMar voting aye), CONSENT CALENDAR ITEMS 3 THROUGH 9 WERE APPROVED AS FOLLOWS:

CONSENT CALENDAR (CONTINUED)

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

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

4. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the October 28, 2019 Regular Board Meeting be approved as presented.

5. ACWA 2019 MEMBERSHIP MEETING AND 2020-2021 ELECTION

Recommendation: That the Board support the candidates selected by the ACWA Nominating Committee and designate Vice President Mary Aileen Matheis as the IRWD voting delegate for the December 4, 2019 membership meeting.

6. CHANGES TO GENERAL MANAGER'S COMPENSATION

Recommendation: That the Board approve an increase to the annual salary of the General Manager to the amount of \$317,800, a one-time performance award in the amount of \$18,500, and maintain the General Manager's automobile allowance at \$725 per month, effective October 1, 2019.

7. <u>ORANGE COUNTY TRANSPORTATION AUTHORITY PIPELINE CROSSING OC-</u>276 LICENSE AGREEMENT

Recommendation: That the Board authorize the General Manager to execute the Orange County Transportation Authority License OC-276 for the 12-inch domestic water pipeline serving Innovation Park, subject to non-substantive changes.

8. 2020 INVESTMENT POLICY

Recommendation: That the Board adopt the following resolution by title:

RESOLUTION NO. 2019 - 28

RESOLUTION OF THE BOARD OF DIRECTORS OF THE IRVINE RANCH WATER DISTRICT APPROVING AN INVESTMENT POLICY AND AUTHORIZING THE TREASURER AND ASSISTANT TREASURER(S) TO INVEST AND REINVEST FUNDS OF THE DISTRICT AND OF EACH OF ITS IMPROVEMENT DISTRICTS AND TO SELL AND EXCHANGE SECURITIES

ACTION CALENDAR

<u>SAND CANYON PROFESSIONAL CENTER – PHASE II CONSTRUCTION UPDATE AND LISTING AGREEMENT</u>

General Manager Cook reported that some aspects of the Sand Canyon Professional Center construction update were covered by Director of Treasury and Risk Management Jacobson at the Special Board meeting tour. The listing agreement part of this item is related to an extension with the existing brokerage team through February 29, 2020.

Mr. Jacobson added that the leasing interest in the building has increased. Meetings are held with the brokerage team twice a month. Currently there are negotiations with a prospective tenant who is interested in 75% of the building. Commercial leasing within the Irvine Spectrum area is currently stable and the Irvine Company has started a couple new office projects in the area, which is promising.

Director Swan reported that this item was reviewed by the Finance and Personnel Committee on November 5, 2019, and agrees with the staff recommendation. On <u>MOTION</u> Swan, seconded by Matheis, and unanimously carried (Reinhart, Withers, Swan, Matheis, and LaMar voting aye), THE BOARD APPROVED A NEW LISTING AGREEMENT WITH THE EXISTING BROKERAGE TEAM OF CUSHMAN & WAKEFIELD AND COLLIERS INTERNATIONAL UNDER THE SAME TERMS AND COMMISSION RATES AS THE PREVIOUSLY EXECUTED LISTING AGREEMENT, WITH A TIME EXTENSION THROUGH FEBRUARY 29, 2020.

CRYSTAL COVE IN-LIEU DOMESTIC WATER AGREEMENT

General Manager Cook reported that the Crystal Cove homeowner association (HOA) common area are irrigated with recycled water. The Crystal Cove HOA reported to IRWD that they were seeing increasing levels of algae and debris in their irrigation equipment resulting in increased landscape maintenance costs. District staff determined that the source of the debris was related to IRWD's San Joaquin Reservoir. In addition, staff was also working to address repeated issues with a 10-inch recycled water pipeline in the Crystal Cove area. Staff recommends that IRWD address both issues by converting the Crystal Cove HOA irrigation system to potable water on an interim basis; make improvements at the San Joaquin Reservoir to prevent debris from entering the recycled water distribution system; and to replace the failing recycled water pipeline on Seawatch within the Crystal Cove community.

Director of Water Operations Roberts described how staff proposed to convert the HOA from recycled to potable water. He reported that there are two sources of water to the Crystal Cove community, the first through Signal Peak down to Seawatch, an easement road with a 10-inch recycled pipeline that has experienced multiple failures; the domestic line parallel to it has not experienced any issues. The second source of water is through an additional 10-inch pipeline through the Pelican Hills Golf Course. Staff recommends disconnecting both sources of recycled water and temporarily connecting the Crystal Cove irrigation system to the domestic water system using a back flow preventer device for the duration of the project.

President LaMar noted that this item was not reviewed by a committee. On MOTION by Matheis, seconded by Swan, and unanimously carried (Reinhart, Withers, Swan, Matheis, and LaMar voting aye), THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE AN IN-LIEU DOMESTIC WATER AGREEMENT WITH CRYSTAL COVE HOMEOWNERS ASSOCIATION FOR THE TEMPORARY USE OF POTABLE WATER FOR LANDSCAPE IRRIGATION DURING THE CONSTRUCTION OF THE SAN JOAQUIN FILTRATION PROJECT AND THE SEAWATCH RECYCLED PIPELINE REPLACEMENT PROJECT FOR A PERIOD OF 36 MONTHS OR UNTIL BOTH PROJECTS ARE COMPLETE, WHICHEVER IS LATER.

GENERAL MANAGER'S REPORT

General Manager Cook reported that IRWD's San Joaquin Marsh was named a wetland of distinction by the Society of Wetland Scientists. It is a rare honor, as only 20 are named in the United States. He thanked Director Swan's vision and Ian Swift and his staff for operating and maintaining the marsh to be recognized as one of the world's most valuable wetland ecosystems.

DIRECTORS' COMMENTS

Director Reinhart reported on his attendance at the OCBC's Annual Economic Forecast; the MWDOC Board Meeting Workshop with the MWD directors; and the SOCWA Board Meeting.

Director Withers reported on his participation at the OCWD/OCSD joint groundbreaking ceremony for phase three of the Groundwater Replenishment System.

Director Swan reported on his attendance at the monthly WACO meeting; and his participation in the Water Education Foundation's 2019 Water Summit and the Water Education Foundation's Central Coast Tour.

Director Matheis reported on her participation in the Water Education Foundation's 2019 Water Summit; her attendance at the monthly WACO meeting; the ISDOC Executive Committee Meeting; and the Astounding Inventions Appreciation Reception.

President LaMar reported on his attendance at the OCBC's Annual Economic Forecast; the monthly WACO meeting; and the National Water Resources Association Conference.

COMMUNITY UPDATES: None.

ADJOURNMENT

There being no further business, President LaMar adjourned the meeting at 5:36 p.m. in memory of William "Bill" Woollett Jr., Irvine's first city manager; and in memory of Ed Royce Sr., former MWDOC Board Director.

APPROVED and SIGNED this 25th	h day of November, 2019.
	President, IRVINE RANCH WATER DISTRICT
	Secretary IRVINE RANCH WATER DISTRICT
APPROVED AS TO FORM:	
C1.: II C11: I 1 C	
Claire Hervey Collins, Legal Coun- Lewis Brisbois	Sel

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November 25, 2019

Prepared by: J. Davis / T. Fournier Submitted by: R. Jacobson / C. Clary Approved by: Paul A. Cook

CONSENT CALENDAR

OCTOBER 2019 TREASURY REPORT

SUMMARY:

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

- A. The October 2019 Investment Summary Report. This Investment Summary Report conforms with the 2019 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Summary of Fixed and Variable Debt as of October 31, 2019, as outlined in Exhibit "B".
- C. The Monthly Interest Rate Swap Summary as of October 31, 2019, as outlined in Exhibit "C".
- D. The October 31, 2019 Disbursement Summary of warrants 402586 through 403540, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$32,181,115 as outlined in Exhibit "D".
- E. The Summary of Payroll ACH payments in the total amount of \$2,117,028 as outlined in Exhibit "E".
- F. The Disclosure Report of Reimbursements to Board Members and Staff for October 2019, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "F".

FISCAL IMPACTS:

As of October 31, 2019, the book value of the investment portfolio was \$345,427,987, with a 2.17% rate of return and a market value of \$347,101,880. Based on the District's September 30, 2019 quarterly real estate investment rate of return of 9.15%, the weighted average return for the fixed income and real estate investments was 4.36%.

As of October 31, 2019, the outstanding principal amount of fixed and variable rate debt was \$659,425,000. The monthly weighted average all-in variable rate was 1.42%. Including the District's weighted average fixed rate bond issues of 3.69% and the previous month's negative cash accruals from fixed payer interest rate swaps, which hedge a portion of the District's variable rate debt, the total average debt rate was 3.01%.

Payroll ACH payments totaled \$2,117,028, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for October totaled \$32,181,115.

Consent Calendar: October 2019 Treasury Reports

November 25, 2019

Page 2

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 debt 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 SUMMARY OF FIXED AND VARIABLE RATE DEBT, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE OCTOBER 2019 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$2,117,028; AND APPROVE THE OCTOBER 2019 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 402586 THROUGH 403540 WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$32,181,115.

LIST OF EXHIBITS:

Exhibit "A" – Investment Summary Report

Exhibit "B" – Summary of Fixed and Variable Debt

Exhibit "C" – Monthly Interest Rate Swap Summary

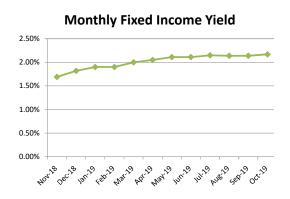
Exhibit "D" – Monthly Summary of District Disbursements

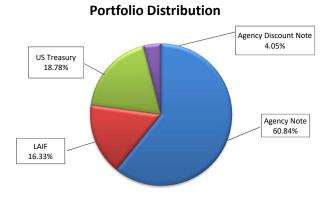
Exhibit "E" – Monthly Payroll ACH Summary

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

Exhibit "A"

Irvine Ranch Water District Investment Portfolio Summary October 2019





Investment Summary

Type	PAR	Book Value	Market Value
Agency Note	210,550,000	210,308,416	211,189,831
US Treasury	65,000,000	64,633,795	65,330,700
LAIF	56,500,000	56,500,000	56,592,819
Agency Discount Note	14,000,000	13,985,776	13,988,530
Grand Total	346,050,000	345,427,987	347,101,880

Weighted Average Return Including Real Estate Portfolio 4.40% 4.30% 4.20% 4.10% 4.00% 3.90% 3.80% 3.70%



Top Issuers

Issuer	PAR	% Portfolio
Fed Farm Credit Bank	75,000,000	21.67%
Fed Home Loan Bank	44,000,000	12.71%
Fed Home Loan Mortgage Corp	50,000,000	14.45%
Fed Natl Mortgage Assoc	55,550,000	16.06%
State of California Treasury - LAIF	56,500,000	16.33%
US Treasury	65,000,000	18.78%
Grand Total	346,050,000	100.00%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT

10/31/19

SETTLMT	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 10/31/2019	UNREALIZED ⁽²⁾ GAIN/(LOSS)
				8									(/
08/23/17			11/01/19		LAIF	State of California Tsy.	\$56,500,000		2.250%	\$56,500,000.00	\$56,500,000.00	56,592,819.16	92,819.16
06/14/19	NA	NA	11/05/19	NR	FHLB - Discount Note	Fed Home Loan Bank	5,000,000	2.130%	2.178%	4,957,400.00	4,998,816.67	4,999,050.00	233.33
11/08/16	Quarterly	05/08/17	11/08/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.250%	1.245%	5,000,750.00	5,000,004.79	4,999,600.00	(404.79)
11/28/16	NA	NA	11/15/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.375%	1.440%	4,990,550.00	4,999,877.73	4,999,500.00	(377.73)
05/30/19	NA	NA	11/19/19	NR	FFCB - Discount Note	Fed Farm Credit Bank	5,000,000	2.315%	2.374%	4,944,375.69	4,994,212.50	4,995,800.00	1,587.50
11/28/16	Quarterly	05/25/17	11/25/19	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.400%	1.503%	4,985,000.00	4,999,670.33	4,998,900.00	(770.33)
09/18/19	NA	NA	12/05/19	NR	FHLB - Discount Note	Fed Home Loan Bank	4,000,000	1.920%	1.955%	3,983,360.00	3,992,746.67	3,993,680.00	933.33
12/12/16	NA	NA	12/12/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.450%	1.440%	5,001,450.00	5,000,053.02	4,999,100.00	(953.02)
12/21/16	NA	NA	12/19/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.500%	1.621%	4,982,350.00	4,999,224.89	4,998,650.00	(574.89)
12/20/17	NA	NA	01/17/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.500%	1.932%	4,956,250.00	4,989,668.54	4,998,400.00	8,731.46
10/16/17	NA	NA	02/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.612%	4,987,025.00	4,998,215.00	4,998,350.00	135.00
12/19/18	NA	NA	02/29/20	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	1.250%	2.672%	9,833,593.76	9,949,354.62	9,987,500.00	38,145.38
12/20/17	NA	NA	03/13/20	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	4.125%	1.940%	5,237,200.00	5,068,479.12	5,045,950.00	(22,529.12)
12/20/18	NA	NA	03/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	2.250%	2.665%	9,948,000.00	9,981,850.11	10,026,200.00	44,349.89
10/03/17	NA	NA	04/20/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.375%	1.630%	4,968,350.00	4,994,180.48	4,994,450.00	269.52
06/29/18	NA	NA	04/23/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	2.500%	2.544%	4,996,000.00	4,999,043.48	5,021,350.00	22,306.52
06/29/18	NA	NA	05/15/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.550%	2.566%	4,998,450.00	4,999,557.14	5,025,400.00	25,842.86
11/21/17	Continuous after	02/20/18	05/20/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.830%	1.930%	4,987,500.00	4,991,790.58	5,000,100.00	8,309.42
06/11/18	NA	NA	06/11/20	Aaa/NR/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.550%	2.570%	4,997,100.00	4,999,115.32	5,024,650.00	25,534.68
11/10/17	NA	NA	06/22/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	1.750%	4,968,000.00	4,997,392.97	4,995,850.00	(1,542.97)
04/19/18	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.535%	4,886,000.00	4,962,775.51	4,995,400.00	32,624.49
06/08/18	NA	NA	07/30/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.500%	2.559%	4,890,100.00	4,961,822.73	4,995,400.00	33,577.27
12/20/17	Quarterly	11/10/16	08/10/20	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.450%	2.052%	4,923,000.00	4,969,247.93	4,993,150.00	23,902.07
09/14/18	NA	NA	08/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.680%	2.789%	4,989,700.00	4,995,691.41	5,044,100.00	48,408.59
05/21/18	Continuous after	12/01/17	09/01/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.680%	2.735%	4,884,250.00	4,957,669.36	5,000,050.00	42,380.64
09/14/18	NA	NA	09/04/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	2.690%	2.794%	4,990,050.00	4,995,749.51	5,046,100.00	50,350.49
12/12/17	One Time	09/28/18	09/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	2.000%	2.000%	5,000,000.00	5,000,000.00	5,011,400.00	11,400.00
10/31/17	One Time	10/30/18	10/30/20	Aaa/NR/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,550,000	1.850%	1.850%	5,550,000.00	5,550,000.00	5,552,830.50	2,830.50
09/28/18	NA	NA	10/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	1.750%	2.847%	4,889,453.13	4,831,719.88	5,006,850.00	175,130.12
12/13/17	Continuous after	08/23/17	11/23/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.770%	2.060%	4,958,750.00	4,980,946.79	4,988,950.00	8,003.21
12/13/17	Quarterly	05/24/18	11/24/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.900%	2.023%	4,982,500.00	4,991,908.08	5,000,250.00	8,341.92
11/30/17	NA	NA	11/24/20	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.850%	1.964%	4,983,550.00	4,994,129.31	5,001,600.00	7,470.69
12/20/17	NA	NA	12/28/20	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.875%	2.023%	4,978,400.00	4,989,728.26	5,014,250.00	24,521.74
11/09/18	NA	NA	12/31/20	Aaa/NR/AAA	Treasury - Note	US Treasury	5,000,000	2.375%	2.958%	4,939,843.75	4,967,271.31	5,042,950.00	75,678.69
10/12/18	NA	NA	01/31/21	Aaa/NR/AAA	Treasury - Note	US Treasury	10,000,000	1.375%	2.890%	9,664,843.76	9,818,092.16	9,973,400.00	155,307.84

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT

10/31/19

Petty Cash Ck Balance Bank of America 273,413.00 \$344,955,264.67 Outstanding Variable Rate Debt Net Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) Security market value is as of the most recent quarter-end as reported by LAIF. Net Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 Investment Balance: Investment Balance: Investment to Variable Rate Debt Ratio: Investment Summary Report is in conformity with the 2019 Investment Policy Add Povides sufficient liquidity to meet the next six months estimated expenditures. Portfolio - Average Number of Days To Maturity 310 October 2.17% 9.15% 4.36% Add Ago 9.15% 4.32% Add Provides sufficient liquidity to meet the next six months estimated expenditures. Change 0.03% 0.004%							10/31/19							
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1002/19 value 12/30/19 09/30/21 Aaan/NA/NR FHLMC - Note Fed Home Loam Mortgage Corp 10,000,000 2,000% 2,000% 10,000,000 0 10,000,000 0 9,985,700,00 (14,300 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19 10/15/19						•	•							
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1015/19 0 1015/19 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21 1015/21														
10/2219		NA				•							, , ,	(/ /
03/08/19 NA NA 01/15/22 Aaa/AA+/RR Treasury Note US Treasury 5,000,000 2,500% 2,460% 5,005,468.75 5,004,222.04 5,102,750.00 98,527.94		Quarterly	01/15/19											
03/21/19 NA NA 02/03/22 Aaa/AA+/AAA FFCB - Note Fed Farm Credit Bank 5,000,000 2,030% 2,361% 4,954,350,00 4,964,132.14 5,049,250,00 85,117.84 03/08/19 NA NA 03/11/22 Aaa/AA+/NR FHLB - Note Fed Home Loan Bank 5,000,000 2,500% 2,549% 5,002,750.00 5,002,154.46 5,106,550.00 104,395.54		NA	NA								, ,			,
TOTAL INVESTMENTS S346,050,000 S344,678,451.67 S345,427,986.80 S347,101,879.66 S1,673,892.80		NA	NA			•	3							
TOTAL INVESTMENTS Petty Cash Ck Balance Bank of America Petty Cash Ck Balance Bank of America Outstanding Variable Rate Debt Security market value is as of the most recent quarter-end as reported by LAIF. Security market value is as of the most recent quarter end return Outstanding Variable Rate Debt Security market value sing Bank of New York ("Trading Prices"), Bloomberg Investment Balance: Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 and/or broker dealer pricing. Net Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 Investment Balance: Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 Investment Balance: Portfolio Portfolio Portfolio Return This Investment Summary Report is in conformity with the 2019 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures. S344,955,264 Weighted Avg. Return		NA	NA											
Petty Cash Ck Balance Bank of America 3,400.00 273,413.00 3344,955,264.67 Outstanding Variable Rate Debt Security market value is as of the most recent quarter-end as reported by LAIF. Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing. Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) Investment Balance: Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 Investment Balance: Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 Investment Balance: Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 Investment to Variable Rate Debt Ratio: 1719 Outstanding Variable Rate Debt (Less \$60 million fixed-payer swaps) S202,300,000 S344,955,264 S202,300,000 S202,300,000 S204,955,264 S202,300,000 S202,300,	03/08/19	NA	NA	03/11/22	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	2.500%	2.549%	5,002,750.00	5,002,154.46	5,106,550.00	104,395.54
Security market values are determined using Bank of New York ("Trading Prices"), Bloomberg and/or broker dealer pricing. Investment Balance: \$344,955,265	TOTAL INV	VESTMENTS				•	Bank of America	\$346,050,000	=		3,400.00 273,413.00	\$345,427,986.80	\$347,101,879.66	\$1,673,892.86
Portfolio Return October 2.17% 9.15% 4.36% This Investment Summary Report is in conformity with the 2019 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures. Change 0.03% Portfolio Return 4.36% 4.32% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00% 6.00	Security market valuand/or broker dealer (2) Gain (loss) calcul	ues are determin r pricing. lated against carr	ed using Barry value using	k of New Yo	rk ("Trading Prices"),	· ·	ers		Net Outstandi Investment Ba Investment to	ing Variable alance: Variable R	e Rate Debt (Less \$60 ate Debt Ratio:		• /	\$262,300,000 \$202,300,000 \$344,955,265 171% 310
and provides sufficient liquidity to meet the next six months estimated expenditures. Change 0.03% 0.04%											October	Portfolio	Portfolio	Return
	This Investment Sur	mmary Report is	in conformi	ty with the 20	19 Investment Policy						September	2.14%	9.15%	4.32%
	and provides suffici	ient liquidity to 1	meet the next	six months e	stimated expenditures.						Change	0.03%		0.04%
	*S - Step up				-									

IRVINE RANCH WATER DISTRICT SUMMARY OF MATURITIES

10/31/19

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount	Collateral Deposit	US Treasury
					Notes		
10/19	\$56,500,000	16.33%	\$56,500,000				
11/19	25,000,000	7.22%		15,000,000	10,000,000		
12/19	14,000,000	4.05%		10,000,000	4,000,000		
01/20	5,000,000	1.44%		5,000,000			
02/20	15,000,000	4.33%		5,000,000			10,000,000
03/20	15,000,000	4.33%		5,000,000			10,000,000
04/20	10,000,000	2.89%		10,000,000			
05/20	10,000,000	2.89%		10,000,000			
06/20	10,000,000	2.89%		10,000,000			
07/20	10,000,000	2.89%		10,000,000			
08/20	10,000,000	2.89%		10,000,000			
09/20	15,000,000	4.33%		15,000,000			
SUB-TOTAL	\$195,500,000	56.49%	\$56,500,000	\$105,000,000	\$14,000,000		\$20,000,000
13 Months - 3 YEARS							
10/01/2020 - 12/31/2020	35,550,000	10.27%		25,550,000			10,000,000
1/01/2021 -03/31/2021	40,000,000	11.56%		25,000,000			15,000,000
04/01/2021 -6/30/2021	15,000,000	4.33%		10,000,000			5,000,000
07/01/2021 - 09/31/2021	25,000,000	7.22%		20,000,000			5,000,000
10/01/2021 - 12/31/2021	20,000,000	5.78%		15,000,000			5,000,000
1/01/2022 -3/28/2022	15,000,000	4.33%		10,000,000			5,000,000
	-						
	-						
	-						
			_				
TOTALS	\$346,050,000	100.00%	\$56,500,000	\$210,550,000	\$14,000,000		\$65,000,000

16.33%

60.84%

4.05%

18.78%

% OF PORTFOLIO

Irvine Ranch Water District Summary of Real Estate - Income Producing Investments 9/30/2019

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	 ORIGINAL COST	MA	RKET VALUE 9/30/2019	ANNUALIZED RATE OF RETURN QUARTER ENDED 9/30/2019
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$	148,625,000	20.15%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$	28,710,327	8.50%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$	11,730,000	9.29%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$	9,180,000	6.64%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$	11,220,000	9.08%
Total - Income Properties				\$ 72,569,826	\$	209,465,327	15.40%
OTHER REAL ESTATE DESCRIPTION							
Serrano Summit - Promissory Note	Sep-17	NA	NA	\$ 88,128,000	\$	88,128,000	4.00%
Total - Income Producing Real Estate	Investments			\$ 160,697,826	\$	297,593,327	9.15%

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT INVESTMENT ACTIVITY

Oct-19

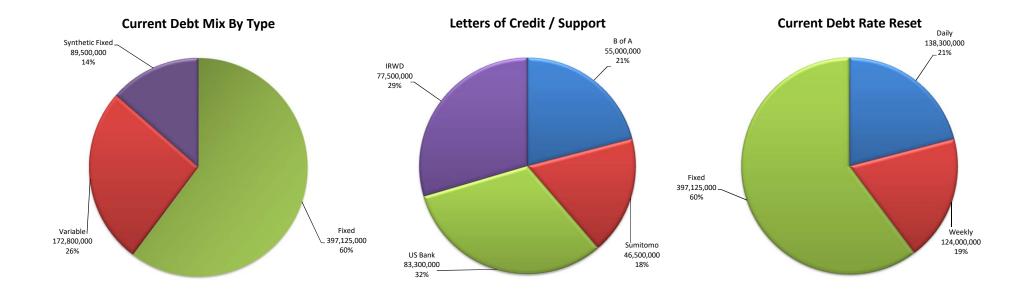
MATURITIES/SALES/CALLS

PURCHASES

				Settlement				YIELD TO
DATE	SECURITY TYPE	PAR	YIELD	Date	Maturity Date	SECURITY TYPE	PAR	MATURITY
10/1/2019	FHLB - Discount Note	\$10,000,000	2.43%	10/2/2019	9/30/2021	FHLMC - Note	\$10,000,000	2.03%
10/3/2019	FHLB - Note	\$10,000,000	1.16%	10/11/2019	10/15/2021	Treasury - Note	\$5,000,000	1.54%
10/11/2019	FFCB - Note	\$10,000,000	1.21%	10/11/2019	10/15/2019	FHLB - Discount Note	\$10,000,000	1.71%
10/15/2019	FHLB - Discount Note	\$10,000,000	1.71%	10/15/2019	10/15/2021	FHLMC - Note	\$10,000,000	2.00%
10/22/2019	FHLB - Discount Note	\$5,000,000	2.03%	10/22/2019	10/15/2021	FFCB - Note	\$5,000,000	1.64%

Exhibit "B"

Irvine Ranch Water District Summary of Fixed and Variable Rate Debt October 2019



Outstanding Par by Series

Series	Issue Date	Maturity Date	Remaining Principal	Percent	Letter of Credit/Support	Rmkt Agent	Mode	Reset
Series 1993	05/19/93	04/01/33	\$28,300,000	4.29%	US Bank	BAML	Variable	Daily
Series 2008-A Refunding	04/24/08	07/01/35	\$46,500,000	7.05%	Sumitomo	BAML	Variable	Weekly
Series 2011-A-1 Refunding	04/15/11	10/01/37	\$46,500,000	7.05%	IRWD	Goldman	Variable	Weekly
Series 2011-A-2 Refunding	04/15/11	10/01/37	\$31,000,000	4.70%	IRWD	Goldman	Variable	Weekly
Series 2009 - A	06/04/09	10/01/41	\$55,000,000	8.34%	US Bank	US Bank	Variable	Daily
Series 2009 - B	06/04/09	10/01/41	\$55,000,000	8.34%	B of A	Goldman	Variable	Daily
2010 Refunding COPS	02/23/10	03/01/20	\$1,980,000	0.30%	N/A	N/A	Fixed	Fixed
2016 COPS	09/01/16	03/01/46	\$116,745,000	17.70%	N/A	N/A	Fixed	Fixed
2010 Build America Taxable Bond	12/16/10	05/01/40	\$175,000,000	26.54%	N/A	N/A	Fixed	Fixed
Series 2016	10/12/16	02/01/46	\$103,400,000	15.68%	N/A	N/A	Fixed	Fixed
Total			\$659,425,000	100.00%				

IRVINE RANCH WATER DISTRICT

SUMMARY OF FIXED & VARIABLE RATE DEBT

October-19

ITN

Daily

Weekly

	GI	ENERAL BO	OND INFORMA	TION					L	ETTER OF CRE	DIT INFOR	MATION					TR	USTEE INFOR	MATION	
VARIABLE RATE ISSUES	Issue Date	Maturity Date	Principal Payment Date	Payment Date	Original Par Amount	Remaining Principal	Letter of Credit	Reimbursment Agreement Date		MOODYS	S&P	FITCH	LOC Stated Amount	LOC Fee	Annual LOC Cost	Rmkt Agent	Reset	Rmkt Fees	Annual Cost	Trustee
SERIES 1993	05/19/93	04/01/33	Apr 1	5th Bus. Day	\$38,300,000	\$28,300,000	US BANK	05/07/15	12/15/21	Aa3/VMIG1	AA-/A-1+	N/R	\$28,681,468	0.3300%	\$94,649	BAML	DAILY	0.10%	\$28,300	BANK OF NY
SERIES 2008-A Refunding	04/24/08	07/01/35	Jul 1	5th Bus. Day	\$60,215,000	\$46,500,000	SUMITOMO	04/01/11	07/21/21	A1/P-1	A/A-1	A/F1	\$47,187,945	0.3150%	\$148,642	BAML	WED	0.07%	\$32,550	BANK OF NY
SERIES 2011-A-1 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$60,545,000	\$46,500,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$58,125	BANK OF NY
SERIES 2011-A-2 Refunding	04/15/11	10/01/37	Oct 1	1st Bus. Day	\$40,370,000	\$31,000,000	N/A	N/A	N/A	Aa1/VMIG1	A-1+	AAA/F1+	N/A	N/A	N/A	Goldman	WED	0.13%	\$38,750	BANK OF NY
SERIES 2009 - A	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$55,000,000	US BANK	04/01/11	12/15/21	Aa2/VMIG 1	AA-/A-1+	AA/F1+	\$55,614,795	0.3300%	\$183,529	US Bank	DAILY	0.07%	\$38,500	US BANK
SERIES 2009 - B	06/04/09	10/01/41	Oct 1	1st Bus. Day	\$75,000,000	\$55,000,000	B of A	04/01/11	05/16/22	Aa2/VMIG 1	A/A-1	A1/F1+	\$55,614,795	0.3000%	\$166,844	Goldman	DAILY	0.10%	\$55,000	US BANK

\$349,430,000 \$262,300,000 SUB-TOTAL VARIABLE RATE DEBT \$187,099,003 0.3173% \$593,664 0.10% \$251,225 (Wt. Avg) (Wt. Avg) FIXED RATE ISSUES 2010 REFUNDING COPS 02/23/10 03/01/20 Mar 1 Mar/Sept \$85,145,000 \$1,980,000 N/A N/A N/A Aa1 AAA AAA N/A N/A N/A N/A N/A N/A BANK OF NY 2010 GO Build America Taxable Bonds 12/16/10 05/01/40 May (2025) May/Nov \$175,000,000 \$175,000,000 N/A N/A N/A Aa1 AAA NR N/A N/A N/A N/A N/A N/A N/A US BANK 2016 COPS 09/01/16 03/01/46 Mar (2021) Mar/Sept \$116,745,000 \$116,745,000 N/A N/A N/A NR AAA AAA N/A N/A N/A N/A N/A N/A N/A US BANK SERIES 2016 10/12/16 02/01/46 Feb (2022) \$103,400,000 \$103,400,000 N/A NR N/A N/A BANK OF NY Feb/Aug N/A N/A AAA AAA N/A N/A N/A N/A N/A

\$480,290,000 \$397,125,000

SUB-TOTAL FIXED RATE DEBT

\$829,720,000 \$659,425,000 TOTAL- FIXED & VARIABLE RATE DEBT

Remarke	ting Agents			GO VS COP's	
Goldman	132,500,000	51%	GO:	540,700,000	82%
BAML	74,800,000	29%	COPS:	118,725,000	18%
US Bank	55,000,000	21%	Total	659,425,000	
	262,300,000				

LOC E	Banks	Breakdown Between	een Variable & Fixed R	ate Mode		
		Daily Issues	138,300,000			
SUMITOMO	46,500,000	Weekly Issues	46,500,000	7%		
BANK OF AMERICA	55,000,000	ITN Issues	77,500,000	12%		
US BANK	83,300,000	Sub-Total	262,300,000			
	184,800,000					
		Fixed Rate Issues	\$397,125,000	60%		
		Sub-Total - Fixed	397,125,000			
		TOTAL DEBT				
		FIXED & VAR.	659,425,000	100%		

IRVINE RANCH WATER DISTRICT SUMMARY OF DEBT RATES Oct-19

Rmkt Agent	GOLDMAN	GOLDMAN	GOLDMAN	MERRILI	LYNCH	US BANK
Mode	DAILY	WEEKLY	WEEKLY	DAILY	WEEKLY	DAILY
Bond Issue	2009 - B	2011 A-1	2011 A-2	1993	2008-A	2009-A
Par Amount	55,000,000	46,500,000	31,000,000	28,300,000	46,500,000	55,000,000
Bank	BOFA	(SIFMA -1)	(SIFMA -1)	US BANK	Sumitomo	US BANK
Reset		Wednesday	Wednesday		Wednesday	
10/1/2019	1.28%	1.57%	1.57%	1.40%	1.40%	1.35%
10/2/2019	1.18%	1.57%	1.57%	1.27%	1.40%	1.25%
10/3/2019	1.10%	1.48%	1.48%	1.09%	1.32%	1.12%
10/4/2019	1.09%	1.48%	1.48%	1.08%	1.32%	1.10%
10/5/2019	1.09%	1.48%	1.48%	1.08%	1.32%	1.10%
10/6/2019	1.09%	1.48%	1.48%	1.08%	1.32%	1.10%
10/7/2019	1.08%	1.48%	1.48%	1.10%	1.32%	1.09%
10/8/2019	1.08%	1.48%	1.48%	1.11%	1.32%	1.08%
10/9/2019	1.03%	1.48%	1.48%	1.09%	1.32%	1.04%
10/10/2019	1.00%	1.39%	1.39%	1.08%	1.18%	1.00%
10/11/2019	1.00%	1.39%	1.39%	1.03%	1.18%	1.00%
10/12/2019	1.00%	1.39%	1.39%	1.03%	1.18%	1.00%
10/13/2019	1.00%	1.39%	1.39%	1.03%	1.18%	1.00%
10/14/2019	1.00%	1.39%	1.39%	1.03%	1.18%	1.00%
10/15/2019	0.98%	1.39%	1.39%	0.99%	1.18%	1.00%
10/16/2019	0.90%	1.39%	1.39%	0.95%	1.18%	0.97%
10/17/2019	0.88%	1.28%	1.28%	0.87%	1.04%	0.90%
10/18/2019	0.87%	1.28%	1.28%	0.85%	1.04%	0.85%
10/19/2019	0.87%	1.28%	1.28%	0.85%	1.04%	0.85%
10/20/2019	0.87%	1.28%	1.28%	0.85%	1.04%	0.85%
10/21/2019	0.82%	1.28%	1.28%	0.82%	1.04%	0.84%
10/22/2019	0.81%	1.28%	1.28%	0.80%	1.04%	0.81%
10/23/2019	0.80%	1.28%	1.28%	0.83%	1.04%	0.80%
10/24/2019	0.83%	1.18%	1.18%	0.83%	0.96%	0.80%
10/25/2019	0.82%	1.18%	1.18%	0.82%	0.96%	0.85%
10/26/2019	0.82%	1.18%	1.18%	0.82%	0.96%	0.85%
10/27/2019	0.82%	1.18%	1.18%	0.82%	0.96%	0.85%
10/28/2019	0.82%	1.18%	1.18%	0.83%	0.96%	0.85%
10/29/2019	0.82%	1.18%	1.18%	0.82%	0.96%	0.85%
10/30/2019	0.89%	1.18%	1.18%	0.84%	0.96%	0.85%
10/31/2019	0.97%	1.11%	1.11%	0.92%	0.87%	0.85%
Avg Interest Rates	0.96%	1.34%	1.34%	0.97%	1.13%	0.96%
Rmkt Fee	0.10%	0.13%	0.13%	0.10%	0.07%	0.07%
LOC Fee	0.30%			0.33%	0.32%	0.33%
All-In Rate	1.36%	1.47%	1.47%	1.40%	1.52%	1.36%
Par Amount	101	,500,000	31,000,000	74,80	0,000	55,000,000

	Percent of		Par	Weighted All-In		Base Rate
	Total Variable Rate		Outstanding	Average Rate		Average
Interest Rate Mode	Debt		Outstanding	Average Nate		Average
Daily	52.73%		138,300,000	1.37%		0.96%
Weekly	47.27%		124,000,000	1.49%		1.26%
	100.00%	\$	262,300,000	1.42%		1.10%
Fixed						
COPS 2010	0.50%		1,980,000	3.82%		
COPS 2016	29.40%		116,745,000	2.90%		
BABS 2010	44.07%		175,000,000	4.44%	(1)	
SERIES 2016	26.04%		103,400,000	3.32%		
	100.00%	\$	397,125,000	3.69%		
All-In Debt Rate Including \$60 Million Notional Amount of Swaps						
	<u> </u>		•	D 2		

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Exhibit "C" 10/31/2019

IRVINE RANCH WATER DISTRICT INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL October 31, 2019

LIBOR Avg %

Prior Mo.	Current Mo.	12-Mo Avg
2.04%	1.88%	2.33%

Effective Maturity Years to Counter Base	Current Fiscal Year Active Swaps							
Date Date Maturity Farty Notional Aint Type Index Fixed Nate	Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Туре	Base Index	Fixed Rate

	(Since 3/07)		
Prior Month	Current Month	Fiscal YTD	Cumulative Net Accrual

Mark to Market						
Current Mark to	Notional					
Market	Difference					

Fixed Payer Swaps - By Effective Date 3/10/2007 3/10/2029 9.4 ML

30,000,000 3/10/2007 3/10/2029 9.4 CG 30,000,000 **Totals/Weighted Avgs** \$ 60,000,000

LIBOR 5.687% LIBOR 5.687% 5.687%

(60,633)(95,911)(328, 104)(60,633)(95,911)(328, 104)(656,208) \$ (34,347,661) (121,266) \$ (191,822) \$

18,845,086 18,852,424

(11,154,914)(11,147,576)

(22,302,490) 37,697,510 \$

Total Current Year Active Swaps

60.000.000

FXP

FXP

\$ (121,266) \$ (191,822) \$ (656,208) \$ (34,347,661) \$

(17,173,831)

(17,173,831)

37,697,510 \$

(22,302,490)

Current Fiscal Year Terminated Swaps							
Effective	Maturity		Counter			Base	
Date	Date		Party	Notional Amt	Type	Index	Fixed Rate

Cash Flow Prior Current Cumulative Month Month Fiscal YTD **Net Accrual**

Mark to Market **Current Mark to** Notional Market Difference

Total Current Year Terminated Swaps

\$

Current Fiscal Year - Total Swaps

Cash Flow							
Prior	Current		Cumulative				
Month	Month	Fiscal YTD	Net Accrual				

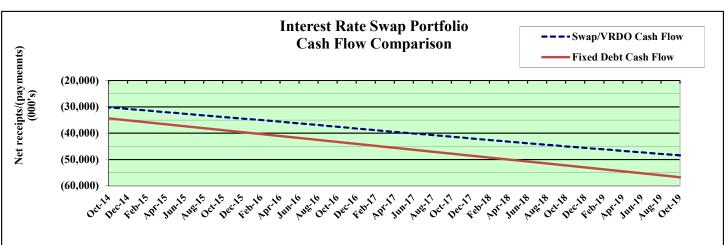
Mark to Market **Current Mark to** Notional Difference Market

Total Current Year Active & Terminated Swaps

60,000,000

\$ (121,266) \$ (191,822) \$ (656,208) \$ (34,347,661) \$

37,697,510 \$ (22,302,490)



Cash Flow Comparison Synthetic Fixed vs. Fixed Rate Debt

Cash Flow to Date

Synthetic Fixed = \$48,407,066

Fixed Rate = \$59,724,129

Assumptions:

Fixed rate debt issued at 4.93%

(estimated TE rate - Bloomberg) 'Synthetic' includes swap cash

flow + interest + fees to date

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CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
402586	IRWD-PETTY CASH CUSTODIAN	1-Oct-19	IRWD Check	1,451.07	Reconciled
402587	JCI JONES CHEMICALS INC	1-Oct-19	IRWD Check	4,681.00	Reconciled
402588	SHADETREE PARTNERSHIP INC.	2-Oct-19	IRWD Check	100.00	Reconciled
402589	Bogdanova, Miroslava (Mira)	3-Oct-19	IRWD Check	167.01	Reconciled
402590	Bowers, Marie	3-Oct-19	IRWD Check	62.40	Reconciled
402591 402592	Chen, Christina Chia, David C (David)	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	156.24 64.99	Reconciled Reconciled
402593	Davis, Jennifer R (Jennifer)	3-Oct-19	IRWD Check	1,767.81	Reconciled
402594	Ho, Connie	3-Oct-19	IRWD Check	25.98	Reconciled
402595	Hufana, Mr. Eugenio D II (Gino)	3-Oct-19	IRWD Check	62.64	Reconciled
402596	Janelli, Matthew (Matt)	3-Oct-19	IRWD Check	190.00	Reconciled
402597	Moeder, Jacob J (Jacob)	3-Oct-19	IRWD Check	1,208.13	Reconciled
402598	Nash, Joel	3-Oct-19	IRWD Check	81.20	Reconciled
402599	Oldewage, Lars D (Lars)	3-Oct-19	IRWD Check	2,704.15	Reconciled
402600	Parra, Dennis	3-Oct-19	IRWD Check	188.00	Reconciled
402601	Shinbashi, Allen	3-Oct-19	IRWD Check	883.71	Reconciled
402602	Silva, Jose A (Jose)	3-Oct-19	IRWD Check	133.48	Reconciled
402603	Sosa, Ives (Ives)	3-Oct-19	IRWD Check	183.16	Reconciled
402604 402605	ABC ICEHOUSE, INC. ACCUSTANDARD INC	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	125.08 66.96	Reconciled Reconciled
402606	ADS LLC	3-Oct-19	IRWD Check	3,232.50	Reconciled
402607	AECOM TECHNICAL SERVICES, INC.	3-Oct-19	IRWD Check	16,017.75	Reconciled
402608	AEGIS ENGINEERING MANAGEMENT, INC.	3-Oct-19	IRWD Check	15,012.75	Reconciled
402609	AIRGAS, INC.	3-Oct-19	IRWD Check	2,307.57	Reconciled
402610	ALEXANDER'S CONTRACT SERVICES, INC.	3-Oct-19	IRWD Check	121,492.60	Reconciled
402611	AMAZON CAPITAL SERVICES, INC.	3-Oct-19	IRWD Check	1,022.92	Reconciled
402612	AMERICAN GEOTECHNICAL, INC.	3-Oct-19	IRWD Check	7,935.00	Reconciled
402613	AMERICAN WATER CHEMICALS, INC.	3-Oct-19	IRWD Check	1,142.00	Reconciled
402614	ANDERSONPENNA PARTNERS, INC	3-Oct-19	IRWD Check	80,673.50	Reconciled
402615	ANTHONY N. LARSEN	3-Oct-19	IRWD Check	450.00	Reconciled
402616	ASSEMBLED PRODUCTS CORPORATION	3-Oct-19	IRWD Check	3,539.67	Reconciled
402617 402618	AT&T AT&T	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	399.90 56.24	Reconciled Reconciled
402619	AT&T	3-Oct-19	IRWD Check	4,140.81	Reconciled
402620	BARRETT, WILLIAM	3-Oct-19	IRWD Check	31.70	Reconciled
402621	BILL'S SWEEPING SERVICE INC	3-Oct-19	IRWD Check	1,170.00	Reconciled
402622	BIOMAGIC INC	3-Oct-19	IRWD Check	17,750.32	Reconciled
402623	BOYD & ASSOCIATES	3-Oct-19	IRWD Check	651.00	Reconciled
402624	BRAGA, DAVID	3-Oct-19	IRWD Check	134.82	Negotiable
402625	BROOKFIELD RESIDENTIAL	3-Oct-19	IRWD Check	181.36	Reconciled
402626	BSI SERVICES AND SOLUTIONS (WEST) INC.	3-Oct-19	IRWD Check	7,840.00	Reconciled
402627	BULL, STEPHEN	3-Oct-19	IRWD Check	1,139.72	Reconciled
402628	CALIFORNIA BARRICADE RENTAL, INC.	3-Oct-19	IRWD Check	5,828.13	Reconciled
402629	CANON SOLUTIONS AMERICA, INC.	3-Oct-19	IRWD Check	926.21	Reconciled
402630 402631	CAO, RAYMOND CAPTIVE AUDIENCE MARKETING INC.	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	36.66 79.00	Negotiable Reconciled
402632	CAPOLLO ENGINEERS, INC	3-Oct-19	IRWD Check	12,170.23	Reconciled
402633	CDW GOVERNMENT LLC	3-Oct-19	IRWD Check	1,243.58	Reconciled
402634	CHAIREL CUSTOM HAY, INC.	3-Oct-19	IRWD Check	5,391.46	Reconciled
402635	CHARLES P CROWLEY COMPANY INC	3-Oct-19	IRWD Check	7,489.89	Reconciled
402636	CHEM TECH INTERNATIONAL INC	3-Oct-19	IRWD Check	28,100.32	Reconciled
402637	CHO DESIGN ASSOCIATES, INC	3-Oct-19	IRWD Check	2,030.89	Reconciled
402638	CITY OF TUSTIN	3-Oct-19	IRWD Check	266.81	Reconciled
402639	CLA-VAL COMPANY	3-Oct-19	IRWD Check	5,441.91	Reconciled
402640	CONSTELLATION NEWENERGY, INC.	3-Oct-19	IRWD Check	55,514.76	Reconciled
402641	CONTROL TECHNOLOGY, INC.	3-Oct-19	IRWD Check	8,448.00	Reconciled
402642	CONTROLLED KEY SYSTEMS INC	3-Oct-19	IRWD Check	195.26	Reconciled
402643	CORONA, SERGIO	3-Oct-19	IRWD Check	48.26	Reconciled
402644	CRESCENT CHEMICAL CO.	3-Oct-19	IRWD Check	45.38	Reconciled
402645 402646	CS-AMSCO DG INVESTMENT INTERMEDIATE HOLDINGS 2, INC.	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	233.53 4,618.36	Reconciled Reconciled
402647	DIGITAL MAP PRODUCTS, INC.	3-Oct-19	IRWD Check	4,369.68	Reconciled
402648	DIGITAL MAP PRODUCTS, INC. DKF SOLUTIONS GROUP LLC	3-Oct-19	IRWD Check	5,200.00	Reconciled
402649	DOUANGSAVANH, SHANNON	3-Oct-19	IRWD Check	418.19	Reconciled
402650	DUKE'S ROOT CONTROL INC	3-Oct-19	IRWD Check	11,725.25	Reconciled
402651	ENTERPRISE HOLDINGS, INC.	3-Oct-19	IRWD Check	28,117.48	Reconciled
402652	ENVIRONMENTAL EQUIPMENT SUPPLY	3-Oct-19	IRWD Check	250.50	Reconciled
402653	FEDEX	3-Oct-19	IRWD Check	191.81	Reconciled
402653 402654	FERGUSON ENTERPRISES, LLC	3-Oct-19	IRWD Check	1,981.97	Reconciled

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
402656	FIRENZE PROPERTY MANAGEMENT	3-Oct-19	IRWD Check	38.22	Reconciled
402657	FIRST CHOICE SERVICES	3-Oct-19	IRWD Check	858.20	Reconciled
402658	FISERV	3-Oct-19	IRWD Check	23,116.76	Reconciled
402659	FISHER SCIENTIFIC COMPANY LLC	3-Oct-19	IRWD Check	3,098.65	Reconciled
402660	FOUGHT, CYNTHIA J.	3-Oct-19	IRWD Check	2,593.70	Reconciled
402661	FRONTIER CALIFORNIA INC.	3-Oct-19	IRWD Check	285.22	Reconciled
402662	GANAHL LUMBER CO.	3-Oct-19	IRWD Check	1,125.43	Reconciled
402663	GEI CONSULTANTS INC	3-Oct-19	IRWD Check	5,424.50	Reconciled
402664	GEOCON WEST, INC.	3-Oct-19	IRWD Check	500.00	Reconciled
402665	GLENN LUKOS ASSOCIATES, INC	3-Oct-19	IRWD Check	178.30	Reconciled
402666 402667	GRAINGER HACH COMPANY	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	3,931.85 8,073.74	Reconciled Reconciled
402668	HAN, ASHLEY	3-Oct-19	IRWD Check	745.23	Negotiable
402669	HARRINGTON INDUSTRIAL PLASTICS LLC	3-Oct-19	IRWD Check	21,887.55	Reconciled
402670	HELPMATES STAFFING SERVICES	3-Oct-19	IRWD Check	10,551.04	Reconciled
402671	HGCPM, INC	3-Oct-19	IRWD Check	10,728.21	Reconciled
402672	HILL BROTHERS CHEMICAL COMPANY	3-Oct-19	IRWD Check	8,786.91	Reconciled
402673	HOME DEPOT USA INC	3-Oct-19	IRWD Check	440.58	Reconciled
402674	HYDRO INTERNATIONAL	3-Oct-19	IRWD Check	972.44	Reconciled
402675	INFOSEND, INC.	3-Oct-19	IRWD Check	38,971.93	Reconciled
402676	INTERNATIONAL PUBLIC MANAGEMENT ASSOCIATION-HR	3-Oct-19	IRWD Check	976.00	Reconciled
402677	IRVINE GATEWAY DEVELOPMENT	3-Oct-19	IRWD Check	310.55	Reconciled
402678	IRVINE PACIFIC	3-Oct-19	IRWD Check	424.01	Reconciled
402679	IRVINE PIPE & SUPPLY INC	3-Oct-19	IRWD Check	550.83	Reconciled
402680 402681	JIG CONSULTANTS JON ALPERT	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	700.00 368.78	Reconciled Reconciled
402682	JPR SYSTEMS INC	3-Oct-19	IRWD Check	5,468.10	Reconciled
402683	K HOVNANIAN HOMES	3-Oct-19	IRWD Check	12.05	Reconciled
402684	KONECRANES INC	3-Oct-19	IRWD Check	3,998.81	Reconciled
402685	KRONICK MOSKOVITZ TIEDEMANN & GIRARD	3-Oct-19	IRWD Check	2,115.30	Reconciled
402686	KUNG, KEVIN	3-Oct-19	IRWD Check	16.14	Reconciled
402687	KURRA, VAMSI	3-Oct-19	IRWD Check	31.55	Reconciled
402688	LAMBERT RANCH MAINTENANCE	3-Oct-19	IRWD Check	793.47	Reconciled
402689	LANCER SALES USA, INC.	3-Oct-19	IRWD Check	538.89	Reconciled
402690	LANDCARE HOLDINGS, INC.	3-Oct-19	IRWD Check	36,074.49	Reconciled
402691	LANDSEA HOLDINGS CORPORATION	3-Oct-19	IRWD Check	321.54	Negotiable
402692	LEBLANC, LAUREN	3-Oct-19	IRWD Check	73.57	Reconciled
402693	LEE, JUSTINE	3-Oct-19	IRWD Check	4.55	Reconciled
402694 402695	LENNAR HOMES LI, JUN TING	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	273.70 37.87	Reconciled Negotiable
402696	LI, WEI	3-Oct-19	IRWD Check	27.70	Reconciled
402697	LIN, XINYUAN	3-Oct-19	IRWD Check	72.54	Reconciled
402698	LOBO, JOHN S	3-Oct-19	IRWD Check	134.90	Reconciled
402699	MAGUIRE, MEGAN	3-Oct-19	IRWD Check	19.11	Reconciled
402700	MAILFINANCE INC	3-Oct-19	IRWD Check	319.87	Reconciled
402701	MARK ENTERPRISES, INC.	3-Oct-19	IRWD Check	29,981.40	Reconciled
402702	MBC AQUATIC SCIENCES, INC.	3-Oct-19	IRWD Check	1,350.00	Reconciled
402703	MC MASTER CARR SUPPLY CO	3-Oct-19	IRWD Check	218.05	Reconciled
402704	MERRIMAC PETROLEUM, INC.	3-Oct-19	IRWD Check	29,385.25	Reconciled
402705	MONTANO, KEILA	3-Oct-19	IRWD Check	76.93	Reconciled
402706	MOORE, EILA I	3-Oct-19	IRWD Check	82.51	Negotiable
402707	MW RESIDENTIAL ALTON MURPHY CORP	3-Oct-19	IRWD Check	379.48	Reconciled
402708 402709	NEOGOV NEWPORT NORTH APTS	3-Oct-19 3-Oct-19	IRWD Check IRWD Check	1,000.00 553.90	Reconciled Reconciled
402710	NI, LING	3-Oct-19	IRWD Check	25.44	Reconciled
402711	NOVACOAST INC	3-Oct-19	IRWD Check	1,213.83	Reconciled
402712	OLIN CORPORATION	3-Oct-19	IRWD Check	22,006.88	Reconciled
402713	OMAR DANDASHI	3-Oct-19	IRWD Check	920.87	Reconciled
402714	ONESOURCE DISTRIBUTORS LLC	3-Oct-19	IRWD Check	1,873.16	Reconciled
402715	ORACLE AMERICA, INC.	3-Oct-19	IRWD Check	6,429.90	Reconciled
402716	ORANGE COUNTY AUTO PARTS CO	3-Oct-19	IRWD Check	506.88	Reconciled
402717	ORANGE COUNTY FIRE AUTHORITY	3-Oct-19	IRWD Check	242.00	Reconciled
402718	ORTIZ, NICOLE	3-Oct-19	IRWD Check	14.15	Reconciled
402719	PACIFIC COAST BOLT CORP	3-Oct-19	IRWD Check	729.30	Reconciled
402720	PAPER DEPOT DOCUMENT DESTRUCTION LLC	3-Oct-19	IRWD Check	360.00	Reconciled
402721	PAYNE & FEARS LLP	3-Oct-19	IRWD Check	289.65	Reconciled
402722	PENN ARCHIVE SERVICES	3-Oct-19	IRWD Check	47.50	Reconciled
402723	PRAXAIR DISTRIBUTION INC	3-Oct-19	IRWD Check	1,585.93	Reconciled
402724	PRUDENTIAL OVERALL SUPPLY	3-Oct-19	IRWD Check	1,213.65	Reconciled
402725	RED HAWK FIRE & SECURITY (CA) LLC	3-Oct-19	IRWD Check	475.00	Reconciled

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
402726	REICHEL, JOHN	3-Oct-19	IRWD Check	855.00	Reconciled
402727	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	3-Oct-19	IRWD Check	11,540.53	Negotiable
402728	SALVADOR, BEVERLY	3-Oct-19	IRWD Check	56.97	Reconciled
402729	SANDERS PAVING INC	3-Oct-19	IRWD Check	31,900.00	Reconciled
402730	SANTA CLARA APTS	3-Oct-19	IRWD Check	357.34	Reconciled
402731	SCHINDLER ELEVATOR CORPORATION	3-Oct-19	IRWD Check	221.90	Reconciled
402732	SHAMROCK SUPPLY CO INC	3-Oct-19	IRWD Check	238.14	Reconciled
402733	SHIN, CHRISTINE	3-Oct-19	IRWD Check	59.28	Reconciled
402734	SHOSHANI, MAYAN	3-Oct-19	IRWD Check	204.51	Reconciled
402735	SIGMA-ALDRICH INC	3-Oct-19	IRWD Check	126.07	Reconciled
402736	SOUTHERN CALIFORNIA EDISON COMPANY	3-Oct-19	IRWD Check	494,012.35	Reconciled
402737	SOUTHERN CALIFORNIA EDISON COMPANY	3-Oct-19	IRWD Check	101.75	Reconciled
402738	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	3-Oct-19	IRWD Check	154.70	Reconciled
402739	SPATIAL WAVE, INC.	3-Oct-19	IRWD Check	900.00	Reconciled
402740	STUKENBERG, CONNIE	3-Oct-19	IRWD Check	142.03	Reconciled
402741	SUNG JIN, KIM	3-Oct-19	IRWD Check	11.17	Negotiable
402742	SUSAN A. SIROTA	3-Oct-19	IRWD Check	4,525.00	Reconciled
402743	SWENSON, KERRY	3-Oct-19	IRWD Check	35.56	Reconciled
402744	TAYLOR MORRISON OF CALIFORNIA, LLC	3-Oct-19	IRWD Check	331.64	Reconciled
402745	TECHNICO TV INC.	3-Oct-19	IRWD Check	770.60	Reconciled
402746	TETELI, KABUTO	3-Oct-19	IRWD Check	49.20	Reconciled
402747	THIND, MINHTHU	3-Oct-19	IRWD Check	123.61	Reconciled
402748	THYSSENKRUPP ELEVATOR CORPORATION	3-Oct-19	IRWD Check	396.46	Reconciled
402749	TIC-OFFICE PROPERTIES	3-Oct-19	IRWD Check	116.44	Reconciled
402750	TIC-SPECTRUM OFFICE	3-Oct-19	IRWD Check	51.12	Reconciled
402751	TOLL BROS., INC.	3-Oct-19	IRWD Check	1,355.59	Reconciled
402752	TOY, JENNIFER	3-Oct-19	IRWD Check	21.33	Negotiable
402753	TROPICAL PLAZA NURSERY INC	3-Oct-19	IRWD Check	3,744.00	Reconciled
402754	TRUCPARCO	3-Oct-19	IRWD Check	123.40	Reconciled
402755	TSAI, ANNE	3-Oct-19	IRWD Check	45.07	Reconciled
402756	ULINE INC	3-Oct-19	IRWD Check	86.59	Reconciled
402757	UNITED PARCEL SERVICE INC	3-Oct-19	IRWD Check	70.90	Reconciled
402758	VERIZON WIRELESS SERVICES LLC	3-Oct-19	IRWD Check	14,626.27	Reconciled
402759	VESCO PLASTIC SALES (PTY) LTD	3-Oct-19	IRWD Check	3,569.90	Negotiable
402760	VICKERS, TYLER	3-Oct-19	IRWD Check	43.98	Reconciled
402761	VWR INTERNATIONAL, LLC	3-Oct-19	IRWD Check	1,280.55	Reconciled
402762	WALTERS WHOLESALE ELECTRIC	3-Oct-19	IRWD Check	468.71	Reconciled
402763	WAN, LI	3-Oct-19	IRWD Check	307.31	Reconciled
402764	WARMINGTON HOMES	3-Oct-19	IRWD Check	54.82	Reconciled
402765	WAXIE'S ENTERPRISES, INC	3-Oct-19	IRWD Check	1,990.34	Reconciled
402766	WECK LABORATORIES INC	3-Oct-19	IRWD Check	4,515.00	Reconciled
402767	WEST COAST SAME & CRANGE INC	3-Oct-19	IRWD Check	4,458.91	Reconciled
402768	WEST COAST SAND & GRAVEL INC.	3-Oct-19	IRWD Check	484.51	Reconciled
402769	WESTERN SAFETY PRODUCTS INC	3-Oct-19	IRWD Check	4,051.40	Reconciled
402770	WINDWOOD GLEN	3-Oct-19	IRWD Check	55.76	Reconciled
402771	WIRELESS WATCHDOGS, LLC	3-Oct-19	IRWD Check	1,232.00	Reconciled
402772	WOODRUFF, SPRADLIN & SMART, APC	3-Oct-19	IRWD Check	25.50	Reconciled
402773	WORKFORCE SAFETY LLC	3-Oct-19	IRWD Check	1,500.00	Reconciled
402774	YAN, JIANING	3-Oct-19	IRWD Check	32.99	Reconciled
402775	YARHI, SILVANA	3-Oct-19	IRWD Check	33.45	Reconciled
402776	ZEBRON CONTRACTING INC	3-Oct-19	IRWD Check	70,540.00	Reconciled
402777	ZHAO, ZIDAN	3-Oct-19	IRWD Check	16.04	Reconciled
402778	JCI JONES CHEMICALS INC	7-Oct-19	IRWD Check	2,560.15	Reconciled
402779	UNITED PARCEL SERVICE INC	7-Oct-19	IRWD Check	38.28	Reconciled
402780	SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY	7-Oct-19	IRWD Check	4,000.00	Reconciled
402781	EAST ORANGE COUNTY WATER DISTRICT	8-Oct-19	IRWD Check	43,381.11	Reconciled
402782	LINKEDIN CORPORATION	8-Oct-19	IRWD Check	14,525.00	Reconciled
402783	Collazo, Carlos C (Carlos)	10-Oct-19	IRWD Check	50.00	Negotiable
402784	Compton, Christine A	10-Oct-19	IRWD Check	147.18	Reconciled
402785	Fournier, Tanja L (Tanja)	10-Oct-19	IRWD Check	101.32	Reconciled
402786	Gallegos, Adriel	10-Oct-19	IRWD Check	49.00	Reconciled
402787	Jacobson, Robert C (Rob)	10-Oct-19	IRWD Check	1,114.71	Reconciled
402788	Nguyen, Viet Quoc (Quoc)	10-Oct-19	IRWD Check	51.04	Reconciled
402789	Pan, Jenny W (Jenny)	10-Oct-19	IRWD Check	163.04	Negotiable
402790	Srader, Lisa	10-Oct-19	IRWD Check	229.34	Reconciled
402704	ORACLE AMERICA, INC.	10-Oct-19	IRWD Check	4,749.96	Reconciled
402791		10 0-+ 10	IDIA/D Charle	2,552.32	Reconciled
402792	RED WING SHOE STORE	10-Oct-19	IRWD Check		
402792 402793	ABC ICEHOUSE, INC.	10-Oct-19	IRWD Check	126.98	Reconciled
402792					

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
402796	AFLAC	10-Oct-19	IRWD Check	6,721.34	Reconciled
402797	AFLAC	10-Oct-19	IRWD Check	10,082.01	Reconciled
402798	AFLAC	10-Oct-19	IRWD Check	6,721.34	Reconciled
402799	AFLAC	10-Oct-19	IRWD Check	6,721.34	Reconciled
402800	ALLIANT INSURANCE SERVICES,INC	10-Oct-19	IRWD Check	3,096.00	Reconciled
402801	AMAZON CAPITAL SERVICES, INC.	10-Oct-19	IRWD Check	320.78	Reconciled
402802	AMERICAN WATER CHEMICALS, INC.	10-Oct-19	IRWD Check	5,112.74	Reconciled
402803	AQUA BEN CORPORATION	10-Oct-19	IRWD Check	30,112.90	Reconciled
402804	AQUA-METRIC SALES COMPANY	10-Oct-19	IRWD Check	30,669.31	Reconciled
402805	AT&T	10-Oct-19	IRWD Check	1,666.07	Reconciled
402806	AT&T	10-Oct-19	IRWD Check	1,096.92	Reconciled
402807	AUTOZONE PARTS, INC.	10-Oct-19	IRWD Check	530.51	Reconciled
402808	B & K ELECTRIC WHOLESALE	10-Oct-19	IRWD Check	3,197.52	Reconciled
402809	BAKER, ANTOINETTE	10-Oct-19	IRWD Check	56.80	Negotiable
402810	BEST DRILLING AND PUMP, INC.	10-Oct-19	IRWD Check	273,410.00	Reconciled
402811	BOLANOS, LORI	10-Oct-19	IRWD Check	25.00	Reconciled
402812	BRENNTAG PACIFIC INC	10-Oct-19	IRWD Check	21,765.77	Reconciled
402813	BUENA VISTA WATER STORAGE DISTRICT	10-Oct-19	IRWD Check	488,049.10	Reconciled
402814 402815	C WELLS PIPELINE MATERIALS INC	10-Oct-19 10-Oct-19	IRWD Check IRWD Check	6,208.56 200.84	Reconciled Reconciled
402816	CAKIR, MUHAMMET EMIN CALIFORNIA BARRICADE RENTAL, INC.	10-Oct-19 10-Oct-19	IRWD Check	2,371.25	Reconciled
402810	CHOI, WONJEONG	10-Oct-19	IRWD Check	15.90	Reconciled
402817	CLEAN ENERGY	10-Oct-19	IRWD Check	5,041.48	Reconciled
402819	CLIFFORD MORIYAMA	10-Oct-19	IRWD Check	4,000.00	Reconciled
402821	COASTLINE EQUIPMENT COMPANY	10-Oct-19	IRWD Check	1,068.60	Reconciled
402822	CONNEXUS INDUSTRIES INC.	10-Oct-19	IRWD Check	27,679.20	Negotiable
402823	CONSOLIDATED CONTRACTING SERVICES, INC.	10-Oct-19	IRWD Check	1,367.61	Reconciled
402824	CONSTELLATION NEWENERGY, INC.	10-Oct-19	IRWD Check	9,843.65	Reconciled
402825	CORRPRO COMPANIES, INC.	10-Oct-19	IRWD Check	19,459.42	Reconciled
402826	COTTONS POINT DESIGN, INC.	10-Oct-19	IRWD Check	10,411.50	Reconciled
402827	COX COMMUNICATIONS, INC.	10-Oct-19	IRWD Check	265.54	Reconciled
402828	CULLIGAN OF SANTA ANA	10-Oct-19	IRWD Check	20,000.00	Reconciled
402829	D & G SIGNS	10-Oct-19	IRWD Check	27,972.64	Reconciled
402830	D & H WATER SYSTEMS INC.	10-Oct-19	IRWD Check	1,442.95	Reconciled
402831	DANG, SHENGCUI	10-Oct-19	IRWD Check	132.46	Reconciled
402832	DDB ENGINEERING, INC.	10-Oct-19	IRWD Check	7,965.00	Reconciled
402833	DELL MARKETING LP	10-Oct-19	IRWD Check	4,783.83	Reconciled
402834	DENALI WATER SOLUTIONS LLC	10-Oct-19	IRWD Check	6,361.27	Reconciled
402835	DENG, ZILIN	10-Oct-19	IRWD Check	17.59	Negotiable
402836	DISCOUNT COURIER SERVICE INC.	10-Oct-19	IRWD Check	67.47	Reconciled
402837	EAGLE PRINT DYNAMICS	10-Oct-19	IRWD Check	6,611.39	Reconciled
402838	EHS INTERNATIONAL,INC	10-Oct-19	IRWD Check	1,200.00	Reconciled
402839 402840	EI&C ENGINEERING INC	10-Oct-19	IRWD Check	46,686.00	Reconciled
402841	EKI ENVIRONMENT & WATER, INC. ENDRESS AND HAUSER INC	10-Oct-19 10-Oct-19	IRWD Check IRWD Check	16,446.90 5,650.00	Reconciled Reconciled
402841	ENVIRONMENTAL RESOURCE ASSOCIATES	10-Oct-19	IRWD Check	484.11	Reconciled
402842	ENVIRONMENTAL RESOURCE ASSOCIATES ENVIRONMENTAL SCIENCE ASSOCIATES	10-Oct-19	IRWD Check	8,922.05	Reconciled
402844	EVANS-HYDRO INC	10-Oct-19	IRWD Check	1,629.80	Reconciled
402845	FEDEX	10-Oct-19	IRWD Check	378.69	Reconciled
402846	FERGUSON ENTERPRISES, LLC	10-Oct-19	IRWD Check	25.97	Reconciled
402847	FERGUSON ENTERPRISES, LLC	10-Oct-19	IRWD Check	120.68	Reconciled
402848	FISHER SCIENTIFIC COMPANY LLC	10-Oct-19	IRWD Check	7,494.84	Reconciled
402849	FLEET SOLUTIONS LLC	10-Oct-19	IRWD Check	5,123.25	Reconciled
402850	FOUGHT, CYNTHIA J.	10-Oct-19	IRWD Check	433.14	Reconciled
402851	GCI CONSTRUCTION, INC.	10-Oct-19	IRWD Check	1,686.43	Reconciled
402852	GRAINGER	10-Oct-19	IRWD Check	11,262.89	Reconciled
402853	HAAKER EQUIPMENT COMPANY	10-Oct-19	IRWD Check	1,521.20	Reconciled
402854	HACH COMPANY	10-Oct-19	IRWD Check	517.20	Reconciled
402855	HAMILTON, KURT	10-Oct-19	IRWD Check	1,684.29	Reconciled
402856	HARMSWORTH ASSOCIATES	10-Oct-19	IRWD Check	4,446.00	Reconciled
402857	HARRINGTON INDUSTRIAL PLASTICS LLC	10-Oct-19	IRWD Check	3,202.94	Reconciled
402858	HART BROTHERS CONSTRUCTION INC	10-Oct-19	IRWD Check	1,395.70	Reconciled
402859	HELP/SYSTEMS, LLC	10-Oct-19	IRWD Check	5,800.00	Reconciled
402860	HELPMATES STAFFING SERVICES	10-Oct-19	IRWD Check	9,213.81	Reconciled
402861	HILL BROTHERS CHEMICAL COMPANY	10-Oct-19	IRWD Check	5,917.20	Reconciled
402862	HSG INC	10-Oct-19	IRWD Check	1,744.00	Reconciled
402863	HUANG, WEIYU	10-Oct-19	IRWD Check	38.96	Reconciled
402864 402865	HWOZDEK, NICOLE IRVINE PIPE & SUPPLY INC	10-Oct-19 10-Oct-19	IRWD Check IRWD Check	17.69 3,061.08	Reconciled Reconciled
402866	IRWD-PETTY CASH CUSTODIAN	10-Oct-19 10-Oct-19	IRWD Check	3,061.08 1,055.76	Reconciled
402000	INVVD I ETTT CASH COSTODIAN	10-001-19	INVVD CHECK	1,033.70	RECONCIEU

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
402867	J.L. WINGERT CO.	10-Oct-19	IRWD Check	3,718.11	Reconciled
402868	JEAN AND JEANETTE DOUMBE	10-Oct-19	IRWD Check	32.02	Reconciled
402869	JOHNSON, KAREN E	10-Oct-19	IRWD Check	1,540.00	Reconciled
402870	JOSEPH A DECONINCK	10-Oct-19	IRWD Check	10,105.36	Reconciled
402871	KAYUGA SOLUTION INC	10-Oct-19	IRWD Check	4,860.00	Reconciled
402872	KIM, KWANG	10-Oct-19	IRWD Check	56.84	Reconciled
402873	KITTIWANICH, KENT	10-Oct-19	IRWD Check	21.81	Negotiable
402874	KONECRANES INC	10-Oct-19	IRWD Check	798.00	Reconciled
402875	LA HABRA FENCE COMPANY INC	10-Oct-19	IRWD Check	672.00	Reconciled
402876	LAGUNA BEACH COUNTY WATER DISTRICT	10-Oct-19	IRWD Check	3,377.38	Reconciled
402877	LANDCARE HOLDINGS, INC.	10-Oct-19	IRWD Check	52,796.50	Reconciled
402878	LENNAR HOMES	10-Oct-19	IRWD Check	239.96	Reconciled
402879	LEOCH BATTERY CORP	10-Oct-19	IRWD Check	1,151.37	Reconciled
402880	LEWIS BRISBOIS BISGAARD AND SMITH, LLP	10-Oct-19	IRWD Check	39,134.63	Reconciled
402881	LI, JIBING	10-Oct-19	IRWD Check	285.57	Negotiable
402883	LILLESTRAND LEADERSHIP CONSULTING, INC.	10-Oct-19	IRWD Check	1,396.62	Reconciled
402884	LINE-X OF SOUTH COAST	10-Oct-19	IRWD Check	2,418.00	Reconciled
402885	LIU, LINZI	10-Oct-19	IRWD Check	2,059.14	Negotiable
402886	LU'S LIGHTHOUSE, INC.	10-Oct-19	IRWD Check	1,583.35	Reconciled
402887	MARK KADESH	10-Oct-19	IRWD Check	10,000.00	Reconciled
402888	MC MASTER CARR SUPPLY CO	10-Oct-19	IRWD Check	2,930.05	Reconciled
402889	MICROSOFT CORPORATION	10-Oct-19	IRWD Check	376.21	Reconciled
402890	MISSION COMMUNICATIONS, LLC	10-Oct-19	IRWD Check	2,385.00	Reconciled
402891	MOBILE MODULAR MANAGEMENT CORPORATION	10-Oct-19	IRWD Check	1,212.19	Reconciled
402892	MOHAMMAD BASTI AND SAMIRA SABERI	10-Oct-19	IRWD Check	10.27	Negotiable
402893	MOODY'S INVESTORS SERVICE INC	10-Oct-19	IRWD Check	2,000.00	Reconciled
402894	MORRISROE, EDWARD	10-Oct-19	IRWD Check	266.37	Negotiable
402895	MPULSE MOBILE, INC	10-Oct-19	IRWD Check	130.42	Reconciled
402896	NALCO US 2 INC	10-Oct-19	IRWD Check	301.01	Reconciled
402897	NEWPORT REAL ESTATE SERVICES	10-Oct-19	IRWD Check	13,100.00	Reconciled
402898	NMG GEOTECHNICAL INC	10-Oct-19	IRWD Check	3,987.80	Reconciled
402899	NOVACOAST INC	10-Oct-19	IRWD Check	75,064.91	Reconciled
402900	O.C. SUPERIOR CUSTOM CLEANING	10-Oct-19	IRWD Check	832.00	Reconciled
402901	OC WELDING SERVICES	10-Oct-19	IRWD Check	915.00	Reconciled
402902	OLIN CORPORATION	10-Oct-19	IRWD Check	22,069.96	Reconciled
402903	ONESOURCE DISTRIBUTORS LLC	10-Oct-19	IRWD Check	6,251.02	Reconciled
402904	ORANGE COUNTY AUTO PARTS CO	10-Oct-19	IRWD Check	3,944.22	Reconciled
402905	PACIFIC HYDROTECH CORPORATION	10-Oct-19	IRWD Check	28,590.63	Reconciled
402906	PACIFIC HYDROTECH CORPORATION	10-Oct-19	IRWD Check	543,221.87	Reconciled
402907	PACIFIC PARTS & CONTROLS INC	10-Oct-19	IRWD Check	2,617.25	Reconciled
402908	PAPER DEPOT DOCUMENT DESTRUCTION LLC	10-Oct-19	IRWD Check	360.00	Reconciled
402909	PAULUS ENGINEERING INC	10-Oct-19	IRWD Check	85,879.20	Reconciled
402910	PAULUS ENGINEERING, INC.	10-Oct-19	IRWD Check	158,273.64	Reconciled
402911	PCL CONSTRUCTION, INC.	10-Oct-19	IRWD Check	79,854.76	Reconciled
402912	PENN ARCHIVE SERVICES	10-Oct-19	IRWD Check	47.50	Reconciled
402913	PILAR ONATE	10-Oct-19	IRWD Check	10,000.00	Reconciled
402914	PIPELINE PRODUCTS INC	10-Oct-19	IRWD Check	1,069.07	Reconciled
402915	PLUMBERS DEPOT INC.	10-Oct-19	IRWD Check	713.17	Reconciled
402916	PRAXAIR DISTRIBUTION INC	10-Oct-19	IRWD Check	1,042.25	Reconciled
402917	PRIMAL ENERGY	10-Oct-19	IRWD Check	12.88	Reconciled
402918	PRO MOBILE AUTO DETAILING	10-Oct-19	IRWD Check	750.00	Reconciled
402919	PTI SAND & GRAVEL INC	10-Oct-19	IRWD Check	654.73	Reconciled
402920	PUBLIC POLICY INSTITUTE OF CALIFORNIA	10-Oct-19	IRWD Check	10,000.00	Reconciled
402921	R C FOSTER CORPORATION	10-Oct-19	IRWD Check	86,558.01	Reconciled
402922	R.J. NOBLE COMPANY	10-Oct-19	IRWD Check	1,653.74	Reconciled
402923	RAM AIR ENGINEERING INC	10-Oct-19	IRWD Check	2,246.92	Reconciled
402924	RED WING SHOE STORE	10-Oct-19	IRWD Check	2,530.94	Reconciled
402925	RINCON TRUCK CENTER INC.	10-Oct-19	IRWD Check	1,686.89	Reconciled
402926	RLG ENTERPRISES, INC	10-Oct-19	IRWD Check	634.84	Reconciled
402927	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	10-Oct-19	IRWD Check	79,733.38	Negotiable
402928	SAFETY-KLEEN SYSTEMS, INC	10-Oct-19	IRWD Check	385.50	Reconciled
402929	SANDERS PAVING INC	10-Oct-19	IRWD Check	5,182.88	Reconciled
402930	SANTA ANA BLUE PRINT	10-Oct-19	IRWD Check	11,117.28	Reconciled
402931	SEAL ANALYTICAL INC	10-Oct-19	IRWD Check	1,072.33	Reconciled
402932	SERFILCO LTD	10-Oct-19	IRWD Check	7,846.28	Reconciled
402933	SERRANO WATER DISTRICT	10-Oct-19	IRWD Check	10,164.25	Reconciled
402934	SHAMROCK SUPPLY CO INC	10-Oct-19	IRWD Check	59,092.92	Reconciled
402935	SIGNATURE FLOORING, INC	10-Oct-19	IRWD Check	5,292.13	Reconciled
402936	SLR TEXAS CONSTRUCTION, LLC	10-Oct-19	IRWD Check	1,560.55	Reconciled
402937	SOURCEMEDIA LLC	10-Oct-19	IRWD Check	3,350.00	Reconciled

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
402938	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	10-Oct-19	IRWD Check	557.42	Reconciled
402939	SOUTH COAST WATER CO.	10-Oct-19	IRWD Check	90.00	Reconciled
402940	SOUTH ORANGE COUNTY WASTEWATER AUTHORITY	10-Oct-19	IRWD Check	54,169.00	Reconciled
402941	SOUTHERN CALIFORNIA EDISON COMPANY	10-Oct-19	IRWD Check	21,789.23	Reconciled
402942	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.	10-Oct-19	IRWD Check	402.05	Reconciled
402943	STETSON ENGINEERS INC.	10-Oct-19	IRWD Check	1,680.00	Reconciled
402944	STICE COMPANY, INC.	10-Oct-19	IRWD Check	11,461.46	Reconciled
402945	SUKLE ADVERTISING INC.	10-Oct-19	IRWD Check	11,483.75	Reconciled
402946	SUMMIT CHEMICAL SPECIALTY PRODUCTS	10-Oct-19	IRWD Check	9,373.12	Reconciled
402947	TEKDRAULICS	10-Oct-19	IRWD Check	2,048.53	Reconciled
402948	THOMPSON INDUSTRIAL SUPPLY	10-Oct-19	IRWD Check	2,414.13	Reconciled
402949	TIC-OFFICE PROPERTIES	10-Oct-19	IRWD Check	1,082.18	Reconciled
402950	TOLL BROS., INC.	10-Oct-19	IRWD Check	2,447.17	Reconciled
402951	TRIPAC MARKETING INC	10-Oct-19	IRWD Check	1,341.16	Reconciled
402952	TROPICAL PLAZA NURSERY INC	10-Oct-19	IRWD Check	1,364.65	Reconciled
402953	TRUKSPECT, INC	10-Oct-19	IRWD Check IRWD Check	2,396.88	Reconciled Reconciled
402954 402955	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA UNITED PARCEL SERVICE INC	10-Oct-19 10-Oct-19	IRWD Check	922.93 37.76	Reconciled
402956	UNITED PARCEL SERVICE INC UNITED SITE SERVICES OF CALIFORNIA INC	10-Oct-19	IRWD Check	567.31	Reconciled
402957	UNIVAR SOLUTIONS USA INC.	10-Oct-19	IRWD Check	3,616.00	Reconciled
402958	VERTECH INDUSTRIAL SYSTEMS, LLC	10-Oct-19	IRWD Check	5,958.89	Reconciled
402959	VINAL, MICHELLE	10-Oct-19	IRWD Check	21.87	Negotiable
402960	VWR INTERNATIONAL, LLC	10-Oct-19	IRWD Check	379.36	Reconciled
402961	WARE MALCOMB	10-Oct-19	IRWD Check	8,779.51	Reconciled
402962	WASTE MANAGEMENT OF ORANGE COUNTY	10-Oct-19	IRWD Check	5,499.18	Reconciled
402963	WATERSMART SOFTWARE, INC	10-Oct-19	IRWD Check	13,597.50	Reconciled
402964	WAXIE'S ENTERPRISES, INC	10-Oct-19	IRWD Check	660.61	Reconciled
402965	WECK LABORATORIES INC	10-Oct-19	IRWD Check	1,525.00	Reconciled
402966	WEST COAST SAFETY SUPPLY INC	10-Oct-19	IRWD Check	804.44	Reconciled
402967	WEST COAST SAND & GRAVEL INC.	10-Oct-19	IRWD Check	413.75	Reconciled
402968	WILSON, CHRIS	10-Oct-19	IRWD Check	14.66	Reconciled
402969	WIN-911 SOFTWARE	10-Oct-19	IRWD Check	1,690.00	Reconciled
402970	WORKHORSE DIVING AND SALVAGE, LLC	10-Oct-19	IRWD Check	27,200.00	Reconciled
402971	XU, XUEQIN	10-Oct-19	IRWD Check	15.35	Negotiable
402972	YAN, ANGIE	10-Oct-19	IRWD Check	36.38	Reconciled
402973	YEE, LORRIE	10-Oct-19	IRWD Check	62.20	Reconciled
402974	YP LLC	10-Oct-19	IRWD Check	182.00	Reconciled
402975 402976	JCI JONES CHEMICALS INC FRANCHISE TAX BOARD	11-Oct-19 11-Oct-19	IRWD Check IRWD Check	5,255.25 380.00	Reconciled Reconciled
402977	ORANGE COUNTY SHERIFF'S OFFICE	11-Oct-19	IRWD Check	62.50	Reconciled
402978	PERS LONG TERM CARE	11-Oct-19	IRWD Check	538.89	Reconciled
402979	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	11-Oct-19	IRWD Check	2,489.24	Reconciled
402980	STATE OF CALIFORNIA, EDD	11-Oct-19	IRWD Check	75.00	Reconciled
402981	Barreto, Gustavo (Gus)	17-Oct-19	IRWD Check	215.00	Reconciled
402982	Bowers, Marie	17-Oct-19	IRWD Check	195.71	Reconciled
402983	Gallegos, Adriel	17-Oct-19	IRWD Check	32.05	Reconciled
402984	Garcia, Jose (Joe)	17-Oct-19	IRWD Check	50.00	Reconciled
402985	Haney, Lisa	17-Oct-19	IRWD Check	946.22	Reconciled
402986	Montejano, Graciela (Grace)	17-Oct-19	IRWD Check	102.19	Reconciled
402987	Schreck, Jeffrey A (Jeffrey)	17-Oct-19	IRWD Check	500.00	Reconciled
402988	AAF INTERNATIONAL	17-Oct-19	IRWD Check	1,079.62	Reconciled
402989	ABC ICEHOUSE, INC.	17-Oct-19	IRWD Check	411.19	Reconciled
402990	ABM INDUSTRY GROUPS, LLC	17-Oct-19	IRWD Check	996.00	Reconciled
402991	ACWA	17-Oct-19	IRWD Check	2,139.00	Negotiable
402992	ACWA	17-Oct-19	IRWD Check	43,368.42	Reconciled
402993	AIR TECHNOLOGY LABORATORIES	17-Oct-19	IRWD Check	289.00	Reconciled
402994	AIRGAS, INC.	17-Oct-19	IRWD Check	2,006.45	Reconciled
402995	AIRKINETICS, INC	17-Oct-19	IRWD Check	4,590.00	Reconciled
402996 402997	ALTA NURSERY, INC. AMAZON CAPITAL SERVICES, INC.	17-Oct-19	IRWD Check IRWD Check	1,320.16 737.90	Reconciled Reconciled
402997 402998	ARCADIS U.S., INC.	17-Oct-19 17-Oct-19	IRWD Check	737.90 89,217.61	Reconciled
402998 402999	ARCADIS U.S., INC. AT&T	17-Oct-19 17-Oct-19	IRWD Check	66.18	Reconciled
402999	AT&T	17-Oct-19 17-Oct-19	IRWD Check	5,951.53	Reconciled
403000	AT&T	17-Oct-19	IRWD Check	173.55	Reconciled
403001	ATHENS SERVICES	17-Oct-19	IRWD Check	8,529.62	Reconciled
403002	AUTOZONE PARTS, INC.	17-Oct-19	IRWD Check	1,063.09	Reconciled
403003	B & K ELECTRIC WHOLESALE	17-Oct-19	IRWD Check	1,931.11	Reconciled
403005	BANTUGAN, MARVIN	17-Oct-19	IRWD Check	45.86	Reconciled
403006	BDC SPECIAL WASTE	17-Oct-19	IRWD Check	450.00	Reconciled
403007	BLACK & VEATCH CORPORATION	17-Oct-19	IRWD Check	249,371.81	Reconciled

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
403008	BORCHARD SURVEYING & MAPPING, INC.	17-Oct-19	IRWD Check	7,840.00	Reconciled
403009	BRENDA JO PUEPKE	17-Oct-19	IRWD Check	200.00	Reconciled
403010	BROOKFIELD RESIDENTIAL	17-Oct-19	IRWD Check	117.87	Reconciled
403011	BROWN AND CALDWELL	17-Oct-19	IRWD Check	848.66	Reconciled
403012	CALATLANTIC HOMES	17-Oct-19	IRWD Check	39.87	Reconciled
403013	CALIFORNIA BARRICADE RENTAL, INC.	17-Oct-19	IRWD Check	5,330.00	Reconciled
403014	CALIFORNIA PACIFIC HOMES	17-Oct-19	IRWD Check	27.54	Reconciled
403015	CHAI, YUAN	17-Oct-19	IRWD Check	377.31	Reconciled
403016	CHARLES P CROWLEY COMPANY INC	17-Oct-19	IRWD Check	5,594.92	Reconciled
403017	CHARLES WILLIAM ROBLE, JR.	17-Oct-19	IRWD Check	135.00	Reconciled
403018	CHEM TECH INTERNATIONAL INC	17-Oct-19	IRWD Check	5,522.76	Reconciled
403019	CHO DESIGN ASSOCIATES, INC	17-Oct-19	IRWD Check	5,777.68	Reconciled
403020	CITY OF IRVINE	17-Oct-19	IRWD Check	264,058.88	Reconciled
403021	CITY OF IRVINE	17-Oct-19	IRWD Check	388.04	Reconciled
403022	CITY OF TUSTIN	17-Oct-19	IRWD Check	953.15	Reconciled
403023	CLA-VAL COMPANY	17-Oct-19	IRWD Check	2,755.32	Reconciled
403024	CNC ENGINEERING	17-Oct-19	IRWD Check	3,662.50	Reconciled
403025	COMPUTER AIDED SOLUTIONS LLC	17-Oct-19	IRWD Check	3,216.56	Reconciled
403026	CONSTELLATION NEWENERGY, INC.	17-Oct-19	IRWD Check	8,313.17	Reconciled
403027	CONTROLLED KEY SYSTEMS INC	17-Oct-19	IRWD Check	1,471.63	Reconciled
403028	CORELOGIC INC	17-Oct-19	IRWD Check	105.39	Reconciled
403029	CR & R INCORPORATED	17-Oct-19	IRWD Check	318.45	Reconciled
403030	D & G SIGNS	17-Oct-19	IRWD Check	684.88	Reconciled
403031	D & H WATER SYSTEMS INC.	17-Oct-19	IRWD Check	758.03	Reconciled
403032	DEE JASPAR & ASSOCIATES, INC.	17-Oct-19	IRWD Check	2,139.50	Reconciled
403033	DELANEY, JOSEPH P	17-Oct-19	IRWD Check	564.20	Reconciled
403034	DELL MARKETING LP	17-Oct-19	IRWD Check	84,000.09	Reconciled
403035	DILYTICS INC	17-Oct-19	IRWD Check	77,425.00	Reconciled
403036	DISCOVERY SCIENCE CENTER OF ORANGE COUNTY	17-Oct-19	IRWD Check	1,174.32	Reconciled
403037	DUTHIE ELECTRIC SERVICE CORPORATION	17-Oct-19	IRWD Check	970.00	Reconciled
403038	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.	17-Oct-19	IRWD Check	19,010.00	Reconciled
403039	ENVIRONMENTAL RESOURCE ASSOCIATES	17-Oct-19	IRWD Check	872.77	Reconciled
403040	ENVIRONMENTAL WATER SOLUTIONS, INC	17-Oct-19	IRWD Check	14,325.85	Reconciled
403041	EUROFINS EATON ANALYTICAL, INC.	17-Oct-19	IRWD Check	105.00	Reconciled
403042	EVERETT DOREY LLP	17-Oct-19	IRWD Check	1,219.95	Reconciled
403043	EXCHANGE CLUB OF IRVINE	17-Oct-19	IRWD Check	550.00	Negotiable
403044	FARRELL & ASSOCIATES	17-Oct-19	IRWD Check	102.18	Reconciled
403045	FARWEST CORROSION CONTROL COMPANY	17-Oct-19	IRWD Check	4,550.60	Reconciled
403046	FENG, CHUAN	17-Oct-19	IRWD Check	380.66	Reconciled
403047	FERGUSON ENTERPRISES, LLC	17-Oct-19	IRWD Check	10,104.80	Reconciled
403048	FIERRO, SERGIO D	17-Oct-19	IRWD Check	3,960.00	Reconciled
403049	FIONA HUTTON & ASSOCIATES, INC.	17-Oct-19	IRWD Check	29,467.25	Reconciled
403050	FIRE EXTINGUISHING SAFETY & SERVICE	17-Oct-19	IRWD Check	912.93	Reconciled
403051	FIRST CHOICE SERVICES	17-Oct-19	IRWD Check	584.59	Reconciled
403052	FISHER SCIENTIFIC COMPANY LLC	17-Oct-19	IRWD Check	3,509.12	Reconciled
403053	FRANK TORRES CONSTRUCTION	17-Oct-19	IRWD Check	7,506.24	Reconciled
403054	FRONTIER CALIFORNIA INC.	17-Oct-19	IRWD Check	347.24	Reconciled
403055	FULLER TRUCK ACCESSORIES	17-Oct-19	IRWD Check	3,301.46	Reconciled
403056	GANAHL LUMBER CO.	17-Oct-19	IRWD Check	41.03	Reconciled
403057	GEI CONSULTANTS INC	17-Oct-19	IRWD Check	14,736.00	Reconciled
403058	GEIGER BROS	17-Oct-19	IRWD Check	423.97	Reconciled
403059	GRAINGER	17-Oct-19	IRWD Check	2,798.71	Reconciled
403060	HAAKER EQUIPMENT COMPANY	17-Oct-19	IRWD Check	1,100.14	Reconciled
403061	HABITAT RESTORATION SCIENCES, INC.	17-Oct-19	IRWD Check	1,183.00	Reconciled
403062	HACH COMPANY	17-Oct-19	IRWD Check	1,077.10	Reconciled
403063	HAMADA, JAMES	17-Oct-19	IRWD Check	109.46	Reconciled
403064	HDR ENGINEERING INC	17-Oct-19	IRWD Check	29,285.08	Reconciled
403065	HELPMATES STAFFING SERVICES	17-Oct-19	IRWD Check	5,734.00	Reconciled
403066	HILL BROTHERS CHEMICAL COMPANY	17-Oct-19	IRWD Check	13,736.58	Reconciled
403067	HOME DEPOT USA INC	17-Oct-19	IRWD Check	1,704.15	Reconciled
403068	HOWDEN ROOTS LLC	17-Oct-19	IRWD Check	471.95	Reconciled
403069	IRON MOUNTAIN INFORMATION MANAGEMENT INC	17-Oct-19	IRWD Check	1,695.14	Reconciled
403070	IRVINE PIPE & SUPPLY INC	17-Oct-19	IRWD Check	3,500.65	Reconciled
403071	IRWD-PETTY CASH CUSTODIAN	17-Oct-19	IRWD Check	648.24	Reconciled
403072	K HOVNANIAN HOMES	17-Oct-19	IRWD Check	212.91	Reconciled
403073	KANG, ALBERT	17-Oct-19	IRWD Check	85.37	Reconciled
403074	KARAMI, JAVAD	17-Oct-19	IRWD Check	6.13	Reconciled
403075	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES	17-Oct-19	IRWD Check	7,395.00	Reconciled
403076 403077	KIMBALL MIDWEST KRONICK MOSKOVITZ TIEDEMANN & GIRARD	17-Oct-19 17-Oct-19	IRWD Check IRWD Check	2,937.48 4,631.45	Reconciled Reconciled

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
403078	LAYFIELD USA CORP	17-Oct-19	IRWD Check	3,900.22	Reconciled
403079	LCS TECHNOLOGIES, INC.	17-Oct-19	IRWD Check	4,590.00	Reconciled
403080	LEE & RO, INC.	17-Oct-19	IRWD Check	28,684.84	Negotiable
403081	LENNAR HOMES	17-Oct-19	IRWD Check	617.85	Reconciled
403082	LINE-X OF SOUTH COAST	17-Oct-19	IRWD Check	806.00	Reconciled
403083	LOTUS CONSULTING	17-Oct-19	IRWD Check IRWD Check	1,898.47	Reconciled
403084 403085	LU'S LIGHTHOUSE, INC. MAP COMMUNICATIONS, INC.	17-Oct-19 17-Oct-19	IRWD Check	1,251.30 1,124.37	Reconciled Reconciled
403086	MC FADDEN-DALE INDUSTRIAL	17-Oct-19	IRWD Check	1,124.37	Reconciled
403087	MICHAEL AND MICHELE SOWERS	17-Oct-19	IRWD Check	930.35	Reconciled
403088	MICROSOFT CORPORATION	17-Oct-19	IRWD Check	366.22	Reconciled
403089	MR CRANE INC	17-Oct-19	IRWD Check	1,198.80	Reconciled
403090	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	17-Oct-19	IRWD Check	11,748.75	Reconciled
403091	MUTUAL PROPANE	17-Oct-19	IRWD Check	120.26	Reconciled
403092	MYERS & SONS HI-WAY SAFETY, INC.	17-Oct-19	IRWD Check	421.84	Reconciled
403093	NATURES IMAGE INC	17-Oct-19	IRWD Check	5,295.00	Reconciled
403094	NAVIGANT CONSULTING, INC	17-Oct-19	IRWD Check	8,384.50	Reconciled
403095	NINYO & MOORE	17-Oct-19	IRWD Check	8,104.50	Reconciled
403096	NIXON-EGLI EQUIPMENT COMPANY INC.	17-Oct-19	IRWD Check	1,583.93	Reconciled
403097 403098	O.C. SUPERIOR CUSTOM CLEANING OLIN CORPORATION	17-Oct-19 17-Oct-19	IRWD Check IRWD Check	3,600.00 34,157.61	Reconciled Reconciled
403098	ONESOURCE DISTRIBUTORS LLC	17-0ct-19 17-0ct-19	IRWD Check	12,405.45	Reconciled
403100	ORANGE COUNTY AUTO PARTS CO	17-Oct-19	IRWD Check	349.70	Reconciled
403100	ORANGE COUNTY BUSINESS COUNCIL	17-Oct-19	IRWD Check	5,000.00	Reconciled
403101	ORANGE COUNTY LOCAL AGENCY FORMATION COMMISSION	17-Oct-19	IRWD Check	2,934.21	Reconciled
403103	PARKHOUSE TIRE INC	17-Oct-19	IRWD Check	260.79	Reconciled
403104	PARKWAY LAWNMOWER SHOP	17-Oct-19	IRWD Check	881.65	Reconciled
403105	PASCAL & LUDWIG CONSTRUCTORS	17-Oct-19	IRWD Check	4,087.93	Reconciled
403106	PASCAL & LUDWIG CONSTRUCTORS	17-Oct-19	IRWD Check	77,670.57	Reconciled
403107	PHAM, REENA	17-Oct-19	IRWD Check	458.26	Reconciled
403108	PIVOT INTERIORS INC	17-Oct-19	IRWD Check	26,121.83	Reconciled
403109	PRAXAIR DISTRIBUTION INC	17-Oct-19	IRWD Check	243.24	Reconciled
403110	PROCARE WORK INJURY CENTER	17-Oct-19	IRWD Check	1,970.00	Reconciled
403111	PSOMAS	17-Oct-19	IRWD Check	30,455.17	Reconciled
403112 403113	PTI SAND & GRAVEL INC QU, MELISSA	17-Oct-19 17-Oct-19	IRWD Check IRWD Check	1,306.59 308.35	Reconciled Reconciled
403114	RAM AIR ENGINEERING INC	17-Oct-19	IRWD Check	1,658.13	Reconciled
403115	RCE CONSULTANTS, INC.	17-Oct-19	IRWD Check	1,814.00	Reconciled
403116	REX, WILLIAM	17-Oct-19	IRWD Check	30.94	Reconciled
403117	RINCON TRUCK CENTER INC.	17-Oct-19	IRWD Check	833.35	Reconciled
403118	RLG ENTERPRISES, INC	17-Oct-19	IRWD Check	1,449.88	Reconciled
403119	ROYAL INDUSTRIAL SOLUTIONS	17-Oct-19	IRWD Check	930.10	Reconciled
403120	RS HUGHES COMPANY, INC.	17-Oct-19	IRWD Check	2,205.00	Reconciled
403121	RYAN HERCO PRODUCTS CORP	17-Oct-19	IRWD Check	328.16	Reconciled
403122	SAINT MARINA CHURCH	17-Oct-19	IRWD Check	171.31	Reconciled
403123	SANTA MARGARITA FORD	17-Oct-19	IRWD Check	401.50	Reconciled
403124	SECURITAS SECURITY SERVICES USA, INC.	17-Oct-19	IRWD Check	62,048.76	Reconciled
403125	SHAMROCK SUPPLY CO INC	17-Oct-19	IRWD Check	1,816.99	Reconciled
403126	SOUTHERN CALIFORNIA CAS COMPANY	17-Oct-19	IRWD Check	415,691.63	Reconciled
403127 403128	SOUTHERN CALIFORNIA GAS COMPANY SOUTHERN CALIFORNIA PUBLIC LABOR RELATIONS COUNCIL	17-Oct-19 17-Oct-19	IRWD Check IRWD Check	3,629.16 250.00	Reconciled Negotiable
403128	SPARKLETTS	17-Oct-19	IRWD Check	326.89	Reconciled
403130	SPARLING INSTRUMENTS LLC	17-Oct-19	IRWD Check	739.20	Reconciled
403130	SPATIAL WAVE, INC.	17-Oct-19	IRWD Check	5,220.00	Reconciled
403132	STANTEC CONSULTING SERVICES INC.	17-Oct-19	IRWD Check	5,834.50	Reconciled
403133	STREAKWAVE WIRELESS, INC.	17-Oct-19	IRWD Check	2,966.96	Reconciled
403134	T.E. ROBERTS, INC.	17-Oct-19	IRWD Check	65,648.81	Reconciled
403135	TAYLOR MORRISON OF CALIFORNIA, LLC	17-Oct-19	IRWD Check	24.51	Reconciled
403136	THOMAS HARDER & CO	17-Oct-19	IRWD Check	6,187.50	Reconciled
403137	THOMPSON INDUSTRIAL SUPPLY	17-Oct-19	IRWD Check	486.33	Reconciled
403138	TIC-OFFICE PROPERTIES	17-Oct-19	IRWD Check	44.71	Reconciled
403139	TIC-RETAIL PROPERTIES	17-Oct-19	IRWD Check	1,200.20	Reconciled
403140	TOTAL RESOURCE MANAGEMENT, INC.	17-Oct-19	IRWD Check	5,110.96	Reconciled
403141	TRACY AND MIKE BILEK	17-Oct-19	IRWD Check	129.71	Reconciled
403142	TRAM, MELISSA	17-Oct-19	IRWD Check	657.02	Negotiable
403143	TROPICAL PLAZA NURSERY INC	17-Oct-19	IRWD Check	20,577.05	Reconciled
403144	UNITED PARCEL SERVICE INC UNITED SITE SERVICES OF CALIFORNIA INC	17-Oct-19	IRWD Check	49.29	Reconciled
403145 403146	UNIVER SOLUTIONS USA INC.	17-Oct-19 17-Oct-19	IRWD Check IRWD Check	320.57 4,474.00	Reconciled Reconciled
403146	VAUGHAN'S INDUSTRIAL REPAIR CO INC	17-Oct-19 17-Oct-19	IRWD Check	1,932.00	Reconciled
403147	WOSINIA S NADOSTNIAL NEI AIN CO INC	17-001-13	HAAD CHECK	1,332.00	Neconclied

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
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403148 403149	WARMINGTON HOMES	17-Oct-19 17-Oct-19	IRWD Check IRWD Check	63.70 190.72	Negotiable Reconciled
403149	WASTE MANAGEMENT OF ORANGE COUNTY WAXIE'S ENTERPRISES, INC	17-Oct-19 17-Oct-19	IRWD Check	413.62	Reconciled
403151	WECK LABORATORIES INC	17-Oct-19	IRWD Check	415.02	Reconciled
403151	WEST COAST SAFETY SUPPLY INC	17-Oct-19	IRWD Check	1,578.87	Reconciled
403153	WEST COAST SAFETY SOFTET INC. WESTAMERICA COMMUNICATIONS, INC.	17-Oct-19	IRWD Check	622.26	Reconciled
403154	WHITE GLOVE PROPERTY MANAGEMENT, INC.	17-Oct-19	IRWD Check	119.13	Reconciled
403155	WIRELESS WATCHDOGS, LLC	17-Oct-19	IRWD Check	1,252.00	Negotiable
403156	WONN, GRANT	17-Oct-19	IRWD Check	72.57	Reconciled
403157	YALE/CHASE EQUIPMENT AND SERVICES, INC.	17-Oct-19	IRWD Check	31,110.87	Reconciled
403158	YIM, JOSHUA	17-Oct-19	IRWD Check	2.73	Negotiable
403159	ZAMORA, VERONICA	17-Oct-19	IRWD Check	22.15	Reconciled
403160	SOUTHERN CALIFORNIA GAS COMPANY	21-Oct-19	IRWD Check	2,292.65	Negotiable
403161	JCI JONES CHEMICALS INC	21-Oct-19	IRWD Check	2,606.25	Reconciled
403162	KPRS CONSTRUCTION SERVICES, INC.	21-Oct-19	IRWD Check	1,540,797.68	Reconciled
403163	MERRIMAC PETROLEUM, INC.	21-Oct-19	IRWD Check	26,910.36	Reconciled
403164	IRWD-PETTY CASH CUSTODIAN	23-Oct-19	IRWD Check	1,231.29	Reconciled
403165	SOUTHERN CALIFORNIA EDISON COMPANY	23-Oct-19	IRWD Check	69,667.70	Reconciled
403166	Bennett, Ray R (Ray)	24-Oct-19	IRWD Check	358.36	Reconciled
403167	Borowski, Michael (Mike)	24-Oct-19	IRWD Check	48.44	Reconciled
403168	Cariker, Cody J (Cody)	24-Oct-19	IRWD Check	21.00	Negotiable
403169	Colston, James	24-Oct-19	IRWD Check	33.23	Reconciled
403170	Corral, Edward Jr (Ed)	24-Oct-19	IRWD Check	94.15	Reconciled
403171	Hjorth, Charles O (Charles)	24-Oct-19	IRWD Check	134.08	Negotiable
403172	Ordonez, Bernardino A (Berny)	24-Oct-19	IRWD Check IRWD Check	125.00	Negotiable Negotiable
403173 403174	Perez, David M (David) Sanchez, Fiona M (Fiona)	24-Oct-19 24-Oct-19	IRWD Check	60.00 586.27	Negotiable Reconciled
403174	ABC ICEHOUSE, INC.	24-Oct-19	IRWD Check	73.70	Negotiable
403175	ABM INDUSTRY GROUPS, LLC	24-Oct-19 24-Oct-19	IRWD Check	18,915.01	Reconciled
403177	ABSOLUTE STANDARDS, INC.	24-Oct-19	IRWD Check	620.50	Reconciled
403178	ACCESS TECHNOLOGIES, INC.	24-Oct-19	IRWD Check	4,628.95	Reconciled
403179	AGILENT TECHNOLOGIES, INC.	24-Oct-19	IRWD Check	712.41	Reconciled
403180	AIRGAS, INC.	24-Oct-19	IRWD Check	1,085.96	Reconciled
403181	AMAZON CAPITAL SERVICES, INC.	24-Oct-19	IRWD Check	6,219.53	Reconciled
403182	AMERICAN GEOTECHNICAL, INC.	24-Oct-19	IRWD Check	3,760.00	Reconciled
403183	ANDERSONPENNA PARTNERS, INC	24-Oct-19	IRWD Check	59,690.50	Reconciled
403184	ANDREW LAURENCE CLAPP	24-Oct-19	IRWD Check	6,854.63	Reconciled
403185	ARCHROCK SERVICES, L.P.	24-Oct-19	IRWD Check	18,464.78	Reconciled
403186	AT&T	24-Oct-19	IRWD Check	6,878.82	Reconciled
403187	ATHENS SERVICES	24-Oct-19	IRWD Check	2,005.12	Reconciled
403188	AUTOZONE PARTS, INC.	24-Oct-19	IRWD Check	72.58	Reconciled
403189	BALANCE INDUSTRIAL SCALE, INC.	24-Oct-19	IRWD Check	1,183.95	Reconciled
403190	BATTERIES PLUS AND BATTERIES PLUS BULBS	24-Oct-19	IRWD Check	2,640.68	Reconciled
403191	BI, ANQI	24-Oct-19	IRWD Check	37.85	Negotiable
403192	BILL'S SWEEPING SERVICE INC	24-Oct-19	IRWD Check	780.00	Reconciled
403193	BIOMAGIC INC	24-Oct-19	IRWD Check	13,823.31	Reconciled
403194	BROADCOM LTD	24-Oct-19	IRWD Check	1,052.47	Negotiable
403195	BROWN AND CALDWELL	24-Oct-19	IRWD Check	72,442.95	Reconciled
403196	BRUCE HADLEY NEWELL BELSERVICES AND SOLUTIONS (MISST) INC.	24-Oct-19 24-Oct-19	IRWD Check IRWD Check	1,250.00	Reconciled
403197 403198	BSI SERVICES AND SOLUTIONS (WEST) INC. BUSH & ASSOCIATES INC	24-Oct-19 24-Oct-19	IRWD Check	8,395.44 7,036.00	Reconciled Negotiable
403198	C WELLS PIPELINE MATERIALS INC	24-Oct-19	IRWD Check	12,761.14	Reconciled
403199	CALIFORNIA BARRICADE RENTAL, INC.	24-Oct-19 24-Oct-19	IRWD Check	13,693.38	Reconciled
403201	CALIFORNIA COUNCIL FOR ENVIRONMENTAL AND ECONOMIC BALANCE	24-Oct-19	IRWD Check	32,000.00	Negotiable
403202	CALIFORNIA SPECIAL DISTRICTS ASSOCIATION	24-Oct-19	IRWD Check	7,615.00	Reconciled
403203	CANON FINANCIAL SERVICES, INC	24-Oct-19	IRWD Check	8,398.83	Reconciled
403204	CAROLLO ENGINEERS, INC	24-Oct-19	IRWD Check	31,674.00	Negotiable
403205	CERTIFIED TRANSPORTATION SERVICES, INC	24-Oct-19	IRWD Check	1,697.02	Reconciled
403206	CHARLES P CROWLEY COMPANY INC	24-Oct-19	IRWD Check	15,950.18	Reconciled
403207	CHEM TECH INTERNATIONAL INC	24-Oct-19	IRWD Check	2,365.00	Negotiable
403208	CITY OF IRVINE	24-Oct-19	IRWD Check	141.00	Reconciled
403209	CITY OF IRVINE	24-Oct-19	IRWD Check	298.94	Reconciled
403210	CITY OF SANTA ANA	24-Oct-19	IRWD Check	188.98	Reconciled
403211	CLA-VAL COMPANY	24-Oct-19	IRWD Check	455.10	Reconciled
403212	CONSTELLATION NEWENERGY, INC.	24-Oct-19	IRWD Check	6,413.96	Reconciled
403213	COX COMMUNICATIONS, INC.	24-Oct-19	IRWD Check	3,394.09	Reconciled
403214	CR & R INCORPORATED	24-Oct-19	IRWD Check	94.17	Reconciled
403215	CROSSROADS AUTOMOTIVE INC	24-Oct-19	IRWD Check	17.77	Negotiable
403216	DAVIS FARR LLP	24-Oct-19	IRWD Check	30,000.00	Reconciled
403217	DC FROST ASSOCIATES, INC.	24-Oct-19	IRWD Check	17,794.75	Negotiable

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
403218	DEIHIMI, MITRA	24-Oct-19	IRWD Check	27.78	Negotiable
403219	DELL MARKETING LP	24-Oct-19	IRWD Check	56,515.21	Reconciled
403220	DIRECTV INC	24-Oct-19	IRWD Check	131.98	Reconciled
403221	ENVIRONMENTAL RESOURCE ASSOCIATES	24-Oct-19	IRWD Check	143.02	Reconciled
403222	EUROFINS EATON ANALYTICAL, INC.	24-Oct-19	IRWD Check	192.15	Reconciled
403223	FEDEX	24-Oct-19	IRWD Check	212.02	Reconciled
403224	FERGUSON ENTERPRISES, LLC	24-Oct-19	IRWD Check	526.88	Reconciled
403225	FISERV	24-Oct-19	IRWD Check	21,190.10	Reconciled
403226	FISHER SCIENTIFIC COMPANY LLC	24-Oct-19	IRWD Check	13,397.86	Reconciled
403227	FLW SERVICE CORPORATION	24-Oct-19	IRWD Check	575.00	Reconciled
403228	FRONTIER CALIFORNIA INC.	24-Oct-19	IRWD Check	322.22	Reconciled
403229	GEI CONSULTANTS INC	24-Oct-19	IRWD Check	8,342.00	Reconciled
403230	GRAINGER	24-Oct-19	IRWD Check	14,096.82	Reconciled
403231	HACH COMPANY	24-Oct-19	IRWD Check	3,323.75	Reconciled
403232	HALL GRIFFIN LLP	24-Oct-19	IRWD Check	1,180.62	Reconciled
403233	HDR ENGINEERING INC	24-Oct-19	IRWD Check	2,981.57	Reconciled
403234	HELPMATES STAFFING SERVICES	24-Oct-19	IRWD Check	19,625.91	Reconciled
403235	HERITAGE FIELDS EL TORO, LLC	24-Oct-19	IRWD Check	5,719.30	Reconciled
403236	HILL BROTHERS CHEMICAL COMPANY	24-Oct-19	IRWD Check	12,856.96	Reconciled
403237	HIT IT HARD INDUSTRIES	24-Oct-19	IRWD Check	2,836.20	Reconciled
403238	HOME DEPOT USA INC	24-Oct-19	IRWD Check	954.03	Reconciled
403239	HOPKINS TECHNICAL PRODUCTS INC	24-Oct-19	IRWD Check	6,683.80	Reconciled
403240	HOSSEINTEHRANI, MOJGAN	24-Oct-19	IRWD Check	85.16	Reconciled
403241	INSITUFORM TECHNOLOGIES INC	24-Oct-19	IRWD Check	26,970.51	Negotiable
403242	IRVINE PACIFIC	24-Oct-19	IRWD Check	23.53	Reconciled
403243	IRVINE PIPE & SUPPLY INC	24-Oct-19	IRWD Check	4,655.60	Reconciled
403244	JCI JONES CHEMICALS INC	24-Oct-19	IRWD Check	15,769.49	Reconciled
403245	JUST ENERGY SOLUTIONS INC.	24-Oct-19	IRWD Check	129.30	Reconciled
403246	KB HOMES	24-Oct-19	IRWD Check	357.46	Negotiable
403247	KEYTRAK	24-Oct-19	IRWD Check	9,723.99	Negotiable
403248	KILL-N-BUGS TERMITE AND PEST CONTROL SERVICES	24-Oct-19	IRWD Check	2,600.00	Reconciled
403249	KIM, MYUNGJI	24-Oct-19	IRWD Check	310.47	Negotiable
403250	KLEINFELDER, INC.	24-Oct-19	IRWD Check	4,517.20	Reconciled
403251	KONECRANES INC	24-Oct-19	IRWD Check	1,374.00	Reconciled
403252	LE, PHUONG-THAO	24-Oct-19	IRWD Check	19.67	Negotiable
403253	LEWIS BRISBOIS BISGAARD AND SMITH, LLP	24-Oct-19	IRWD Check	57,524.85	Reconciled
403254	LILLESTRAND LEADERSHIP CONSULTING, INC.	24-Oct-19	IRWD Check	462.86	Negotiable
403255	LSA ASSOCIATES INC	24-Oct-19	IRWD Check	17,643.35	Reconciled
403256	MARINA LANDSCAPE, INC.	24-Oct-19	IRWD Check	151,433.66	Reconciled
403257	MARQUART, BRIDGET S	24-Oct-19	IRWD Check	162.35	Negotiable
403258	MC MASTER CARR SUPPLY CO	24-Oct-19	IRWD Check	681.31	Reconciled
403259	MICHAEL BAKER INTERNATIONAL, INC.	24-Oct-19	IRWD Check	4,047.30	Reconciled
403260	NEW TANGRAM, LLC	24-Oct-19	IRWD Check	2,111.70	Reconciled
403261	NMG GEOTECHNICAL INC	24-Oct-19	IRWD Check	34,407.60	Reconciled
403262	NV5, INC.	24-Oct-19	IRWD Check	27,755.00	Negotiable
403263	OLIN CORPORATION	24-Oct-19	IRWD Check	17,764.49	Reconciled
403264	ORANGE COUNTY AUTO PARTS CO	24-Oct-19	IRWD Check	1,754.37	Reconciled
403265	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT	24-Oct-19	IRWD Check	3,803.60	Reconciled
403266	ORANGE COUNTY SANITATION DISTRICT	24-Oct-19	IRWD Check	226,351.86	Reconciled
403267	ORANGE LINE OIL COMPANY	24-Oct-19	IRWD Check	2,146.42	Reconciled
403268	OTT, DARCIE & MICHAEL	24-Oct-19	IRWD Check	359.37	Reconciled
403269	PACIFIC COAST BOLT CORP	24-Oct-19	IRWD Check	5,517.67	Negotiable
403270	PACIFIC HYDROTECH CORPORATION	24-Oct-19	IRWD Check	203,734.25	Reconciled
403271	PACIFIC HYDROTECH CORPORATION	24-Oct-19	IRWD Check	10,722.85	Negotiable
403272	PARKHOUSE TIRE INC	24-Oct-19	IRWD Check	4,263.00	Negotiable
403273	PELLETIER & ASSOCIATES, INC.	24-Oct-19	IRWD Check	1,063.00	Reconciled
403274	PETRUSSE-NORRIS PAINTING, INC.	24-Oct-19	IRWD Check	392.00	Reconciled
403275	PILLSBURY WINTHROP SHAW PITTMAN LLP	24-Oct-19	IRWD Check	11,037.32	Reconciled
403276	PINNACLE TOWERS LLC	24-Oct-19	IRWD Check	749.21	Reconciled
403277	PIVOT INTERIORS INC	24-Oct-19	IRWD Check	1,672.46	Reconciled
403278	PLUMBERS DEPOT INC.	24-Oct-19	IRWD Check	345.66	Reconciled
403279	PROCARE WORK INJURY CENTER	24-Oct-19	IRWD Check	970.00	Reconciled
403280	PRUDENTIAL OVERALL SUPPLY	24-Oct-19	IRWD Check	6,796.21	Reconciled
403281	PURE EFFECT INC	24-Oct-19	IRWD Check	6,882.80	Reconciled
403282	RAM AIR ENGINEERING INC	24-Oct-19	IRWD Check	15,896.26	Reconciled
403283	RCE CONSULTANTS, INC.	24-Oct-19	IRWD Check	2,994.16	Reconciled
403284	RED HAWK FIRE & SECURITY (CA) LLC	24-Oct-19	IRWD Check	375.00	Reconciled
	RELIABLE WATER SOLUTIONS, LLC	24-Oct-19	IRWD Check	6,744.10	Reconciled
403285	·			•	
403285 403286 403287	RELIANCE STANDARD LIFE INSURANCE COMPANY RENTOKIL NORTH AMERICA, INC	24-Oct-19 24-Oct-19	IRWD Check IRWD Check	61,255.12 14,095.00	Negotiable Reconciled

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
403288	RINCON TRUCK CENTER INC.	24-Oct-19	IRWD Check	632.88	Reconciled
403289	SAFETY CENTER INCORPORATED	24-Oct-19 24-Oct-19	IRWD Check	1,680.00	Reconciled
403289	SANDERS PAVING INC	24-Oct-19 24-Oct-19	IRWD Check	32,851.75	Reconciled
403291	SEAL ANALYTICAL INC	24-Oct-19	IRWD Check	47,083.06	Reconciled
403292	SHAMROCK SUPPLY CO INC	24-Oct-19	IRWD Check	256.34	Reconciled
403293	SIGNATURE FLOORING, INC	24-Oct-19	IRWD Check	8,301.34	Negotiable
403294	SIMI VALLEY LANDFILL AND RECYCLING CENTER	24-Oct-19	IRWD Check	297.36	Reconciled
403295	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	24-Oct-19	IRWD Check	1,672.26	Negotiable
403296	SOUTHERN CALIFORNIA EDISON COMPANY	24-Oct-19	IRWD Check	22.61	Reconciled
403297	SOUTHERN CALIFORNIA EDISON COMPANY	24-Oct-19	IRWD Check	300,914.27	Reconciled
403298	SOUTHERN CALIFORNIA GAS COMPANY	24-Oct-19	IRWD Check	17,167.79	Reconciled
403299	SOUTHERN COUNTIES LUBRICANTS LLC	24-Oct-19	IRWD Check	936.29	Negotiable
403300	SPARKLETTS	24-Oct-19	IRWD Check	97.04	Reconciled
403301	STATE WATER RESOURCES CONTROL BOARD	24-Oct-19	IRWD Check	14,520.00	Reconciled
403302	STERIS CORPORATION	24-Oct-19	IRWD Check	5,222.73	Reconciled
403303	STREAKWAVE WIRELESS, INC.	24-Oct-19	IRWD Check	621.41	Reconciled
403304	SUNSHINE SUPPLY COMPANY, INC.	24-Oct-19	IRWD Check	3,418.37	Reconciled
403305	SWAINS ELECTRIC MOTOR SERVICE	24-Oct-19	IRWD Check	14,718.58	Negotiable
403306	TAYLOR MORRISON OF CALIFORNIA, LLC	24-Oct-19	IRWD Check	159.77	Reconciled
403307	TETRA TECH, INC	24-Oct-19	IRWD Check	8,616.00	Reconciled
403308	THE IRVINE COMPANY	24-Oct-19	IRWD Check	2,029.50	Reconciled
403309	THOMPSON INDUSTRIAL SUPPLY	24-Oct-19	IRWD Check	1,605.14	Reconciled
403310	TIC-RETAIL PROPERTIES	24-Oct-19	IRWD Check	68.24	Negotiable
403311	TIC-SPECTRUM OFFICE	24-Oct-19	IRWD Check	18.82	Negotiable
403312	TROPICAL PLAZA NURSERY INC	24-Oct-19	IRWD Check	59,772.79	Reconciled
403313 403314	TRUKSPECT, INC UNITED PARCEL SERVICE INC	24-Oct-19 24-Oct-19	IRWD Check IRWD Check	903.96 43.98	Reconciled Reconciled
403314	US BANK NAT'L ASSOCIATION NORTH DAKOTA	24-Oct-19 24-Oct-19	IRWD Check	70,268.27	Negotiable
403315	VARGAS, SERGIO	24-Oct-19 24-Oct-19	IRWD Check	70,208.27 244.96	Reconciled
403317	VEOLIA WATER TECHNOLOGIES, INC.	24-Oct-19	IRWD Check	11,547.24	Reconciled
403317	VOLKAN ULUSOY AND FATMAN ULUSOY	24-Oct-19	IRWD Check	125.96	Reconciled
403319	VU, MICHELLLE	24-Oct-19	IRWD Check	212.23	Reconciled
403320	VULCAN MATERIALS COMPANY	24-Oct-19	IRWD Check	1,475.86	Reconciled
403321	WATER INFORMATION SHARING AND ANALYSIS CENTER (WATERISAC)	24-Oct-19	IRWD Check	3,149.00	Reconciled
403322	WAXIE'S ENTERPRISES, INC	24-Oct-19	IRWD Check	3,625.43	Reconciled
403323	WECK LABORATORIES INC	24-Oct-19	IRWD Check	2,755.00	Reconciled
403324	WIN-911 SOFTWARE	24-Oct-19	IRWD Check	532.29	Reconciled
403325	WOO, YOUNGHA	24-Oct-19	IRWD Check	83.64	Negotiable
403326	WORKFORCE SAFETY LLC	24-Oct-19	IRWD Check	6,000.00	Negotiable
403327	YANG, LISHUANG	24-Oct-19	IRWD Check	24.00	Negotiable
403328	YSI, INC	24-Oct-19	IRWD Check	40,670.03	Reconciled
403329	AFLAC	25-Oct-19	IRWD Check	203.12	Reconciled
403330	AFLAC	25-Oct-19	IRWD Check	148.74	Reconciled
403331	AFLAC	25-Oct-19	IRWD Check	148.74	Reconciled
403332	AFLAC	25-Oct-19	IRWD Check	223.11	Reconciled
403333	AFLAC	25-Oct-19	IRWD Check	148.74	Reconciled
403334	PERS LONG TERM CARE	25-Oct-19	IRWD Check	538.89	Reconciled
403335	INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 47	25-Oct-19	IRWD Check	2,445.82	Reconciled
403336	FRANCHISE TAX BOARD	25-Oct-19	IRWD Check	380.00	Negotiable
403337	ORANGE COUNTY SHERIFF'S OFFICE	25-Oct-19	IRWD Check	62.50	Negotiable
403338 403339	STATE OF CALIFORNIA, EDD	25-Oct-19 28-Oct-19	IRWD Check IRWD Check	75.00	Reconciled Reconciled
403339	CITY OF TUSTIN CITY OF IRVINE	28-Oct-19 28-Oct-19	IRWD Check	6,500.00 9,409.40	Reconciled
403340	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	29-Oct-19	IRWD Check	463.00	Negotiable
403341	IRWD-PETTY CASH CUSTODIAN	29-Oct-19	IRWD Check	1,298.80	Reconciled
403342	CALIFORNIA DEPARTMENT OF TAX AND FEE ADMINISTRATION	30-Oct-19	IRWD Check	930.70	Negotiable
403344	TINSELTONES LLC	30-Oct-19	IRWD Check	327.50	Negotiable
403345	TINSELTONES LLC	30-Oct-19	IRWD Check	327.50	Negotiable
403346	UNITED STATES POST OFFICE	30-Oct-19	IRWD Check	1,063.00	Negotiable
403347	Baquerizo, Joseph	30-Oct-19	IRWD Check	227.17	Negotiable
403348	Borowski, Michael (Mike)	30-Oct-19	IRWD Check	192.00	Negotiable
403349	Cronin, Gregory	30-Oct-19	IRWD Check	251.00	Reconciled
403350	Oldewage, Lars D (Lars)	30-Oct-19	IRWD Check	144.29	Reconciled
403351	Parsons, Sheryl	30-Oct-19	IRWD Check	44.43	Reconciled
403352	Perry, Guy M (Matthew)	30-Oct-19	IRWD Check	122.00	Negotiable
403353	ABC ICEHOUSE, INC.	30-Oct-19	IRWD Check	525.42	Negotiable
403354	ABSOLUTE STANDARDS, INC.	30-Oct-19	IRWD Check	1,198.50	Negotiable
403355	ADT SECURITY SERVICES INC	30-Oct-19	IRWD Check	412.47	Negotiable
403356	AECOM TECHNICAL SERVICES, INC.	30-Oct-19	IRWD Check	1,954.75	Negotiable
403357	AGILENT TECHNOLOGIES, INC.	30-Oct-19	IRWD Check	669.13	Negotiable

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
403358	AIRGAS, INC.	30-Oct-19	IRWD Check	2,092.76	Negotiable
403359	ALSTON & BIRD LLP	30-Oct-19	IRWD Check	1,424,777.42	Negotiable
403360	AMAZON CAPITAL SERVICES, INC.	30-Oct-19	IRWD Check	855.70	Negotiable
403361	ANAND, NIJANTH	30-Oct-19	IRWD Check	15.90	Negotiable
403362	AQUA-METRIC SALES COMPANY	30-Oct-19	IRWD Check	6,864.53	Negotiable
403363	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA	30-Oct-19	IRWD Check	74,097.51	Negotiable
403364	AT&T	30-Oct-19	IRWD Check	432.72	Negotiable
403365	AT&T	30-Oct-19	IRWD Check	752.61	Negotiable
403366	AT&T	30-Oct-19	IRWD Check	57.58	Negotiable
403367	AUTOZONE PARTS, INC.	30-Oct-19	IRWD Check	514.54	Negotiable
403368	BANK OF AMERICA	30-Oct-19	IRWD Check	18,621.73	Negotiable
403369 403370	BERKELEY COURT APTS	30-Oct-19	IRWD Check IRWD Check	138.65	Negotiable
403370	BILL'S SWEEPING SERVICE INC BOKHARI, TARIQ	30-Oct-19 30-Oct-19	IRWD Check	1,365.00 190.49	Negotiable Negotiable
403371	C WELLS PIPELINE MATERIALS INC	30-Oct-19	IRWD Check	6,279.68	Negotiable
403372	CABELA'S MARKETING AND BRAND MANAGEMENT INC	30-Oct-19	IRWD Check	606.12	Negotiable
403374	CAL MAX PROPERTIES, LP	30-Oct-19	IRWD Check	180.50	Negotiable
403375	CALIFORNIA BARRICADE RENTAL, INC.	30-Oct-19	IRWD Check	4,228.68	Negotiable
403376	CAO, YANG	30-Oct-19	IRWD Check	29.34	Negotiable
403377	CAROLLO ENGINEERS, INC	30-Oct-19	IRWD Check	23,176.75	Negotiable
403378	CERTIFIED TRANSPORTATION SERVICES, INC	30-Oct-19	IRWD Check	1,602.33	Negotiable
403379	CHEM TECH INTERNATIONAL INC	30-Oct-19	IRWD Check	6,934.40	Negotiable
403380	CHEN, HAOYANG	30-Oct-19	IRWD Check	61.96	Negotiable
403381	CHU, BRITTANIE	30-Oct-19	IRWD Check	19.37	Negotiable
403382	CHURNED CREAMERY	30-Oct-19	IRWD Check	61.04	Negotiable
403383	CITY OF IRVINE CITY OF NEWPORT BEACH	30-Oct-19 30-Oct-19	IRWD Check	880.33	Negotiable
403384 403385	CITY OF NEWPORT BEACH CITY OF ORANGE	30-Oct-19	IRWD Check IRWD Check	1,248.68 175.70	Negotiable Negotiable
403386	COLE-PARMER INSTRUMENT CO	30-Oct-19	IRWD Check	217.15	Negotiable
403387	CONSTELLATION NEWENERGY, INC.	30-Oct-19	IRWD Check	13,028.08	Negotiable
403388	CORONADO, MELISSA	30-Oct-19	IRWD Check	153.03	Negotiable
403389	D & H WATER SYSTEMS INC.	30-Oct-19	IRWD Check	12,137.64	Negotiable
403390	DATA CLEAN CORPORATION	30-Oct-19	IRWD Check	554.00	Negotiable
403391	DE CHEZELLES, THOMAS	30-Oct-19	IRWD Check	13.54	Negotiable
403392	DEE JASPAR & ASSOCIATES, INC.	30-Oct-19	IRWD Check	27,188.27	Negotiable
403393	DIEP, ROBERT	30-Oct-19	IRWD Check	55.08	Negotiable
403394	DIRECTV INC	30-Oct-19	IRWD Check	132.53	Negotiable
403395	DIVERSIFIED COMMUNICATIONS SERVICES, INC.	30-Oct-19	IRWD Check	6,560.00	Negotiable
403396 403397	DOSHI, DIPA	30-Oct-19	IRWD Check IRWD Check	36.07	Negotiable
403397	DRAEGER, INC. DRAPP, SHAWN	30-Oct-19 30-Oct-19	IRWD Check	5,198.24 43.55	Negotiable Negotiable
403398	EAST ORANGE COUNTY WATER DISTRICT	30-Oct-19	IRWD Check	67,109.31	Negotiable
403400	ENDRESS AND HAUSER INC	30-Oct-19	IRWD Check	9,980.00	Negotiable
403401	ENTERPRISE HOLDINGS, INC.	30-Oct-19	IRWD Check	20,164.41	Negotiable
403402	ENVIRONMENTAL EXPRESS INC	30-Oct-19	IRWD Check	3,911.15	Negotiable
403403	ENVIRONMENTAL SCIENCE ASSOCIATES	30-Oct-19	IRWD Check	16,198.89	Negotiable
403404	EUROFINS EATON ANALYTICAL, INC.	30-Oct-19	IRWD Check	525.00	Negotiable
403405	EXECUTIVE LIGHTING & ELECTRIC	30-Oct-19	IRWD Check	1,811.44	Negotiable
403406	FARWEST CORROSION CONTROL COMPANY	30-Oct-19	IRWD Check	5,183.03	Negotiable
403407	FEDEX	30-Oct-19	IRWD Check	217.87	Negotiable
403408	FERGUSON ENTERPRISES, LLC	30-Oct-19	IRWD Check	12,253.34	Negotiable
403409	FIDELITY SECURITY LIFE INSURANCE COMPANY	30-Oct-19	IRWD Check	7,410.81	Negotiable
403410	FIRE EXTINGUISHING SAFETY & SERVICE	30-Oct-19	IRWD Check	725.05	Negotiable
403411 403412	FISHER SCIENTIFIC COMPANY LLC FOUGHT, CYNTHIA J.	30-Oct-19 30-Oct-19	IRWD Check IRWD Check	1,594.93 2,593.70	Negotiable Negotiable
403412	FRONTIER CALIFORNIA INC.	30-Oct-19	IRWD Check	2,393.70	Negotiable
403414	GALLADE CHEMICAL INC	30-Oct-19	IRWD Check	868.47	Negotiable
403415	GJ AUTOMOTIVE EQUIPMENT CO INC	30-Oct-19	IRWD Check	1,334.90	Negotiable
403416	GRAINGER	30-Oct-19	IRWD Check	9,749.10	Negotiable
403417	HAAKER EQUIPMENT COMPANY	30-Oct-19	IRWD Check	863.75	Negotiable
403418	HACH COMPANY	30-Oct-19	IRWD Check	6,736.82	Negotiable
403419	HALL GRIFFIN LLP	30-Oct-19	IRWD Check	228.00	Negotiable
403420	HARDY & HARPER, INC.	30-Oct-19	IRWD Check	73,980.00	Negotiable
403421	HARRINGTON INDUSTRIAL PLASTICS LLC	30-Oct-19	IRWD Check	1,306.46	Negotiable
403422	HAZEN AND SAWYER	30-Oct-19	IRWD Check	1,040.00	Negotiable
403423	HDR ENGINEERING INC	30-Oct-19	IRWD Check	1,695.00	Negotiable
403424	HELPMATES STAFFING SERVICES	30-Oct-19	IRWD Check	10,801.18	Negotiable
403425	HENSEL PHELPS CONSTRUCTION CO.	30-Oct-19	IRWD Check	330.67	Negotiable
403426	HILL BROTHERS CHEMICAL COMPANY	30-Oct-19	IRWD Check	5,740.56	Negotiable
403427	HINSILBLON LTD	30-Oct-19	IRWD Check	6,050.00	Negotiable

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
403428	HOME DEPOT USA INC	30-Oct-19	IRWD Check	127.13	Negotiable
403429	HUMANA INSURANCE COMPANY	30-Oct-19	IRWD Check	73.80	Negotiable
403430	ICP DAS USA INC	30-Oct-19	IRWD Check	1,860.00	Negotiable
403431	IDEXX DISTRIBUTION, INC	30-Oct-19	IRWD Check	1,906.96	Negotiable
403432	ILAGAN, JONATHAN	30-Oct-19	IRWD Check	16.54	Negotiable
403433	INDUSTRIAL NETWORKING SOLUTIONS	30-Oct-19	IRWD Check	9,888.39	Negotiable
403434	INFOSEND, INC.	30-Oct-19	IRWD Check	1,402.13	Negotiable
403435	IRVINE PIPE & SUPPLY INC	30-Oct-19	IRWD Check	3,937.98	Negotiable
403436	JHT GROUP, INC.	30-Oct-19	IRWD Check	41.86	Negotiable
403437	JOHN MICHAEL COVAS	30-Oct-19	IRWD Check	173.20	Negotiable
403438	K HOVNANIAN HOMES	30-Oct-19	IRWD Check	32.14	Negotiable
403439	KB HOMES	30-Oct-19	IRWD Check	650.28	Negotiable
403440	KENNY THE PRINTER	30-Oct-19	IRWD Check	243.90	Negotiable
403441	KENT DAHLBERG	30-Oct-19	IRWD Check	7,343.46	Negotiable
403442	KERN COUNTY WATER AGENCY	30-Oct-19	IRWD Check	75,000.00	Negotiable
403443	KEY INFORMATION SYSTEMS, INC.	30-Oct-19	IRWD Check	2,050.00	Negotiable
403444	KIANG, NANCY	30-Oct-19	IRWD Check	153.54	Negotiable
403445	KROHNE, INC	30-Oct-19	IRWD Check	2,085.20	Negotiable
403446	LA HABRA FENCE COMPANY INC	30-Oct-19	IRWD Check	4,569.00	Negotiable
403447	LAGUNA BEACH COUNTY WATER DISTRICT	30-Oct-19	IRWD Check	3,363.83	Negotiable
403448	LANDCARE HOLDINGS, INC.	30-Oct-19	IRWD Check	27,411.43	Negotiable
403449	LEED ELECTRIC, INC.	30-Oct-19	IRWD Check	7,556.30	Negotiable
403450	LENNAR HOMES	30-Oct-19	IRWD Check IRWD Check	774.98 6,800.00	Negotiable Negotiable
403451 403452	LIEBERT CASSIDY WHITMORE LIN, JOHNNY	30-Oct-19 30-Oct-19	IRWD Check	102.50	Negotiable Negotiable
403453	LIN, JOHNNY LIN, ZHANG	30-Oct-19	IRWD Check	23.27	Negotiable
403454	LINE-X OF SOUTH COAST	30-Oct-19	IRWD Check	806.00	Negotiable
403455	LU'S LIGHTHOUSE, INC.	30-Oct-19	IRWD Check	753.55	Negotiable
403456	LU, XIANG HONG	30-Oct-19	IRWD Check	106.52	Negotiable
403457	LUM, ALYSSA	30-Oct-19	IRWD Check	21.09	Negotiable
403458	MARK ENTERPRISES, INC.	30-Oct-19	IRWD Check	29,295.00	Negotiable
403459	MAZDA NORTH AMERICAN OPERATIONS	30-Oct-19	IRWD Check	297.08	Negotiable
403460	MBC AQUATIC SCIENCES, INC.	30-Oct-19	IRWD Check	1,350.00	Negotiable
403461	MBK ENGINEERS	30-Oct-19	IRWD Check	6,402.00	Negotiable
403462	MC MASTER CARR SUPPLY CO	30-Oct-19	IRWD Check	441.63	Negotiable
403463	MERRIMAC PETROLEUM, INC.	30-Oct-19	IRWD Check	8,932.62	Negotiable
403464	MISSION COMMUNICATIONS, LLC	30-Oct-19	IRWD Check	94.05	Negotiable
403465	MORTON, HELEN	30-Oct-19	IRWD Check	43.28	Negotiable
403466	MOURSHAKI, ABRAHAM	30-Oct-19	IRWD Check	119.72	Negotiable
403467	MUTUAL PROPANE	30-Oct-19	IRWD Check	26.14	Negotiable
403468	MYERS & SONS HI-WAY SAFETY, INC.	30-Oct-19	IRWD Check	2,605.40	Negotiable
403469	NATIONAL READY MIXED CONCRETE SALES, LLC	30-Oct-19	IRWD Check	1,697.11	Negotiable
403470	NCH CORPORATION	30-Oct-19	IRWD Check	152.07	Negotiable
403471	NEOGOV	30-Oct-19	IRWD Check	21,367.91	Negotiable
403472	NIELSEN, BREE	30-Oct-19	IRWD Check	664.45	Negotiable
403473	NIXON-EGLI EQUIPMENT COMPANY INC.	30-Oct-19	IRWD Check	2,357.57	Negotiable
403474	NMG GEOTECHNICAL INC	30-Oct-19	IRWD Check	22,191.80	Negotiable
403475 403476	NOREX, INC.	30-Oct-19 30-Oct-19	IRWD Check IRWD Check	4,230.00 19,320.00	Negotiable Negotiable
403477	NV5, INC. OLIN CORPORATION	30-Oct-19	IRWD Check	21,919.65	Negotiable Negotiable
403477	ONESOURCE DISTRIBUTORS LLC	30-Oct-19	IRWD Check	1,854.01	Negotiable
403478	ORANGE COUNTY AUTO PARTS CO	30-Oct-19	IRWD Check	847.96	Negotiable
403480	PACIFIC CITY PROPERTIES, INC.	30-Oct-19	IRWD Check	280.98	Negotiable
403481	PACIFIC COAST BOLT CORP	30-Oct-19	IRWD Check	2,143.27	Negotiable
403482	PARKHOUSE TIRE INC	30-Oct-19	IRWD Check	1,684.03	Negotiable
403483	PARKWAY LAWNMOWER SHOP	30-Oct-19	IRWD Check	2,152.31	Negotiable
403484	PILLSBURY WINTHROP SHAW PITTMAN LLP	30-Oct-19	IRWD Check	2,945.50	Negotiable
403485	POON, GARRY	30-Oct-19	IRWD Check	53.46	Negotiable
403486	POWER CONNECTIONS CAREER SERVICES, INC.	30-Oct-19	IRWD Check	1,500.00	Negotiable
403487	PRAXAIR DISTRIBUTION INC	30-Oct-19	IRWD Check	1,558.67	Negotiable
403488	PTI SAND & GRAVEL INC	30-Oct-19	IRWD Check	657.83	Negotiable
403489	RANCHO ALISAL APTS	30-Oct-19	IRWD Check	26.61	Negotiable
403490	RANCHO TIERRA APTS	30-Oct-19	IRWD Check	18.48	Negotiable
403491	RAZJOO, SALEH	30-Oct-19	IRWD Check	2.99	Negotiable
403492	REFRIGERATION SUPPLIES DISTRIBUTOR	30-Oct-19	IRWD Check	140.27	Reconciled
403493	RESILIENT COMMUNICATIONS INC.	30-Oct-19	IRWD Check	14,953.98	Negotiable
403494	RICHARD C. SLADE & ASSOCIATES LLC	30-Oct-19	IRWD Check	27,136.05	Negotiable
403495	ROSE, OLIVIA	30-Oct-19	IRWD Check	94.17	Negotiable
403496	ROSE, SYBIL	30-Oct-19	IRWD Check	20.58	Negotiable
403497	ROSEDALE - RIO BRAVO WATER STORAGE DISTRICT	30-Oct-19	IRWD Check	39,493.69	Negotiable

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
403498	RUCKER, BRITTANY	30-Oct-19	IRWD Check	27.85	Negotiable
403499	S&S SEEDS INC	30-Oct-19	IRWD Check	12,222.83	Negotiable
403500	SAN LEON APTS	30-Oct-19	IRWD Check	63.47	Negotiable
403501	SANTA MARGARITA FORD	30-Oct-19	IRWD Check	277.24	Negotiable
403502	SCHINDLER ELEVATOR CORPORATION	30-Oct-19	IRWD Check	221.90	Negotiable
403503	SHAMROCK SUPPLY CO INC	30-Oct-19	IRWD Check	672.62	Negotiable
403504	SHIN, JIYEN	30-Oct-19	IRWD Check	36.02	Negotiable
403505	SINGH, RAJAT	30-Oct-19	IRWD Check	11.03	Negotiable
403506	SOFTWAREONE INC	30-Oct-19	IRWD Check	69,069.50	Negotiable
403507	SONG, MYOUNG YOUP	30-Oct-19	IRWD Check	192.75	Negotiable
403508	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	30-Oct-19	IRWD Check	1,114.84	Negotiable
403509	SOUTHERN CALIFORNIA EDISON COMPANY	30-Oct-19	IRWD Check	40.46	Negotiable
403510	SOUTHERN CALIFORNIA EDISON COMPANY	30-Oct-19	IRWD Check	228,726.02	Negotiable
403511	STANFORD COURT APARTMENTS	30-Oct-19	IRWD Check	43.82	Negotiable
403512	TA, BRYANT	30-Oct-19	IRWD Check	34.60	Negotiable
403513	TELEDYNE INSTRUMENTS, INC.	30-Oct-19	IRWD Check	3,350.00	Negotiable
403514	THE NEW HOME COMPANY SOUTHERN CALIFORNIA LLC	30-Oct-19	IRWD Check	113.03	Negotiable
403515	TIC-OFFICE PROPERTIES	30-Oct-19	IRWD Check	141.94	Negotiable
403516	TIC-RETAIL PROPERTIES	30-Oct-19	IRWD Check	525.09	Negotiable
403517	TIC-SPECTRUM OFFICE	30-Oct-19	IRWD Check	597.56	Negotiable
403518	TOLL BROS., INC.	30-Oct-19	IRWD Check	239.70	Negotiable
403519	TRI POINTE HOMES, INC.	30-Oct-19	IRWD Check	206.43	Negotiable
403520	TROPICAL PLAZA NURSERY INC	30-Oct-19	IRWD Check	135.00	Negotiable
403521	TRUCPARCO	30-Oct-19	IRWD Check	34.15	Negotiable
403522	TRUKSPECT, INC	30-Oct-19	IRWD Check	1,465.92	Negotiable
403523	UCT, LLC	30-Oct-19	IRWD Check	182.31	Negotiable
403524	ULINE INC	30-Oct-19	IRWD Check	4,681.19	Negotiable
403525	UNITED HEALTHCARE INSURANCE COMPANY	30-Oct-19	IRWD Check	284.07	Negotiable
403526	UNITED PARCEL SERVICE INC	30-Oct-19	IRWD Check	40.42	Negotiable
403527	VERIZON WIRELESS SERVICES LLC	30-Oct-19	IRWD Check	9,751.36	Negotiable
403528	VERTECH INDUSTRIAL SYSTEMS, LLC	30-Oct-19	IRWD Check	21,207.29	Negotiable
403529	VOONG, BYRON	30-Oct-19	IRWD Check	19.37	Negotiable
403530	VULCAN MATERIALS COMPANY	30-Oct-19	IRWD Check	1,504.83	Negotiable
403531	VWR INTERNATIONAL, LLC	30-Oct-19	IRWD Check	84.58	Negotiable
403532	WANG, SALOMON	30-Oct-19	IRWD Check	38.12	Negotiable
403533	WAXIE'S ENTERPRISES, INC	30-Oct-19	IRWD Check	1,280.18	Negotiable
403534	WECK LABORATORIES INC	30-Oct-19	IRWD Check	2,985.00	Negotiable
403535	WHITMAN REQUARDT AND ASSOCIATES LLP	30-Oct-19	IRWD Check	4,160.00	Negotiable
403536	YORK, DIANE	30-Oct-19	IRWD Check	249.89	Negotiable
403537	ZAGADA, GERMAN	30-Oct-19	IRWD Check	52.76	Negotiable
403538	ZUSMAN, JENNA	30-Oct-19	IRWD Check	21.87	Negotiable
403539	HUANG, QING	31-Oct-19	IRWD Check	54.14	Negotiable
403540	JCI JONES CHEMICALS INC	31-Oct-19	IRWD Check	3,045.84	Negotiable
SUB-TOTAL CHEC	K DISBURSEMENTS			13,023,015.83	
13405	YORK INSURANCE SERVICES GROUP INC - CA	1-Oct-19	IRWD Wire	6,301.66	Negotiable
13406	BANK OF NEW YORK MELLON TRUST COMPANY NA	10-Oct-19	IRWD Wire	1,111.11	Negotiable
13407	SUMITOMO MITSUI BANKING CORPORATION	10-Oct-19	IRWD Wire	38,986.30	Negotiable
13408	U.S. BANK NATIONAL ASSOCIATION	10-Oct-19	IRWD Wire	74,721.75	Negotiable
13409	U.S. BANK NATIONAL ASSOCIATION	11-Oct-19	IRWD Wire	26,749.34	Negotiable
13410	SUMITOMO MITSUI BANKING CORPORATION	11-Oct-19	IRWD Wire	48,385.48	Negotiable
13411	BANK OF AMERICA	11-Oct-19	IRWD Wire	45,461.10	Negotiable
13412	BANK OF NEW YORK MELLON TRUST COMPANY NA	11-Oct-19	IRWD Wire	2,985,334.13	Negotiable
13413	U.S. BANK NATIONAL ASSOCIATION	11-Oct-19	IRWD Wire	2,552,616.41	Negotiable
13414	BANK OF AMERICA	11-Oct-19	IRWD Wire	2,551,592.47	Negotiable
13415	YORK INSURANCE SERVICES GROUP INC - CA	11-Oct-19	IRWD Wire	8,001.76	Negotiable
13416	CHARD SNYDER & ASSOCIATES, INC.	14-Oct-19	IRWD Wire	22,274.64	Negotiable
13417	CHARD SNYDER & ASSOCIATES, INC.	14-Oct-19	IRWD Wire	3,961.20	Negotiable
13418	CALPERS	14-Oct-19	IRWD Wire	515,406.05	Negotiable
13419	CALPERS	14-Oct-19	IRWD Wire	2,892.23	Negotiable
13420	CALPERS	15-Oct-19	IRWD Wire	265.38	Negotiable
13421	BANK OF NEW YORK MELLON TRUST COMPANY NA	15-Oct-19	IRWD Wire	70,303.96	Negotiable
13422	YORK INSURANCE SERVICES GROUP INC - CA	15-Oct-19	IRWD Wire	5,627.97	Negotiable
13423	CHARD SNYDER & ASSOCIATES, INC.	15-Oct-19	IRWD Wire	3,273.51	Negotiable
13424	CHARD SNYDER & ASSOCIATES, INC.	15-Oct-19	IRWD Wire	10,912.08	Negotiable
13425	INTERNAL REVENUE SERVICE	15-Oct-19	IRWD Wire	215,346.78	Negotiable
13426	FRANCHISE TAX BOARD	15-Oct-19	IRWD Wire	66,637.28	Negotiable
13427	EMPLOYMENT DEVELOPMENT DEPARTMENT	15-Oct-19	IRWD Wire	13,026.08	Negotiable
13428	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	15-Oct-19	IRWD Wire	3,026.42	Negotiable
13429	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	15-Oct-19	IRWD Wire	158,292.08	Negotiable

CHECK OR ELECTRONIC #	SUPPLIERS	PAYMENT DATE	PAYMENT METHOD	PAYMENT AMOUNT	STATUS
13430	U.S. BANK NATIONAL ASSOCIATION	16-Oct-19	IRWD Wire	7,322.45	Negotiable
13431	NABAI, PAYMAN	21-Oct-19	IRWD Wire	28.34	Negotiable
13432	PATE-CLEMONS, JORDYN	21-Oct-19	IRWD Wire	38.46	Negotiable
13433	CHARD SNYDER & ASSOCIATES, INC.	21-Oct-19	IRWD Wire	2,222.38	Negotiable
13434	CHARD SNYDER & ASSOCIATES, INC.	21-Oct-19	IRWD Wire	4,198.24	Negotiable
13435	CHARD SNYDER & ASSOCIATES, INC.	21-Oct-19	IRWD Wire	1,432.60	Negotiable
13436	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY	21-Oct-19	IRWD Wire	1,265,146.36	Negotiable
13437	ORANGE COUNTY SANITATION DISTRICT	22-Oct-19	IRWD Wire	1,342,780.07	Negotiable
13438	YORK INSURANCE SERVICES GROUP INC - CA	22-Oct-19	IRWD Wire	11,825.15	Negotiable
13439	CALPERS	23-Oct-19	IRWD Wire	1,184.32	Negotiable
13440	CALPERS	23-Oct-19	IRWD Wire	231,699.87	Negotiable
13441	INTERNAL REVENUE SERVICE	23-Oct-19	IRWD Wire	601.34	Negotiable
13442	FRANCHISE TAX BOARD	23-Oct-19	IRWD Wire	73.63	Negotiable
13443	EMPLOYMENT DEVELOPMENT DEPARTMENT	23-Oct-19	IRWD Wire	119.09	Negotiable
13444	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	23-Oct-19	IRWD Wire	1,803.33	Negotiable
13445	BANK OF NEW YORK MELLON TRUST COMPANY NA	28-Oct-19	IRWD Wire	1,361.11	Negotiable
13446	CHARD SNYDER & ASSOCIATES, INC.	28-Oct-19	IRWD Wire	2,022.19	Negotiable
13447	CHARD SNYDER & ASSOCIATES, INC.	28-Oct-19	IRWD Wire	4,374.26	Negotiable
13448	FILANC-BALFOUR BEATTY JV	29-Oct-19	IRWD Wire	208,708.68	Negotiable
13449	FILANC-BALFOUR BEATTY JV	29-Oct-19	IRWD Wire	3,668.40	Negotiable
13450	YORK INSURANCE SERVICES GROUP INC - CA	29-Oct-19	IRWD Wire	1,838.42	Negotiable
13451	INTERNAL REVENUE SERVICE	29-Oct-19	IRWD Wire	223,669.70	Negotiable
13452	FRANCHISE TAX BOARD	29-Oct-19	IRWD Wire	69,713.37	Negotiable
13453	EMPLOYMENT DEVELOPMENT DEPARTMENT	29-Oct-19	IRWD Wire	12,479.16	Negotiable
13454	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	29-Oct-19	IRWD Wire	3,026.42	Negotiable
13455	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	29-Oct-19	IRWD Wire	155,194.99	Negotiable
13456	CALPERS	29-Oct-19	IRWD Wire	230,962.46	Negotiable
13457	U.S. BANK NATIONAL ASSOCIATION	30-Oct-19	IRWD Wire	5,794,250.00	Negotiable
13458	ORANGE COUNTY WATER DISTRICT	30-Oct-19	IRWD Wire	137,606.70	Negotiable
B-TOTAL ELECT	FRONIC DISBURSEMENTS			19,149,858.66	
JB-TOTAL AP C	HECK AND ELECTRONIC DISBURSEMENTS			32,172,874.49	
402882	LI, SHENGXI	10-Oct-19	IRWD Check	13.19	Voided
402818	CITY OF IRVINE	10-Oct-19	IRWD Check	8,227.38	Voided
IB-TOTAL CHEC	K ISSUED AND VOIDED IN OCTOBER 2019			8,240.57	
OTAL AP DISBUI	RSEMENTS AND VOIDS FOR OCTOBER 2019			32,181,115.06	

Note: This page is intentionally left blank.

Exhibit "E"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

October 2019

	AMOUNT	VENDOR	PURPOSE
10/11/2019 9/27/2019	1,051,402.07 1,065,625.89 \$2,117,027.96	BANK OF AMERICA BANK OF AMERICA	ACH Payments for Payroll ACH Payments for Payroll

Note: This page is intentionally left blank.

Exhibit "F"

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-OCT-19 to 31-OCT-19

NAME	CHECK NO.	CHECK DATE	AMOUNT	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
aquerizo, Joseph	403347	30-Oct-19	117.27	Lodging	WaterSmart Innovations Conference & Expo, Las Vegas, NV - October 2, 2019
arreto, Gus	402981	17-Oct-19	215.00	Certification Renewal	CWEA Electrical/Instrumentation Grade IV
Bennett, Ray	403166	24-Oct-19	180.96	Mileage	SGMA Meeting, Bakersfield - September 24, 2019
Bennett, Ray	403166	24-Oct-19	162.40	Mileage	Goleta Energy and Reliability Workshop, Goleta, CA - September 12, 2019
Bogdanova, Mira	402589	3-Oct-19	167.01	Other(Misc)	Safety shoe allowance
Borowski, Mike	403348	30-Oct-19	192.00	Membership Renewal	CWEA membership
Chen, Christina	402591	3-Oct-19	156.24	Other(Misc)	Safety shoe allowance
Cronin, Gregory	403349	30-Oct-19	129.00	Certification Renewal	Automotive Service Excellence Advanced Level Test and L1 Certification renewal
Davis, Jennifer	402593	3-Oct-19	371.57	Lodging	The Bond Buyer's Calif. Public Finance Conf., San Francisco, CA - September 22, 2019
avis, Jennifer	402593	3-Oct-19	371.57	Lodging	The Bond Buyer's Calif. Public Finance Conf., San Francisco, CA - September 23, 2019
avis, Jennifer	402593	3-Oct-19	371.57	Lodging	The Bond Buyer's Calif. Public Finance Conf., San Francisco, CA - September 24, 2019
avis, Jennifer	402593	3-Oct-19	491.96	Airfare	The Bond Buyer's Calif. Public Finance Conf., San Francisco, CA - September 22-24, 2019
laney, Lisa	402985	17-Oct-19	263.85	Lodging	CASQA 2019 15th Annual Conference, Monterey, CA - October 7, 2019
laney, Lisa	402985	17-Oct-19	263.85	Lodging	CASQA 2019 15th Annual Conference, Monterey, CA - October 8, 2019
aney, Lisa	402985	17-Oct-19	263.85	Lodging	CASQA 2019 15th Annual Conference, Monterey, CA - October 9, 2019
jorth, Charles	403171	24-Oct-19	134.08	Other(Misc)	Safety shoe allowance
cobson, Rob	402787	10-Oct-19	371.57	Lodging	The Bond Buyer's Calif. Public Finance Conf., San Francisco, CA - September 22, 2019
icobson, Rob	402787	10-Oct-19	371.57	Lodging	The Bond Buyer's Calif. Public Finance Conf., San Francisco, CA - September 23, 2019
icobson, Rob	402787	10-Oct-19	371.57	Lodging	The Bond Buyer's Calif. Public Finance Conf., San Francisco, CA - September 24, 2019
nelli, Matt	402596	3-Oct-19	100.00	Certification Renewal	Water Distribution Grade III Exam and Certification
loeder, Jacob	402597	3-Oct-19	292.33	Lodging	WEFTEC 2019 Annual Conference, Chicago, IL - September 22, 2019
loeder, Jacob	402597	3-Oct-19	292.33	Lodging	WEFTEC 2019 Annual Conference, Chicago, IL - September 23, 2019
loeder, Jacob	402597	3-Oct-19	292.33	Lodging	WEFTEC 2019 Annual Conference, Chicago, IL - September 24, 2019
Ildewage, Lars	402599	3-Oct-19	814.00	Registration Fees	WEFTEC 2019 Conference, Chicago, IL - September 21-25, 2019
Ildewage, Lars	402599	3-Oct-19	472.00	Airfare	WEFTEC 2019 Conference, Chicago, IL - September 21-25, 2019
Oldewage, Lars	402599	3-Oct-19	233.63	Lodging	WEFTEC 2019 Annual Conference, Chicago, IL - September 21, 2019
Ildewage, Lars	402599	3-Oct-19	233.63	Lodging	WEFTEC 2019 Annual Conference, Chicago, IL - September 22, 2019
Ildewage, Lars	402599	3-Oct-19	233.63	Lodging	WEFTEC 2019 Annual Conference, Chicago, IL - September 23, 2019
Ildewage, Lars	402599	3-Oct-19	233.63	Lodging	WEFTEC 2019 Annual Conference, Chicago, IL - September 24, 2019
Ildewage, Lars	402599	3-Oct-19	100.00	Parking Fee	WEFTEC 2019 Conference, Chicago, IL - September 21-25, 2019
rdonez, Bernardino	403172	24-Oct-19	125.00	Other(Misc)	Safety shoe allowance
an, Jenny	402789	10-Oct-19	147.96	Other(Misc)	Meeting supplies
arra, Dennis	402600	3-Oct-19	188.00	Membership Renewal	CWEA membership renewal
erry, Guy	403352	30-Oct-19	122.00	Certification Renewal	Automotive Service Excellence Eelectrical/Electronic and Heating AC certification
anchez, Fiona	403174	24-Oct-19	583.96	Airfare	SWRCB Stakeholder Workgroup on Water Loss Performance, Sacramento, CA - October 12, 2019
chreck, Jeffrey	402987	17-Oct-19	500.00	Certification Renewal	ACI Concrete Field Testing Tech Grade 1 certification
hinbashi, Allen	402601	3-Oct-19	513.50	Airfare	EPA/Risk Assessment and Emergency Response Training, San Francisco, - September 11-13, 2019
ilva, Jose	402602	3-Oct-19	133.48	Other(Misc)	Safety shoe allowance
osa, Ives	402603	3-Oct-19	183.16	Other(Misc)	Safety shoe allowance

Total Amount: \$10,761.46

November 25, 2019

Prepared by: B. Rios / K. Lew

Submitted by: K. Burton

Approved by: Paul A. Cook

CONSENT CALENDAR

PLANNING AREA 51 HERITAGE FIELDS CAPITAL FACILITIES

SUMMARY:

Heritage Fields El Toro, LLC (Heritage Fields) is proceeding with development of Planning Area (PA) 51 (Great Park), which includes the construction of streets, storm drains, domestic water, sanitary 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 a Supplemental Reimbursement Agreement with Heritage Fields for Planning Area 51, Great Park Neighborhoods, Districts 2, 3, 5, 6, 9, Domestic Water, Sanitary Sewer and Recycled Water Capital Improvements;
- Authorize the General Manager to accept Heritage Fields' construction contract with Leatherwood Construction Inc. in the amount of \$1,615,806.60 for the Reach B East Sanitary Sewer Improvements, Project 10576;
- Authorize the General Manager to accept Heritage Fields' construction contract with Leatherwood Construction Inc. in the amount of \$875,564.70 for the Reach C Sanitary Sewer and Recycled Water Improvements, Projects 10574 and 10734;
- Authorize the General Manager to accept Heritage Fields' construction contract with Leatherwood Construction Inc. in the amount of \$225,835.00 for the Reach B East "P" Street Sanitary Sewer Improvements, Project 10868; and
- Approve Contract Change Order (CCO) No. 11 to Project 10117 in the amount of \$163,839.00 for the addition of deep sewer facility demolition and relocation tasks to the scope of the Reach B Sanitary Sewer Improvements.

BACKGROUND:

Heritage Fields is moving forward with the residential development of District 5 and the backbone streets of District 6 within PA 51. District 5 is bound by Irvine Boulevard, Chinon, O Street and Lynx. District 6 is south of Marine Way, east of the County of Orange parcel and north of the Barranca Parkway. The project location map is shown as Exhibit "A". As part of this development, Heritage Fields will design and construct IRWD's domestic water, sanitary sewer, and recycled water capital improvements. The required IRWD capital facilities are documented in the September 2016 PA 51 Sub-Area Master Plan Update and all subsequent addendums and updates prepared by Stantec.

The design and construction of the IRWD facilities will be performed under the terms of the Master Reimbursement Agreement approved by the Board in August 2012 and as further refined in the SRA. The SRA, which covers capital facilities in Districts 2, 3, 5, 6 and 9, is attached as Exhibit "B" and has been reviewed by IRWD's legal counsel.

Consent Calendar: Planning Area 51 Heritage Fields Capital Facilities

November 25, 2019

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Reach B East Sanitary Sewer Improvements:

The Reach B East Sanitary Sewer Improvements consist of installing approximately 4,000 feet of 18-inch sewer pipeline and 90 feet of 24-inch sewer pipeline north of and parallel to the Orange County Transportation Authority (OCTA) railroad, then north to the future Marine Way. This portion of the Reach B sewer will be placed within an easement across County Property, the Second Harvest Site and other FivePoint Properties before reaching the future right of way within Marine Way. Heritage Fields retained ProActive Engineering Consultants to prepare the plans and received bids from four contractors. Heritage Fields recommends awarding the construction contract to the low bidder, Leatherwood Construction Inc., for a bid amount of \$1,615,806.60 as shown on Page 3 of Exhibit "C". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, design and field archeological and paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Reach B East Sanitary Sewer Improvements costs is shown below.

Design (ProActive)	\$ 110,200.00
Construction (Leatherwood)	\$1,615,806.60
Geotechnical Services (Engeo)	\$ 28,700.00
Construction Engineering/Surveying (ProActive)	\$ 73,890.00
Archeo/Paleo Monitoring (LSA)	\$ 9,500.00
Heritage Fields Administration Fee (1%)	\$ 16,158.07
	\$1,854,254.67

Reach C Sanitary Sewer and Recycled Water Improvements:

The Reach C Sanitary Sewer and Recycled Water Improvements consist of installing approximately 700 feet of 18-inch sewer pipeline and 700 feet of 16-inch recycled water pipeline from the intersection of Marine Way and Barranca Parkway north across the OCTA railroad. Approximately half of the length of these pipelines will be bored under the railroad and stubbed north of the tracks within the alignment of the future Marine Way. Heritage Fields retained ProActive Engineering Consultants to prepare the plans and received bids from four contractors. Heritage Fields recommends awarding the construction contract to the low bidder, Leatherwood Construction Inc., for a bid amount of \$875,564.70 as shown on Page 5 of Exhibit "C". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, design and field archeological and paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Reach C Sanitary Sewer and Recycled Water Improvements costs is shown below.

Design (ProActive)	\$	83,300.00
Construction (Leatherwood)	\$	875,564.70
Geotechnical Services (Engeo)	\$	15,500.00
Construction Engineering/Surveying (ProActive)	\$	49,390.00
Archeo/Paleo Monitoring (LSA)	\$	5,100.00
Heritage Fields Administration Fee (1%)	\$	8,755.65
	\$1	,037,610.35

Consent Calendar: Planning Area 51 Heritage Fields Capital Facilities

November 25, 2019

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Reach B East "P" Street Sanitary Sewer Improvements:

The Reach B East "P" Street Sanitary Sewer Improvements consist of installing approximately 200 feet of 18-inch sewer pipeline and 100 feet of 12-inch sewer pipeline near the intersection of "O" Street and "P" Street. Heritage Fields retained Hunsaker and Associates to prepare the plans and received bids from four contractors. Heritage Fields recommends awarding the construction contract to Leatherwood Construction Inc. for a bid amount of \$225,835.00 as shown in Exhibit "D". In addition, Heritage Fields has received consultant proposals for geotechnical observation and testing, surveying, construction support services, design and field archeological and paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the Reach C Sanitary Sewer and Recycled Water Improvements costs is shown below.

Design (Hunsaker)	\$	35,500.00
Construction (Leatherwood)	\$2	25,835.00
Geotechnical Services (Engeo)	\$	4,000.00
Construction Engineering/Surveying (Hunsaker)	\$	8,600.00
Archeo/Paleo Monitoring (LSA)	\$	1,350.00
Heritage Fields Administration Fee (1%)	\$	2,258.35
	\$2	77,543.35

Reach B Sanitary Sewer Improvements CCO No. 11:

CCO No. 11 to the Reach B Sanitary Sewer Improvements represents revisions made during construction that included the removal of a deep manhole, repair of a segment of 24-inch sewer, sewer bypassing operations for the repair work, and the removal and relocation of a deep sewer lateral. These changes were made as a result of coordination with IRWD's Collections staff for facilities that fell within sports fields that were not accessible for maintenance. The redesign of these facilities and additional excavation and soils testing also resulted in additional consultant amounts. Staff has reviewed the costs and quantities associated with this change order and finds them to be acceptable. CCO No. 11 in the amount of \$163,839.00 is attached as Exhibit "E".

FISCAL IMPACTS:

Projects 10576, 10574, 10734, 10868, and 10117 are included in the FY 2019-20 Capital Budget and the budgets are sufficient to fund the construction.

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).

Consent Calendar: Planning Area 51 Heritage Fields Capital Facilities

November 25, 2019

Page 4

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee meeting on November 19, 2019.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A SUPPLEMENTAL REIMBURSEMENT AGREEMENT WITH HERITAGE FIELDS FOR PLANNING AREA 51, GREAT PARK NEIGHBORHOODS, DISTRICTS 2, 3, 5, 6, 9, DOMESTIC WATER, SANITARY SEWER AND RECYCLED WATER CAPITAL IMPROVEMENTS; AUTHORIZE THE GENERAL MANAGER TO ACCEPT HERITAGE FIELDS' CONSTRUCTION CONTRACT WITH LEATHERWOOD CONSTRUCTION INC. IN THE AMOUNT OF \$1,615,806.60 FOR THE REACH B EAST SANITARY SEWER IMPROVEMENTS, PROJECT 10576; AUTHORIZE THE GENERAL MANAGER TO ACCEPT HERITAGE FIELDS' CONSTRUCTION CONTRACT WITH LEATHERWOOD CONSTRUCTION INC. IN THE AMOUNT OF \$875,564.70 FOR THE REACH C SANITARY SEWER AND RECYCLED WATER IMPROVEMENTS, PROJECTS 10574 AND 10734; AUTHORIZE THE GENERAL MANAGER TO ACCEPT HERITAGE FIELDS' CONSTRUCTION CONTRACT WITH LEATHERWOOD CONSTRUCTION INC. IN THE AMOUNT OF \$225,835.00 FOR THE REACH B EAST "P" STREET SANITARY SEWER IMPROVEMENTS, PROJECT 10868; AND APPROVE CONTRACT CHANGE ORDER NO. 11 TO PROJECT 10117 IN THE AMOUNT OF \$163,839.00 FOR THE ADDITION OF DEEP SEWER FACILITY DEMOLITION AND RELOCATION TASKS TO THE SCOPE OF THE REACH B SANITARY SEWER IMPROVEMENTS.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

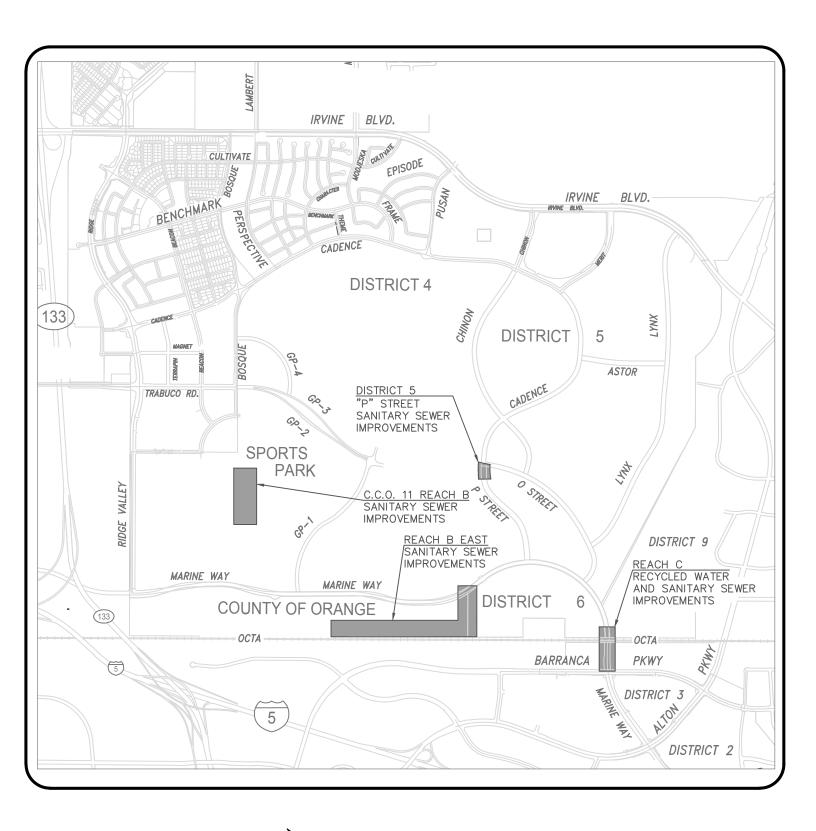
Exhibit "B" – Supplemental Reimbursement Agreement with Heritage Fields for Planning Area 51, Great Park Neighborhoods, Districts 2, 3, 5, 6, 9, Domestic Water, Sanitary Sewer and Recycled Water Capital Improvements

Exhibit "C" – Bid Summary, Reach B East Sanitary Sewer Improvements and Reach C Sanitary Sewer and Recycled Water Improvements

Exhibit "D" – Bid Summary, Reach B East "P" Street Sanitary Sewer Improvements

Exhibit "E" - CCO No. 11, Reach B Sanitary Sewer Improvements

EXHIBIT "A"



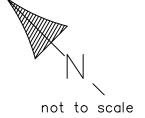


EXHIBIT "A"
LOCATION MAP

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.
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.
terms and conditions of the Remnoursement rigidement into this rigidement.
2. The name of the Project to which this Agreement pertains is: <u>Planning Area 51</u> ,
Great Park Neighborhoods, Districts 2, 3, 5, 6, 9, Domestic Water, Sanitary 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 32,000 lineal feet of 12-inch domestic water, 13,800 lineal feet of 12-inch, 15-inch, 18-inch, and 24-inch sewer, and 33,200 lineal feet of 10-inch, 12-inch, and 16-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 \$21,500,000.
- 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.

IRV	VINE 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 "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

3. TRANSFER OF DOCUMENTATION. On or prior to the Effective Date, Assignor shall provide Assignee with a copy of the Construction ntrat.

Notice of Completion for the Construction Contract unless a different date is inserted in the

EFFECTIVE DATE. The Effective Date shall be the date of the filing of the

provisions of Section 10, entitled "Assignment of Interest", contained in that certain

Reimbursement Agreement between Assignor and Assignee dated as of

following space:

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

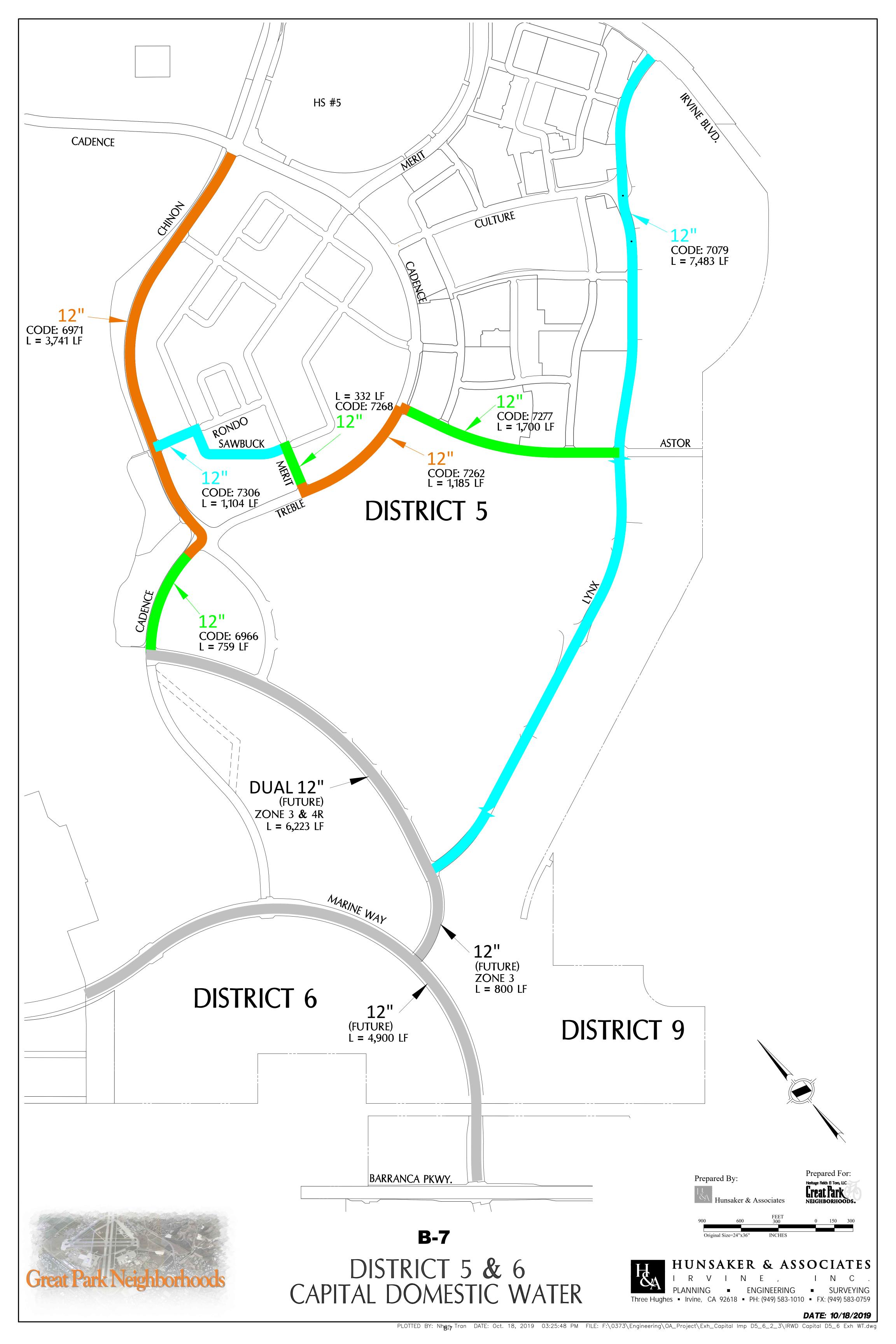
> By: Lennar Heritage Fields, LLC, a California limited liability company Its: Administrative Member

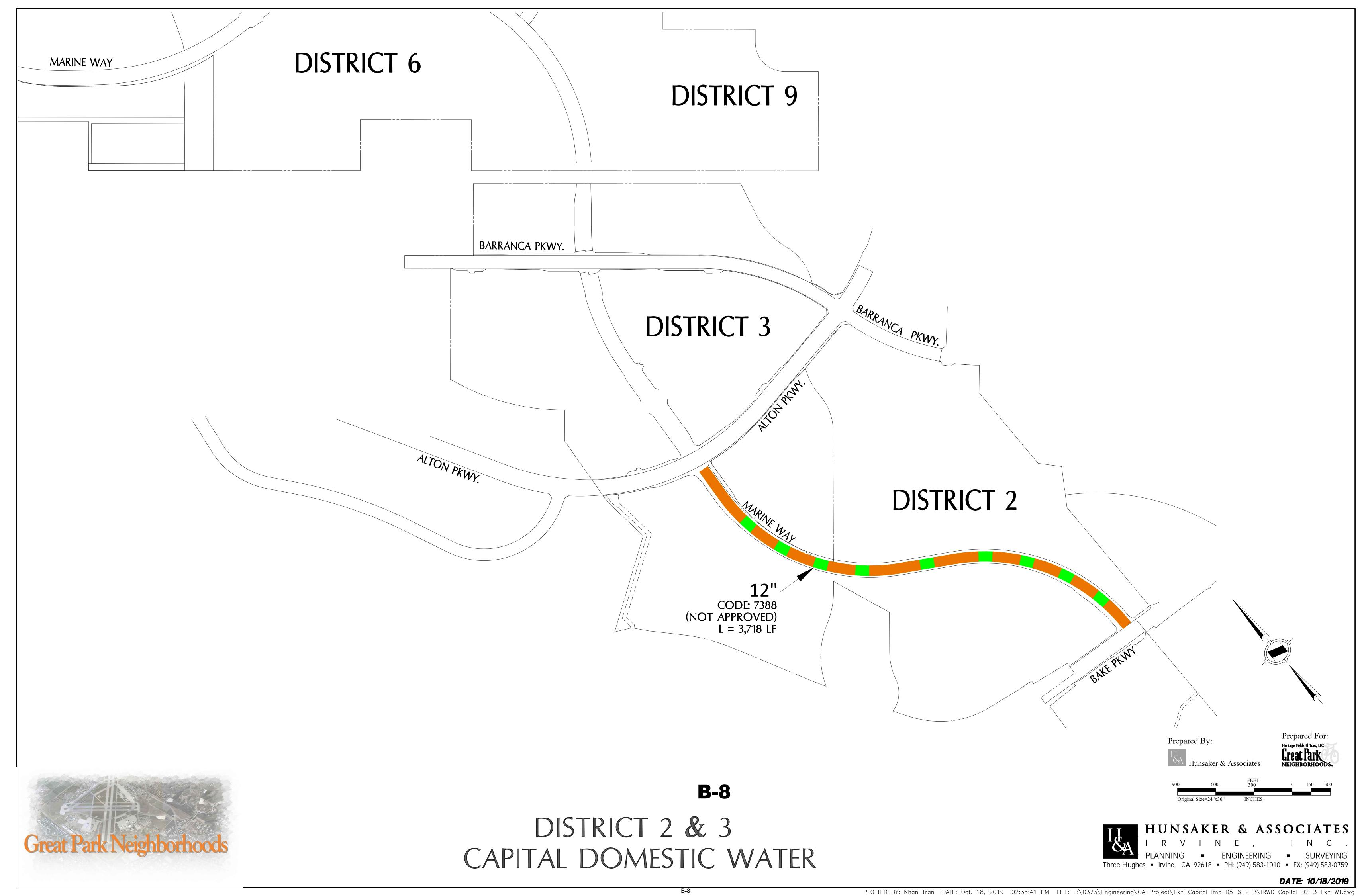
> > By: Lennar Homes of California, Inc., a California corporation Its: Sole Member

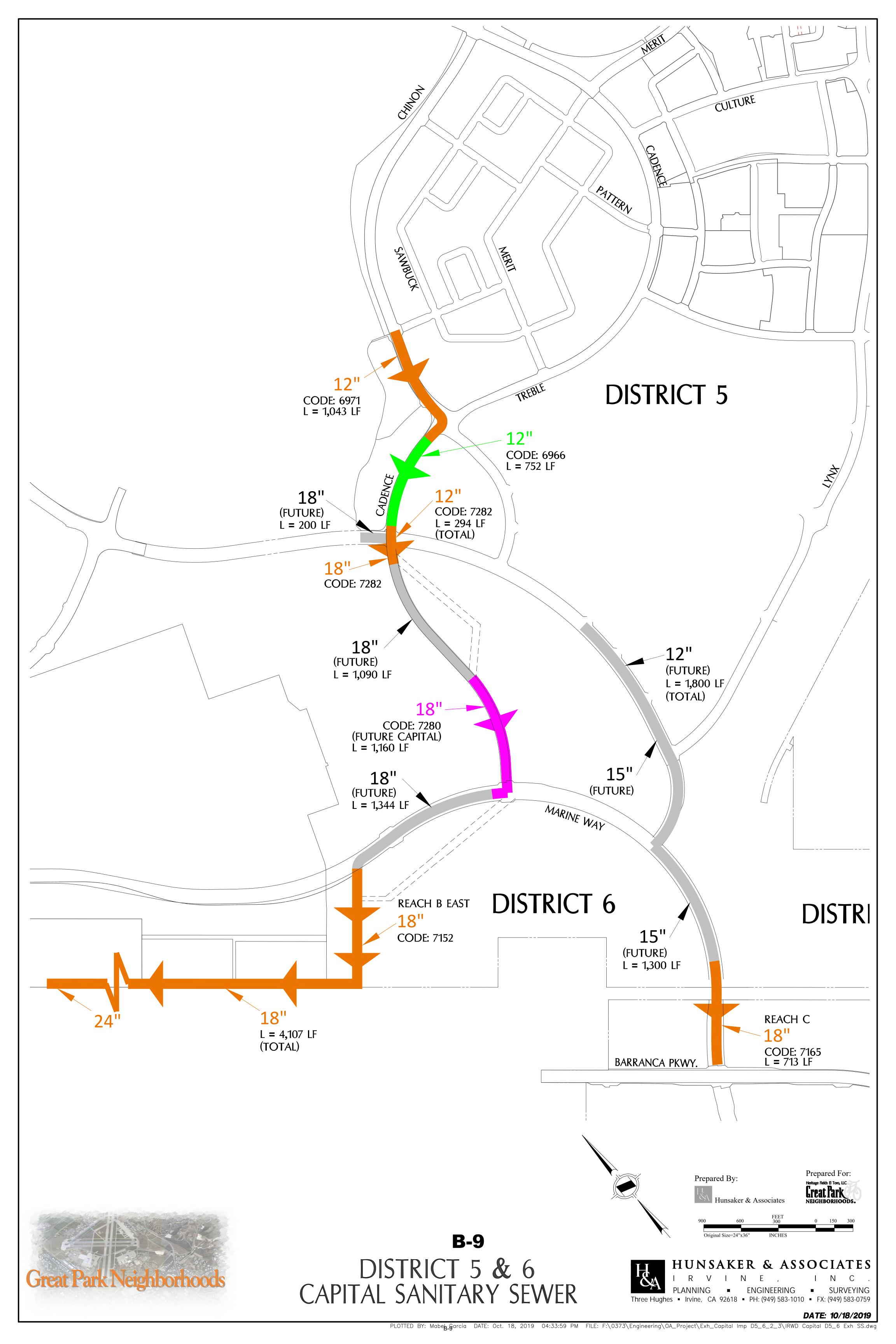
By:		
D		
Print Name:		
Print Title:		

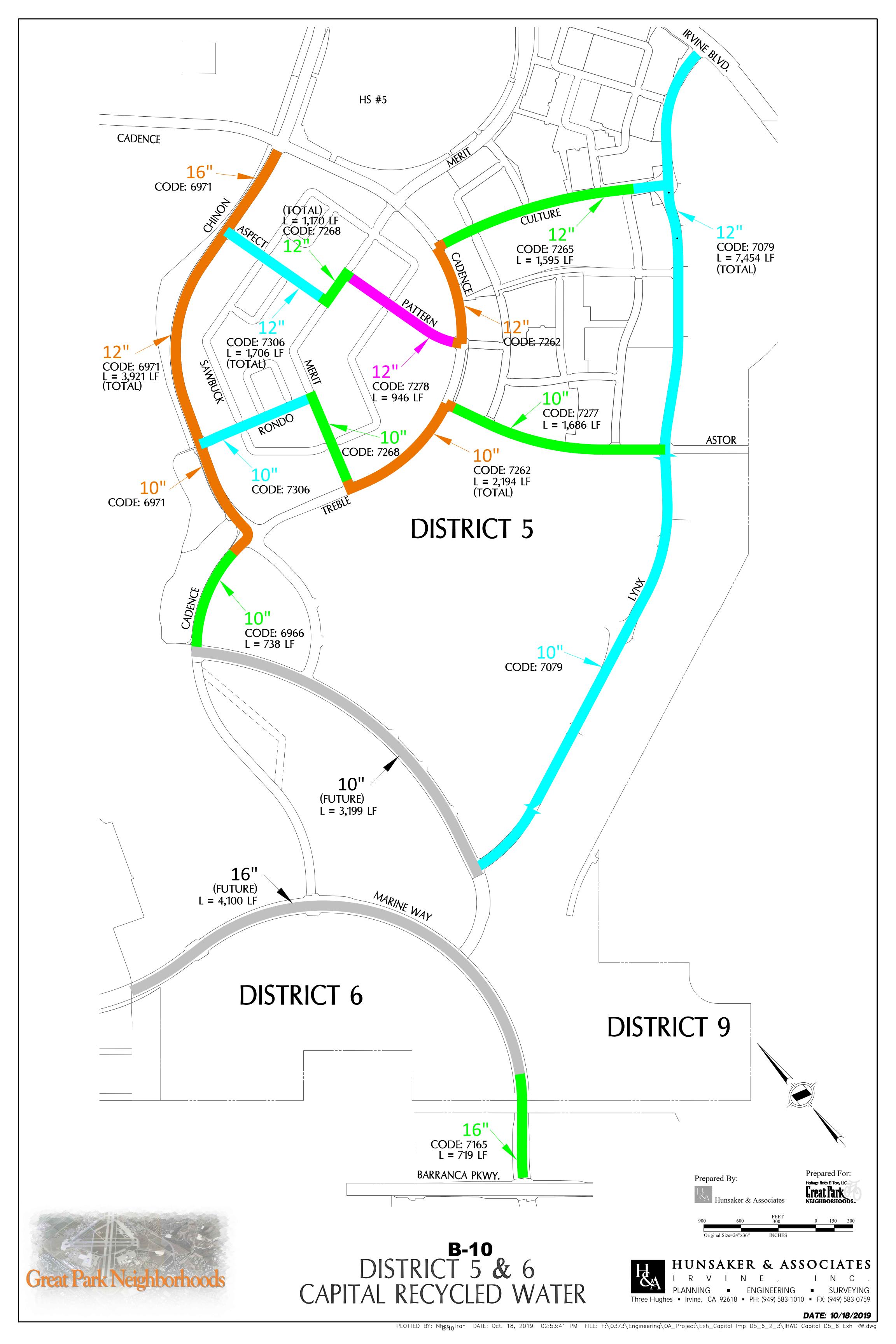
Schedule A to <u>Assignment Agreement</u>

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: <u>Planning Area 51, Great Park Neighborhoods, Districts 2, 3, 5, 6, 9, Domestic Water, Sanitary Sewer and Recycled Water Capital Improvements.</u>
Insert description of Capital Facilities from Section 3 of Supplemental Reimbursement Agreement: <u>Approximately 32,000 lineal feet of 12-inch domestic water, 13,800 lineal feet of 12-inch, 15-inch, 18-inch, and 24-inch sewer, and 33,200 lineal feet of 10-inch, 12-inch, and 16-inch recycled water pipelines.</u>
Contractor's Name:
License No.:
Address:
Phone #: Fax #:
Contact Person:









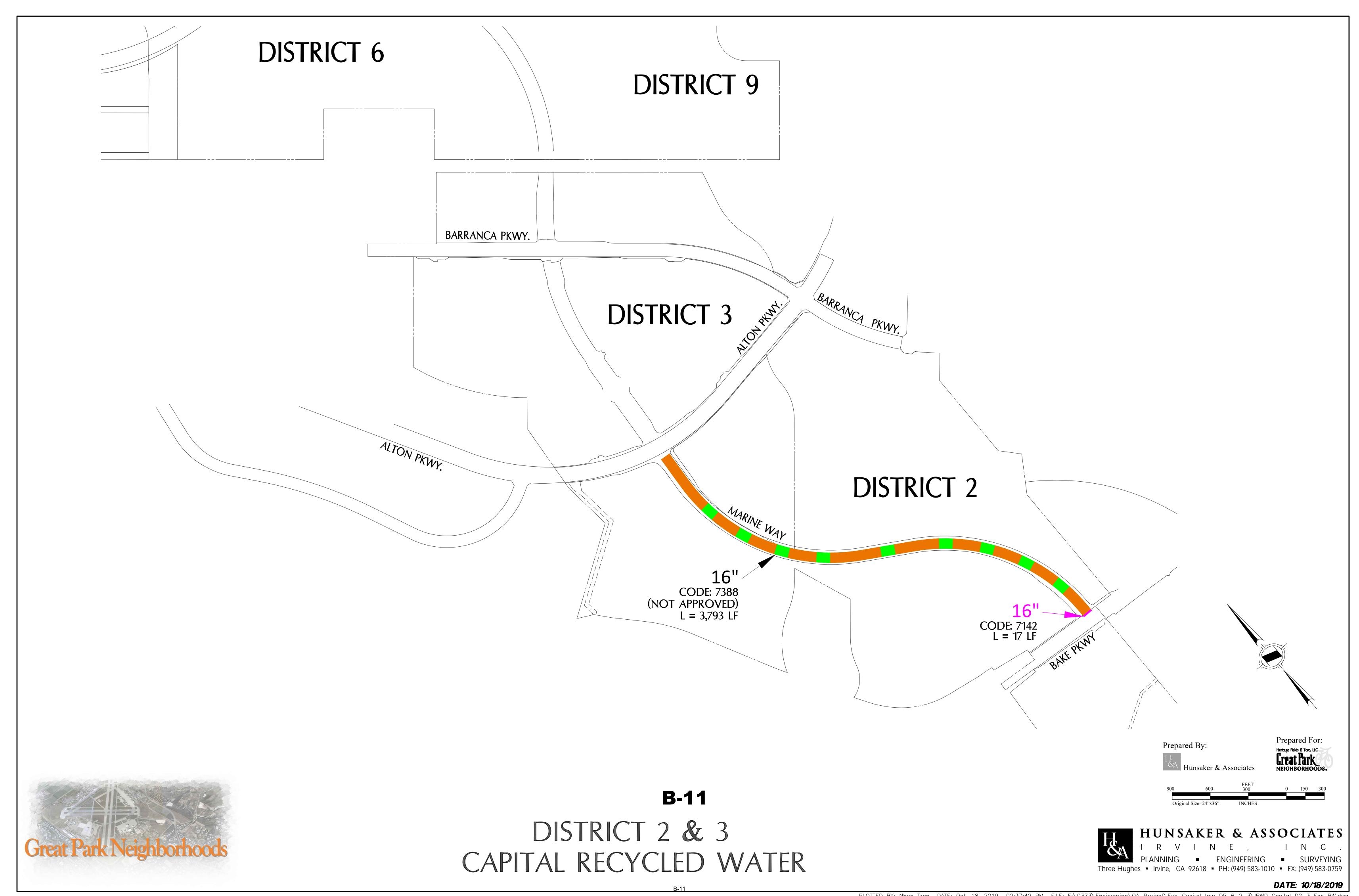


EXHIBIT "C"

Owner: Heritage Fields El Toro, LLC Project: District 2 - Reach B Sewer and Reach C Sewer and Recycled Water (Zone B) Improvements Bid Date: June 19, 2018 CODES 7152 and 7165

OODLO.	7152 and 7165										1		1				
				ENGINEE	ER ES	STIMATE	Attn: Bo	vood - LOW bby Kawai	Attn: Gre	'DAQ eg Huntley	Attn: Elto	. <u>&S</u> on Welham	Attn: Ja	MEC mes Elfring		Attn: Dav	
							Tel: 714	.593.6575	Tel:714	.447.9760	Tel: 714	1.528.3232	Tel: 95	1.734.3010		Tel:949.3	380.8363
				PRICE		AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT		PRICE	AMOUNT
TEM NO.	I. IRWD CODE 7152 CAPITAL SEWER	UNIT	QY														
1.	Mobilization (Not to Exceed 2% of Section A Price)	LS	1	\$ 37,000.00			\$ 32,300.00		\$ 2,250.00		\$ 41,000.00					5 -	\$
2.	Performance, Labor & Payment Bond	LS	1	\$ 27,750.00			\$ 18,200.00		\$ 17,329.10		\$ 39,000.00	\$ 39,000.00				-	\$
3.	SWPPP & BMP's - Interim Erosion Control	LS	1	\$ 18,500.00		18,500.00			\$ 2,500.00		\$ 8,500.00	\$ 8,500.00				5 -	\$
- "	Traffic Control Development & Application of Construction Water	LS	1	\$ 9,250.00		9,250.00	\$ 500.00	\$ 500.00	\$ 1,000.00	\$ 1,000.00	\$ 8,000.00						\$
5.		LS	1	\$ 9,250.00	\$	9,250.00	\$ 1,000.00	\$ 1,000.00	\$ 2,500.00	\$ 2,500.00	\$ 1,500.00	\$ 1,500.00	\$ 6,000.00	\$ 6,000.0	00 \$	-	\$
6.	Air Test and Video Sewer per IRWD Standards and Specifications, Complete		4 000	0.50		40.000.00		6 00 700 00			6 0.50	f 40.000.00		A 47.004.0			
-	Install temporary construction fence one foot inside the Metrolink right	LF	4,092	\$ 2.50	\$	10,230.00	\$ 8.00	\$ 32,736.00	\$ 1.00	\$ 4,092.00	\$ 2.50	\$ 10,230.00	\$ 4.25	\$ 17,391.0	00 \$	-	\$
7.																	
	of way including all post, fabric, fittings and any other appurtenant work, complete.																
^		LF	2,730	Complete			Complete		Complete		Complete		Complete			Complete	
8.	Clear and Grub site in preparation of sewer trenching, including																
	removal, hauling and disposal of all material cleared and grubbed off-																
	site, application of construction water, and any other appurtenant work, complete.																
		LS	1	\$ 12,000.00	\$	12,000.00	\$ 10,900.00	\$ 10,900.00	\$ 1,835.00	\$ 1,835.00	\$ 5,000.00	\$ 5,000.00	\$ 34,000.00	\$ 34,000.0	00 \$	5 -	\$
9.	Remove Existing Sewer Manhole, Foundation and appurtenant																
	material as appropriate within IRWD Easement and dispose of at			1.									1.	I .			
	Owner's Concrete stockpile, within 2 miles.	EA	1	\$ 5,000.00	\$	5,000.00	\$ 3,000.00	\$ 3,000.00	\$ 8,765.00	\$ 8,765.00	\$ 3,500.00	\$ 3,500.00	\$ 3,500.00	\$ 3,500.0	00 \$	- 3	\$
10.	Remove Existing Sewer Lateral and appurtenant material as													1			
	appropriate within IRWD Easement and Dispose of Off-Site, including													1			
	trenching, filling in trenching, compaction, capping exposed ends of																
	sewer lateral .	LF	40	\$ 100.00	\$	4,000.00	\$ 85.00	\$ 3,400.00	\$ 178.50	\$ 7,140.00	\$ 125.00	\$ 5,000.00	\$ 97.00	\$ 3,880.0	00 \$	-	\$
11.	Remove Existing Chain Link Fence including Chain Link Fabric, Posts,	ı T]		1											T	
	Post Foundations and appurtenant material as appropriate, and																
	dispose of off-site.	LF	56	\$ 20.00	\$	1,120.00	\$ 30.00	\$ 1,680.00	\$ 11.00	\$ 616.00	\$ 20.00	\$ 1,120.00	\$ 48.00	\$ 2,688.0	00 \$	- 8	\$
12.	Remove Existing AC Pavement and appurtenant material as																
	appropriate and dispose of in Owner's AC Stockpile, within 2 miles,																
	including saw cutting.	SF	200	\$ 10.00	\$	2,000.00	\$ 8.00	\$ 1,600.00	\$ 9.00	\$ 1,800.00	\$ 6.00	\$ 1,200.00	\$ 24.00	\$ 4,800.0	00 \$	- 6	\$
13.	Remove Existing Concrete Curb and appurtenant material as																
	appropriate and place in Owners stockpile within 2 miles, including saw																
	cutting.	LF	36	\$ 24.00	\$	864.00	\$ 30.00	\$ 1,080.00	\$ 52.00	\$ 1,872.00	\$ 20.00	\$ 720.00	\$ 90.00	\$ 3,240.0	00 9	- 8	\$
14.	Relocate Railroad Property (Approximately 50 LF of Switching Track,				1			* 1,000.00	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			•
	10 CY of Ballast) from Within Reach B Alignment to Temporary Fence																
	Along Railroad Property Line (Final Location to be Determined by																
	Owner's Field Representative)	LS	1	\$ 4.000.00	\$	4 000 00	\$ 5,500,00	\$ 5,500,00	\$ 1,270,00	\$ 1,270.00	\$ 3,500,00	\$ 3,500,00	\$ 2,000.00	\$ 2,000.0	00 \$		\$
15.	Sawcut and remove existing curb, AC and concrete pavement (north of	LO		Ψ 4,000.00	Ψ	4,000.00	ψ 0,000.00	ψ 0,000.00	Ψ 1,270.00	ψ 1,270.00	Ψ 0,000.00	ψ 0,000.00	Ψ 2,000.00	Ψ 2,000.0	4	,	Ψ
	Marine Way) including removal and delivery to Owners stockpile within																
	2 miles, loading and hauling CMB for Owners stockpile within 2 miles,																
	placement and compaction of CMB, application of construction water,																
	and any other appurtenant work, complete.																
	·	LF	180	\$ 45.00	\$	8,100.00	\$ 42.00	\$ 7,560,00	\$ 44.00	\$ 7,920.00	\$ 35.00	\$ 6,300.00	\$ 63.00	\$ 11,340.0	00 9		s
16.	Remove Existing Temporary Cleanout and appurtenant material as		100	Ψ 40.00	۳	5,100.00	J 72.00	2 .,000.00	7 44.00	,020.00	2 00.00	- 0,000.00	\$ 00.00	ψ 11,0-10.0	4		Ψ
	appropriate and dispose of off-site, and Join Existing Sewer, Complete.				1									1			
		EA	4	\$ 5,000.00	•	5 000 00	\$ 6700.00	\$ 6,700.00	\$ 5,000,00	\$ 5,000,00	\$ 4,500.00	¢ 4500.00	\$ 4,500.00	\$ 4,500.0	00 4		•
17.	Furnish 18" C-900 green PVC (DR-18) pipe, per IRWD standards, and	EM		ψ 5,000.00	φ	5,000.00	φ 0,700.00	ψ 0,700.00	φ υ,σσυ.00	ψ υ,σσυ.υυ	ψ 4,500.00	ψ 4,500.00	ψ 4,500.00	ψ 4,000.0	00 \$	-	Ψ
17.	any other appurtenant work, compete [pre-codered by owner]	LE	4,004	\$ 48.90		195,795.60	\$ 48.00	\$ 105.70F.60	\$ 48.00	\$ 195,795.60	\$ 48.00	\$ 105.70F.60	\$ 48.00	\$ 195,795.6	60 9		s
18.	Install 18" C-900 green PVC (DR-18) pipe, d=10.7' to 21.8', per IRWD	LF	4,004	φ 40.90	Þ	190,795.00	φ 40.90	φ 190,795.0U	φ 40.9U	ψ 193,/95.00	φ 40.90	ψ 130,730.6U	φ 46.90	φ 195,795.6	UU 1	, -	φ
10.	standard S-6 including, trench excavation, backfill, PVC fittings,																
					1								1	1			
	removal of trench spoils to Owners stockpile within 2 miles, sewer																
	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other		2 272	e 445.00		270 050 00	e 05.00	¢ 277.050.00	£ 404.50	© 407.44F.00	e 205.00	↑ 70E 7E0 00	¢ 77.5^	Ф 252.405.0	00 4	,	•
10	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete.	LF	3,270	\$ 115.00	\$	376,050.00	\$ 85.00	\$ 277,950.00	\$ 124.50	\$ 407,115.00	\$ 225.00	\$ 735,750.00	\$ 77.50	\$ 253,425.0	00 \$		\$
19.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18* C-900 green PVC (DR-18) pipe, d=16.2* to 17.3*, in Jack and	LF	3,270	\$ 115.00	\$	376,050.00	\$ 85.00	\$ 277,950.00	\$ 124.50	\$ 407,115.00	\$ 225.00	\$ 735,750.00	\$ 77.50	\$ 253,425.0	00 \$	-	\$
19.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18" C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel	LF	3,270	\$ 115.00	\$	376,050.00	\$ 85.00	\$ 277,950.00	\$ 124.50	\$ 407,115.00	\$ 225.00	\$ 735,750.00	\$ 77.50	\$ 253,425.0	00 \$	-	\$
19.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other															-	\$
	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete.	LF LF	3,270	\$ 115.00 \$ 80.00						\$ 407,115.00 \$ 27,892.00		\$ 735,750.00 \$ 41,104.00				S -	\$
19.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3' to 11.8',															5 -	\$
	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2′ to 17.3′, in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3′ to 11.8′, per IRWD standard S-6 including, trench excavation, backfill, PVC															5 -	\$
	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC (fittings, removal of trench spoils to Owners stockpile within 2 miles,															5 - 5 -	\$
	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18' C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24' C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other	LF	734	\$ 80.00	\$	58,720.00	\$ 115.00	\$ 84,410.00	\$ 38.00	\$ 27,892.00	\$ 56.00	\$ 41,104.00	\$ 95.00	\$ 69,730.0	00 \$	\$ -	Ψ
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2′ to 17.3′, in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3′ to 11.8′, per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete.			\$ 80.00	\$	58,720.00	\$ 115.00	\$ 84,410.00	\$ 38.00		\$ 56.00	\$ 41,104.00	\$ 95.00	\$ 69,730.0	00 \$	5 - 5 -	\$
	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC (fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including,	LF	734	\$ 80.00	\$	58,720.00	\$ 115.00	\$ 84,410.00	\$ 38.00	\$ 27,892.00	\$ 56.00	\$ 41,104.00	\$ 95.00	\$ 69,730.0	00 \$	5 - 5 -	Ψ
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18' C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24' C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to	LF	734	\$ 80.00	\$	58,720.00	\$ 115.00	\$ 84,410.00	\$ 38.00	\$ 27,892.00	\$ 56.00	\$ 41,104.00	\$ 95.00	\$ 69,730.0	00 \$	5 - 5 -	Ψ
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence	LF	734	\$ 80.00	\$	58,720.00	\$ 115.00	\$ 84,410.00	\$ 38.00	\$ 27,892.00	\$ 56.00	\$ 41,104.00	\$ 95.00	\$ 69,730.0	00 \$	5 - 5 -	Ψ
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18' C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24' C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence (for pit and work area), application of construction water, and any other	LF	734	\$ 80.00	\$	58,720.00	\$ 115.00	\$ 84,410.00	\$ 38.00	\$ 27,892.00	\$ 56.00	\$ 41,104.00	\$ 95.00	\$ 69,730.0	00 \$	5 - 5 -	Ψ
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence	LF	734	\$ 80.00	\$	58,720.00 26,400.00	\$ 115.00 \$ 245.00	\$ 84,410.00 \$ 21,560.00	\$ 38.00	\$ 27,892.00	\$ 56.00 \$ 325.00	\$ 41,104.00 \$ 28,600.00	\$ 95.00	\$ 69,730.0	00 \$		Ψ
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2′ to 17.3′, in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3′ to 11.8′, per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence (for pit and work area), application of construction water, and any other appurtenant work, complete. Furnish and install 29.5° ID steel casing per IRWD standard S-7 by	LF LF	734	\$ 80.00	\$	58,720.00 26,400.00	\$ 115.00 \$ 245.00	\$ 84,410.00 \$ 21,560.00	\$ 38.00	\$ 27,892.00 \$ 22,880.00	\$ 56.00 \$ 325.00	\$ 41,104.00 \$ 28,600.00	\$ 95.00	\$ 69,730.0	00 \$		\$
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2' to 17.3', in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3' to 11.8', per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence (for pit and work area), application of construction water, and any other appurtenant work, complete. Furnish and install 29.5° ID steel casing per IRWD standard S-7 by jack and bore method including, removal of trench spoils to Owners	LF LF	734	\$ 80.00	\$	58,720.00 26,400.00	\$ 115.00 \$ 245.00	\$ 84,410.00 \$ 21,560.00	\$ 38.00	\$ 27,892.00 \$ 22,880.00	\$ 56.00 \$ 325.00	\$ 41,104.00 \$ 28,600.00	\$ 95.00	\$ 69,730.0	00 \$		\$
20.	removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Install 18° C-900 green PVC (DR-18) pipe, d=16.2′ to 17.3′, in Jack and Bored Steel Casing, per IRWD standard S-6, including stainless steel casing spacers, application of construction water, and any other appurtenant work, compete. Furnish and install 24° C-900 green PVC (DR-25) pipe, d=11.3′ to 11.8′, per IRWD standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, compete. Construct pits for Jack and Bore per details per plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence (for pit and work area), application of construction water, and any other appurtenant work, complete. Furnish and install 29.5° ID steel casing per IRWD standard S-7 by	LF LF	734	\$ 80.00	\$	58,720.00 26,400.00	\$ 115.00 \$ 245.00	\$ 84,410.00 \$ 21,560.00	\$ 38.00	\$ 27,892.00 \$ 22,880.00	\$ 56.00 \$ 325.00	\$ 41,104.00 \$ 28,600.00	\$ 95.00	\$ 69,730.0	00 \$		\$

23.	Furnish and install 29.5" ID steel casing per IRWD standard S-7 Closure Piece, including, removal of trench spoils to Owners stockpile																		
	within 2 miles, application of construction water, and any other appurtenant work, compete.	LF	14	\$ 900.00	•	11,200.00 \$ 1,400.0	,	10,600,00	950.00	•	11 000 00	\$ 250.00	e	4 000 00	\$ 395.00	e	5,530.00	¢	¢
24.	Furnish and install casing test station per IRWD standard CP-3 including trenching, backfill, frame and cover, concrete collar, wire, conduit, identification tape, application of construction water, and any	Lr	14	\$ 800.00	J.	11,200.00 \$ 1,400.0	10 3	19,000.00 \$	830.00	Φ	11,900.00	\$ 330.00	Φ	4,900.00	\$ 393.00	Ψ	5,530.00	5 -	.
25	other appurtenant work, complete.	EA	6	\$ 2,500.00	\$	15,000.00 \$ 2,000.0	0 5	\$ 12,000.00 \$ 1	,610.00	\$	9,660.00	\$ 3,200.00	\$	19,200.00	\$ 2,500.00	\$	15,000.00	\$ -	\$ -
25.	Remove and replaced existing survey monument, including coordinating with the surveyor, installation of new monument, application of construction water, and any other appurtenant work, complete.	EA	1	\$ 2,500.00	\$	2,500.00 \$ 1,200.0	00 5	\$ 1,200.00 \$ 2	2,040.00	\$	2,040.00	\$ 750.00	\$	750.00	\$ 5,000.00	\$	5,000.00	\$ -	\$ -
26.	Construct 60" diameter sewer manhole, d=10.7" to 17.3', per IRWD standard S-1 including, concrete, finishing the concrete base, manhole shaft, steps, manhole frame and cover, excavation, backfill, concrete pad, adjustment to grade of access road, application of construction water, and any other appurtenant work, compete.																		
		EA	9	\$ 10,000.00	\$	90,000.00 \$ 6,900.0	0 5	62,100.00 \$ 15	,735.00	\$ 14	41,615.00	\$ 13,000.00	\$	117,000.00	\$ 18,000.00	\$	162,000.00	\$ -	\$ -
27.	Construct Temporary 8" Sewer Cleanout per IRWD standard S-5, d=21.8', including, pipe, pipe fittings, excavation, backfill, frame and cover, concrete collar, application of construction water, and any other appurtenant work, complete.	EA	1	\$ 3,500.00	•	3,500.00 \$ 2,200.0	ın «	\$ 2200.00 \$ 5	565.00	•	5 565 00	\$ 2400.00	e	2 400 00	\$ 7,000,00	¢	7,000.00	\$ -	s -
28.	Remove and Replace Existing Storm Drain Grate Inlet per SPPWC Standard Plan 304-3 and Detail on plans including removing existing grate and box (concrete to be delivered to Owners Concrete stockpile within 2 miles), construction of concrete box, installation of grate, excavation, backfill, application of construction water, and any other appurtenant work, complete.	EA	1			10,000.00 \$ 13,000.0												\$ -	\$ -
29.	Remove and Replace Existing Asphalt Pavement (at Trenches and	EA	1	φ 10,000.00	Þ	10,000.00 \$ 13,000.0	10 3	p 13,000.00 \$ 8	,290.00	Þ	0,290.00	φ 7,500.00	Ф	7,500.00	φ 14,000.00	Þ	14,000.00	φ -	φ -
	Manholes) per City of Irvine standard plan 223. Alternative B, including saw cutting, AC removal and delivery to Owners stockpile within 2 miles, CMB placement and compaction, loading and hauling CMB from Owners stockpile within 2 miles, placement and compaction of AC, application of construction water, and any other appurtenant work, complete.	LF	699	\$ 60.00	•	41,940.00 \$ 120.0	10	2 00 088 E8 - 2	62.00	•	43,338.00	\$ 90.00	•	62 910 00	\$ 115.00	4	80 385 00	\$ -	٠.
30.	Remove and Replace Existing Asphalt Pavement (at Jack and Bore Pits, curb replacement and SD catch basin) per City of Irvine standard plan 223, Alternative B, including saw cutting, AC removal and delivery to Owners stockpile within 2 miles, CMB placement and compaction, loading and hauling CMB from Owners stockpile within 2 miles, placement and compaction of AC, application of construction water, and any other appurtenant work, complete.		033	φ 30.00		41,540.00		30,000.00	02.00	•	-0,000.00	30.00	Ψ	02,510.00	ψ 110.00	V	30,500.00	Ÿ	•
		SF	1,160	\$ 25.00	\$	29,000.00 \$ 33.0	00 5	\$ 38,280.00 \$	15.00	\$	17,400.00	\$ 18.00	\$	20,880.00	\$ 35.00	\$	40,600.00	\$ -	\$ -
31.	Remove and Replace Concrete Curb per City of Irvine Standard Plan 200 including saw cutting, concrete removal and disposal at Owners Concrete stockpile within 2 miles, forms, transitions, concrete, finishing, application of construction water, and any other appurtenant work, complete.	LF	45	\$ 60.00	\$	2,700.00 \$ 55.0	10 5	\$ 2,475,00 \$	156.00	s	7 020 00	\$ 90.00	\$	4 050 00	\$ 165.00	\$	7,425.00	\$ -	s -
32.	Remove and Replace Exist Concrete V-Gutter in kind, including saw cutting, removal of existing v-gutter and disposal at Owners Concrete stockpile within 2 miles, forming, flares, concrete, finishing, application of construction water and any other appurtenant work, complete.																	•	•
33.	Construct 6" Concrete Curb per City of Irvine Standard Plan 200	LF	50	\$ 80.00	\$	4,000.00 \$ 55.0	0 5	\$ 2,750.00 \$	122.00	\$	6,100.00	\$ 105.00	\$	5,250.00	\$ 143.00	\$	7,150.00	\$ -	\$ -
30.	including, concrete, forming, finishing, removal of forms, application of construction water and any other appurtenant work, complete.	LF	20	\$ 50.00	s	4 000 00 0		0.400.00	00.00		0.004.00			4 000 00			0.000.00	•	•
34.	Construct 14" All Weather Access Road, 14" Minimum CMB over Prepared Subgrade (Minimum load of 66,000 lb.) per Detail on plans including roadway grading, remove of spoils to Owners stockpile within 2 miles, header boards, loading and hauling CMB from Owners stockpile, compaction of CMB, application of construction water, and any other appurtenant work, complete.	SF	36 36,556			1,800.00 \$ 60.0 182,780.00 \$ 5.0		\$ 2,160.00 \$							\$ 111.00		3,996.00	\$ -	у -
35.	Restripe Existing Parking Stalls to Match Existing where damaged or removed in the construction process, including paint, legends, and markings, including those for ADA Parking Spaces, and any other		50,000																ψ <u>-</u>
36.	appurtenant work, complete. Furnish and Paint Striping to Stripe Out Parking Stall with 4" white	LS	1	\$ 3,000.00	\$	3,000.00 \$ 2,900.0	0 5	\$ 2,900.00 \$ 1	,050.00	\$	1,050.00	\$ 3,900.00	\$	3,900.00	\$ 6,000.00	\$	6,000.00	\$ -	\$ -
	stripes with traffic paint any other appurtenant work, complete.	LS	1	\$ 2,000.00	\$	2,000.00 \$ 2,900.0	0 5	\$ 2,900.00 \$ 1	,050.00	\$	1,050.00	\$ 3,500.00	\$	3,500.00	\$ 6,000.00	\$	6,000.00	\$ -	\$ -
37.	Replace damaged landscape and irrigation in kind including, reconnection to irrigation system, all plant material, all irrigation material, application of construction water and any other appurtenant work, complete.			6 500000		5 000 00 0 0 0 5			450.00		0.450.00	4 7500 00		7.500.60	. 40 000 00		10.000.00	•	
L	morn, complete.	LS	1	\$ 5,000.00	\$	5,000.00 \$ 2,500.0	U S	2,500.00 \$ 3	, 150.00	φ	3,150.00	00.000, ۱ چ	Ф	7,500.00	\$ 13,000.00	\$	13,000.00	ა -	ა -

38.	Furnish and install 16' wide perimeter fence access gate per material and height to match existing fence including, removal of existing perimeter fence, posts, post foundations, fabrication of gate (match existing fence asthetics and quality), hardware, application of construction water, and any other appurtenant work, compete.																								
		EA	2	\$ 25,0	00.00	\$ 5	50,000.00	\$ 15,900.00	\$	31,800.00	\$	4,725.00	\$	9,450.00	\$ 4,5	500.00	\$	9,000.00	\$ 17,000	00 \$	34,000.00	\$	-	\$	-
39.	Furnish and install 6' chain link fence per SPPWC standard plan 600-1 including fabric, post, post foundations, hardware, application of construction water, and any other appurtenant work, compete.	1E	70	¢	30.00	¢	5,600.00	\$ 84.00	•	5,880.00	•	98.00	•	6,860.00	¢	47.00	¢	3.290.00	\$ 95.	2 00	6.650.00	•			
40.	Furnish and Install 6' High Double Access Gate per SPPWC Standard Plan 600-1 including post, post foundation, fabric, hardware, application of construction water, and any other appurtenant work, complete.	EA	2	\$ 4,5					\$	16,400.00	\$		\$	8,990.00			\$		\$ 9,000		18,000.00	\$. \$	-
41.	Raise Manhole to Final Grade After Improvements are Complete or Requested by Owner including Extra Move-In, Complete	EA	9	\$ 8	00.00	\$	7,200.00	\$ 605.00	\$	5,445.00	\$	400.00	\$	3,600.00	\$ 6	650.00	\$	5,850.00	\$ 2,000	00 \$	18,000.00	\$		\$	-
42.	Raise Cleanout to Final Grade After Improvements are Complete or Requested by Owner including Extra Move-In, Complete	EA	1	\$ 5	00.00	\$	500.00	\$ 385.00	\$	385.00	\$	350.00	\$	350.00	\$ 5	525.00	\$	525.00	\$ 1,850	00 \$	1,850.00	\$	-	\$	-

					ENGINEE	R ES	TIMATE	Attn:	Bobby	d - LOW Kawai 3.6575	Attn: 0		NQ Huntley 17.9760		L& Attn: Elton Tel: 714.5	n Welham		Attn: Jai Tel: 951			Ā	ttn: Dav	y - No Bid rid Chorak 380.8363
ITEM NO). II. IRWD CODE 7165 CAPITAL SEWER	UNIT	QY		PRICE	A	AMOUNT	PRICE		AMOUNT	PRICE		AMOUNT	F	PRICE	AMOUNT	ı	PRICE	A	AMOUNT	PRI	CE	AMOUNT
43.	Mobilization (Not to Exceed 2% of Section C Price)	LS	1	\$	13,300.00	\$	13,300.00	\$ 10,500.0	0 \$	10,500.00	\$ 2,250.00	0 \$	2,250.00	\$ 1	18,000.00	\$ 18,000.00	\$	6,000.00	\$	6,000.00	\$	-	\$
44.	Performance, Labor & Payment Bond	LS	1	\$	9,975.00	\$	9,975.00	\$ 6,200.0	0 \$	6,200.00	\$ 6,174.43	3 \$	6,174.43	\$	5,200.00	\$ 5,200.00	\$	7,000.00	\$	7,000.00	\$	-	\$
45.	SWPPP & BMP's - Interim Erosion Control	LS	1	\$	6,650.00	\$	6,650.00	\$ 500.0	0 \$	500.00	\$ 2,500.00	0 \$	2,500.00	\$	4,800.00	\$ 4,800.00	\$	5,000.00	\$	5,000.00	\$	-	\$
46.	Traffic Control	LS	1	\$	3,325.00	\$	3,325.00	\$ 500.0	0 \$	500.00	\$ 1,000.00	0 \$	1,000.00	\$	500.00	\$ 500.00	\$	5,000.00	\$	5,000.00	\$	-	\$
47.	Development & Application of Construction Water	LS	1	\$	3,325.00	\$	3,325.00	\$ 1,200.0	0 \$	1,200.00	\$ 2,500.00	0 \$	2,500.00	\$	1,500.00	\$ 1,500.00	\$	6,000.00	\$	6,000.00	\$	-	\$
48.	Railroad Flagman While Working Within OCRRA/Metrolink R/W	DAY	16	\$	1,750.00	\$	28,000.00	\$ 1,750.0	0 \$	28,000.00	\$ 1,500.00	0 \$	24,000.00	\$	1,950.00	\$ 31,200.00	\$	2,500.00	\$	40,000.00	\$	-	\$
49.	Air Test and Video Sewer per IRWD Standards and Specifications, Complete	Ţ	713	\$	5.00	\$	3,565.00	\$ 12.0	0 \$	8,556.00	\$ 10.00	0 \$	7,130.00	\$	3.50	\$ 2,495.50	\$	10.00	\$	7,130.00	\$	-	\$
50.	Clear and Grub site in preparation of sewer trenching, including removal, hauling and disposal of all material cleared and grubbed off- site, application of construction water, and any other appurtenant work, complete.	LS	1	\$	5,000.00	\$	5.000.00	\$ 5,000.0	0 \$	5.000.00	\$ 3.500.00	0 \$	3,500.00	\$	2.200.00	\$ 2,200,00	\$ 1	12.500.00	\$	12,500.00	\$	_	s
51.	Remove and Dispose of Existing Sewer and appurtenant material, as appropriate, Off-Site, including trenching, filling in trenching, compaction, application of construction water, and any other appurtenant work, complete.	LF	16		120.00		1,920.00		0 \$				·			\$ 4,000.00		·			s	_	\$
52.	Furnish 18" C-900 Green PVC (DR-18) Pipe, per IRWD Standards, and any other appurtenant work, complete [Pre-Ordered by Owner]	LF	713				34,865.70			34,865.70			34,865.70			\$ 34,865.70				34,865.70	\$		\$ \$
53.	Install 18* C-900 Green PVC (DR-18) Pipe, d=27.1' to 34.4', per IRWD Standard S-6 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, complete.	LF	403							·						\$ 173,290.00				·			s
54.	Install 18" C-900 Green PVC (DR-18) Pipe, d=31.8" to 34.3", in Jack and Bored Steel Casing, per IRWD Standard S-7, including stainless steel casing spacers, end seals and any other appurtenant work, complete.	LF	310										·			\$ 17,360.00					\$	-	\$
55.	Furnish and Install 29.5" OD Steel Casing per IRWD Standard S-6, d=27.2" to 28.2", including, removal of trench spoils to Owners stockpile within 2 miles, application of construction water, and any other appurtenant work, complete.	LF	60										·			\$ 45,300.00					·	_	\$
56.	Furnish and Install 29.5" OD Steel Casing, Minimum Thickness 0.500", per IRWD Standard S-7 by Jack and Bore method, d=31.8" to 34.3', including, remained of trench spoils to Owners stockpile within 2 miles, application of construction water, and any other appurtenant work, complete.	LF	250	s						121,250.00			204.500.00			\$ 147.500.00					\$	_	s
57.	Construct Jacking and Receiving Pits for Jack and Bore of Sewer Casing per Details on Plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence (for pit and work area), application of construction water, and any other appurtenant work, complete.	EA	230		40.000.00		,									\$ 117.000.00				,	\$	-	\$
58.	Furnish and Install Casing Test Station per IRWD Standard CP-3, including trenching, backfill, frame and cover, concrete collar, wire, conduit, identification tape, application of construction water, and any other appur	EA	4				,				,		6,440.00			, , , , , , , , , , , , , , , , , , , ,				.,	·	_	\$

59.	Remove and Dispose of Existing Temporary Cleanout and Appurtenant material as appropriate and dispose of off-site and Join Existing Sewer and any other appurtenant work, Complete.	EA		1	\$ 4,500	.00	\$	4,500.00	\$ 11,000.00	\$	11,000.00	\$ 6,500.00	\$ 6,500.00	\$ 8,	300.00	\$	8,800.00	\$ 12,	000.00	\$ 12,000.00	\$	-	\$ -
60.	Furnish and Install 4" PVC C900 DR14 or DR18 Sewer Lateral (Modified to have Terminal Cleanout per IRWD Standard S-5 for Recycled Water Blow-off Assembly), d=30.8" per IRWD Standard S-3 including, trench excavation, backfill, PVC fittings, removal of trench spoils to Owners stockpile within 2 miles, sewer indicator tape, application of construction water, and any other appurtenant work, complete.	LF	3	35	\$ 240	.00	\$	8,400.00	\$ 300.00	0 \$	10,500.00	\$ 225.00	\$ 7,875.00	\$	310.00	\$ 1	10,850.00	\$	426.00	\$ 14,910.00	<i>\$</i>	-	\$ -
61.	Construct 72" Diameter Sewer Manhole, d=29.1' to 34.3', with Special Manhole Base per Detail on Plan and per IRWD Standard S-1 including, concrete, finishing the concrete base, manhole shaft, steps, manhole frame and cover, excavation, backfill, concrete pad, adjustment to grade of access road, application of construction water, and any other appurtenant work, complete.	EA		4	\$ 25,000	.00	\$ 1	100,000.00	\$ 21,400.00	0 \$	85,600.00	\$ 25,625.00	\$ 102,500.00	\$ 23,	00.00	\$ 9	92,000.00	\$ 29.	000.00	\$ 116,000.00	\$	-	\$ -
62.	Construct Temporary 8" Sewer Cleanout per IRWD Standard S-5, d=34.0', including riser pipe, pipe fittings, excavation, backfill, frame and cover, concrete collar, application of construction water, and any other appurtenant work, complete.	EA		1	\$ 5,500	.00	\$	5.500.00	\$ 4,600.00) \$	4.600.00	\$ 7.500.00	\$ 7,500.00	\$ 2.	750.00	\$	2,750.00	\$ 12.	500.00	\$ 12,500.00	\$	_	\$ -
63.	Raise Manhole to Final Grade After Improvements are Complete or Requested by Owner including Extra Move-In, Complete	EA		4	\$ 800		\$	3.200.00	\$ 605.00		2.420.00	\$ 400.00	\$ 1.600.00		650.00	•	2.600.00			8.000.00	\$	-	\$ -
64.	Raise Cleanout to Final Grade After Improvements are Complete or Requested by Owner including Extra Move-In, Complete	EA		2	\$ 600	.00	\$	1,200.00	\$ 385.00	\$	770.00	\$ 350.00	\$ 700.00		575.00	•	1,150.00	\$ 1,	600.00	\$ 3,200.00	\$	-	\$ -
65.	Remove and Replace Existing Asphalt Pavement per City of Irvine standard plan 223, Alternative B, including saw cutting, AC removal and delivery to Owners stockpile within 2 miles, CMB placement and compaction, loading and hauling CMB from Owners stockpile within 2 miles, placement and compaction of AC, application of construction water, and any other appurtenant work, compete.																						
66.	Remove and Replace Existing Metal Beam Guardrail and Dead End	LF	1	10	\$ 200	.00	\$	2,000.00	\$ 375.00	\$	3,750.00	\$ 200.00	\$ 2,000.00	\$	200.00	\$	2,000.00	\$	575.00	\$ 5,750.00	\$	-	\$ -
	Signing per City of Irvine Standards 400 and 401.	LS		1	\$ 4,000	.00	\$	4,000.00	\$ 6,400.00	\$	6,400.00	\$ 4,250.00	\$ 4,250.00	\$ 6,	00.00	\$	6,600.00	\$ 7,	00.00	\$ 7,000.00	\$	-	\$ -

\$566,186.70

\$674,440.13

\$702,365.70

SUBTOTAL, CODE 7165, PR 10574 IRWD CAPITAL IMPROVEMENTS

\$744,761.20

\$825,444.70

\$0.00

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					ENGINEE	R ES	TIMATE			d - LOW			DAC				<u>&S</u> n Welham			(EC	16.4			- No Bid d Chorak
										Kawai		Attn: Gre							Attn: Jai					
								1 ei: 7	14.59	3.6575		Tel:714	.447.	.9760		i ei: 714	.528.3232	+	Tel: 951	.734.	3010	I el	:949.3	80.8363
ITEM NO	. III. IRWD CODE 7165 CAPITAL RECYCLED WATER	UNIT	QY		PRICE	,	AMOUNT	PRICE		AMOUNT	PF	RICE	,	AMOUNT	PRI	CE	AMOUNT		PRICE	Α	MOUNT	PRICE		AMOUNT
67.	Mobilization (Not to Exceed 2% of Section D Price)	LS	1	\$	8.800.00	\$	8.800.00	\$ 5.800.0	0 \$	5.800.00	\$ 2	.250.00	\$	2,250,00	\$ 13.5	00.00	\$ 13,500,00	\$	6.000.00	\$	6.000.00	\$	-	\$ -
68.	Performance, Labor & Payment Bond	LS	1	\$	6,600.00	\$	6,600.00	\$ 3,700.0	0 \$	3,700.00	\$ 4	,841.65	\$	4,841,65	\$ 2.5	00.00	\$ 2,500,00	\$	4.000.00	\$	4,000.00	\$	-	\$ -
69.	SWPPP & BMP's - Interim Erosion Control	LS	1	\$	4,400.00	\$	4,400.00	\$ 500.0	0 \$	500.00		,500.00	\$	2,500.00	\$ 4,8	800.00	\$ 4,800.00	\$	5,000.00	\$	5,000.00	\$	-	\$ -
70.	Traffic Control	LS	1	\$	2,200.00	\$	2,200.00	\$ 500.0	0 \$	500.00	\$ 1	.000.00	\$	1,000.00	\$ 5	00.00	\$ 500.00	\$	5.000.00	\$	5,000.00	\$	-	\$ -
71.	Development & Application of Construction Water	LS	1		2,200.00	\$	2,200.00	\$ 1.000.0	0 \$	1.000.00	\$ 2	.500.00	\$	2,500.00	\$ 1.0	00.00	\$ 1,000,00	\$	6,000,00	\$	6,000.00	\$	-	\$ -
72.	Railroad Flagman While Working Within OCRRA/Metrolink R/W	DAY	5	\$	1,750.00	\$	8,750.00	\$ 1,750.0	0 \$	8,750.00	\$ 1	.500.00	\$	7,500.00	\$ 1.7	50.00	\$ 8,750,00	\$	2,500,00	\$	12,500.00	\$	-	\$ -
73.	Pressure test per IRWD Standards and Specifications, Complete	LF	719	\$	3.00	\$	2,157.00	\$ 7.0	0 \$			2.50	\$	1,797,50	\$	2.50	\$ 1,797,50	\$	6.00	\$	4,314.00	S	-	\$ -
74.	Clear and Grub site in preparation of sewer trenching, including removal, hauling and disposal of all material cleared and grubbed off- site, application of construction water, and any other appurtenant work, complete.	LS	1		5,000.00		,	\$ 5,000.0		7				,	\$ 2,2				6,000.00		6,000.00	\$	_	\$ -
75.	Furnish 16" PVC purple C-900 (DR-18) pipe, per IRWD standard W-17, and any other appurtenant work, compete.	LF	719	\$	50.00	\$	35,950.00	\$ 45.0	0 \$	32,355.00	\$	50.00	\$	35,950.00	\$	40.00	\$ 28,760.00	\$	50.00	\$	35,950.00	\$	-	\$ -
76.	Install 16" PVC Purple C-900 (DR-18) Pipe 5.8' to 29.6', per IRWD standard S-6 including, trench excavation, backfill, fittings, removal of trench spoils to Owners stockpile within 2 miles, indicator tape, application of construction water, and any other appurtenant work, complete.	LF	469	\$	200.00	\$	93,800.00	\$ 65.0	0 \$	30,485.00	\$	225.00	\$	105,525.00	\$	88.00	\$ 88,172.00	\$	200.00	\$	93,800.00	\$		\$ -
77.	Install 16" PVC Purple C-900 (DR-18) Pipe, d=24.9' to 29.6', in Jack and Bored Steel Casing, per IRWD standard W-21, including stainless steel casing spacers, end seals and any other appurtenant work, complete.	LF	250	\$	80.00	\$	20.000.00	\$ 115.0	0 \$	28.750.00	\$	150.00	\$	37.500.00	\$ 4	95.00	\$ 123,750,00	\$	95.00	\$	23.750.00	\$	_	\$ -
78.	Furnish and Install 24" ID Steel Casing, Minimum Thickness 0.375", per IRWD Standard W-21 by Jack and Bore method, d=24.9' to 29.6', including, removal of trench spoils to Owners stockpile within 2 miles, application of construction water, and any other appurtenant work, complete.	LF	250		600.00	s	150,000.00	\$ 325.0	0 \$	81,250.00	\$	850.00	\$	212,500.00	s	45.00	\$ 11,250.00	s	520.00	\$	130.000.00	\$	_	\$ -
79.	Construct Jacking and Receiving Pits for Jack and Bore of Recycled Water Casing per Details on Plans including, excavation of pit, shoring, backfilling, compaction, removal of spoils to Owners stockpile within 2 miles, temporary safety and security fence (for pit and work area), application of construction water, and any other appurtenant work, comolete.					•								,						•		·		
	complete.	EA	2	\$	40,000.00	\$	80,000.00	\$ 30,000.0	0 \$	60,000.00	\$ 45	,000.00	\$	90,000.00	\$ 45,0	00.00	\$ 90,000.00	\$	85,000.00	\$	170,000.00	\$	-	\$ -

80.	Furnish and Install Casing Test Station per IRWD standard CP-3 including trenching, backfill, frame and cover, concrete collar, wire, conduit, identification tape, application of construction water, and any other apourten	EA	,	2	\$ 2.500.00	s	5 000 00	\$ 2,000,00	4 000 00	\$ 1.610.00	s	3 220 00	\$ 3,200.00	•	6 400 00	\$ 3,300.00		6.600.00	¢ .	¢	
81.	Remove and Dispose of Temporary Flush Out and appurtenant material, as appropriate, Off-Site and Join Existing Recycled Water, including trenching, filling in trenching, compaction, application of construction water, and any other appurtenant work, complete.				, , , , , , ,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	, , , , , ,		.,	, ,,					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_ ф	Ψ	
82.	Furnish and Install 2" Air Release and Vacuum Relief (Case 3) per IRWD Standard W-11, d=6.6', including trenching, backfill, fittings, vented cover, identification tape, application of construction water, and any other appurtenant work, complete.	EA EA			\$ 3,500.00 \$ 8.500.00			\$ 3,800.00	.,	\$ 5,990.00 \$ 3,500.00		.,	\$ 7,500.00 \$ 7,900.00		,	\$ 11,200.00 \$ 18,000.00		11,200.00	\$ - \$ -	\$	-
83.	Furnish and Install 4* Blow Off Assembly (Case 3) per IRWD Standard W-14, d=25.0', including trenching, backfilling trench, pipe, valve, fittings, manhole, manhole frame and cover, identification tape, application of construction water and any other appurtenant work, complete	EA			\$ 20.000.00			\$ 23,000.00	-,			,,	\$ 16,000.00		,	\$ 23,000.00		23.000.00	•	•	
84.	Furnish and Install Temporary Flush Out Assembly per IRWD Standard W-12, d=29.6', including cap, saddle, thrust block, marker, fittings, identification tape, application of construction water, and any other appurtenant work, complete.				\$ 3.500.00			\$ 6.300.00	.,	\$ 4,250,00		.,	\$ 3,200.00		.,	\$ 12,500.00		12.500.00	\$ -	s	
85.	Raise Valve to Final Grade After Improvements are Complete or Requested by Owner including Extra Move-In, Complete	EA		2	\$ 800.00		1,600.00		-,	. ,		800.00				\$ 1,600.00		3,200.00	\$ -	s	_
86.	Raise Blow-off Manhole to Final Grade After Improvements are Complete or Requested by Owner including Extra Move-In, Complete	EA		1	\$ 800.00		800.00		385.00			400.00	\$ 650.00			\$ 2,500.00		2,500.00		\$	_
	SUBTOTAL, CODE 7165, PR 10734 IRWD CAPITAL RW IMPROVEMI	ENTS					\$462,757.00		 \$309,378.00	-		<u>\$528,859.15</u>			\$419,729.50			\$579,314.00		9	\$0.00
	TOTAL, CODE 7165 PR 10574 AND 10734 IRWD CAPITAL IMPROVE	MENTS					\$1,165,122.70	-	\$875,564.70		<u>\$</u>	\$1,203,299.28		<u>\$</u>	1,164,490.70		<u>\$</u>	1,404,758.70			\$0.00

EXHIBIT "D"

Owner: Heritage Fields El Toro, LLC Project: District 6 - Reach B East Sewer Improvements Bid Date: September 6, 2018 CODE 7282

					GINEER TIMATE			<u>Leatherwood</u> Attn: Bobby K		<u>N</u>	Attr	FYDAQ n: Greg Huntley			L&S Attn: Elton Welham			KE Attn: Jame				ennedy ttn: Matt		
								Tel: 714.593.6	5575		Tel	1:714.447.9760			Tel: 714.528.3232			Tel: 951.7	34.3010		7	el:949.3	30.836	3
	_	, ,																						
ITEM NO.	II. IRWD CODE 7282 CAPITAL SEWER	UNIT	QY	P	RICE	ΑM	MOUNT	PRICE		AMOUNT		PRICE	A	AMOUNT	PRICE	AM	OUNT	PRIC	CE	AM	OUNT	PRICE	ŧ	AMOUNT
1.	Mobilization (Maximum of 2% of Section B1 Amount)	LS	1	\$	6,160.00	\$	6,160.00	\$ 3,780.00		3,780.00	\$	1,485.40	\$	1,485.40	\$ 5,000.00	\$	5,000.00	\$	1,000.00	\$	1,000.00	\$	-	\$ -
2.	Performance, Labor & Payment Bond	LS	1	\$	3,080.00		3,080.00	\$ 2,520.00		2,520.00		4,304.46	\$	4,304.46	\$ 4,800.00	\$	4,800.00		3,000.00		3,000.00	\$	-	\$ -
3.	Erosion Control - SWPPP & BMP's	LS	1		4,928.00		4,928.00	\$ 1,365.00		1,365.00	\$	7,000.00	\$	7,000.00	\$ 1,500.00	\$	1,500.00		3,000.00		3,000.00	\$	-	\$ -
4.	Development and Application of Construction Water	LS	1	\$	4,620.00		4,620.00	\$ 210.00		210.00	\$	840.00	\$	840.00	\$ 900.00	\$	900.00		3,000.00		3,000.00	\$	-	\$ -
5.	Traffic Control	LS	1	\$	4,620.00	\$	4,620.00	\$ 315.00	\$	315.00	\$	4,200.00	\$	4,200.00	\$ 1,250.00	\$	1,250.00	\$	3,000.00	\$	3,000.00	\$	-	\$ -
6.	Air Test and Video Pipeline Per IRWD Standards & Specifications, Complete	LF	295	s	9.00	s	2.655.00	\$ 15.00	s	4.425.00	s	5.00	\$	1.475.00	\$ 4.00	s	1.180.00	s	10.00	s	2.950.00	s	-	s -
7.	Clearing and Grubbing (All Vegetation Within the Project Site)	LS	1	Š	2.800.00			\$ 5,250,00		5,250,00	Š	5,600,00	\$	5,600.00			2,500,00		2.000.00		2.000.00	Š	-	\$ -
8.	Furnish and Install 18" PVC (Green), C900, DR 18 Sewer, including Trenching, Bedding, Backfill & Compaction, Fittings, sewer indicator tape, and any other appurtenant work per IRWD Std. DWG. S-6, Depth = 25"-33", Complete	LF	207	\$	720.00	\$ 14	49,040.00	\$ 600.00	\$	124,200.00	\$	595.00	\$	123,165.00	\$ 725.00	\$ 15	50,075.00	\$	835.00	\$ 17	2,845.00	\$	_	\$ -
9.	Furnish and Install 12" PVC (Green), C900, DR 18 Sewer, including Trenching, Bedding, Backfill & Compaction, Fittings, sewer indicator tape, and any other appurtenant work per IRWD Std. DWG. S-6, Depth = 23'-27', Complete	LF	88	\$	489.00	\$ 4	43,032.00	\$ 215.00	\$	18,920.00	\$	485.00	\$	42,680.00	\$ 480.00	\$ 4	42,240.00	\$	565.00	\$ 4	9,720.00	\$	-	\$ -
	Remove and Dispose of Temporary 6" or 8" Terminal Cleanout & Join Existing Sewer	EA	1	\$	1,941.89	\$	1,941.89	\$ 15,000.00	\$	15,000.00	\$	4,000.00	\$	4,000.00	\$ 4,975.00	\$	4,975.00	\$	12,500.00	\$ 1	2,500.00	\$	-	\$ -
11.	Construct 72° DIA. Manhole w/ Modified Base per IRWD Std. DWG. S-1 and Detail on Plan, including excavation, backfill, concrete, reinforcement, finishing, manhole frame and cover, 1 Raise and any other appurtenant work, Depth = 26°-33°, Complete	EA	2	s	21.721.23	\$ 4	43.442.46	\$ 21.000.00	s	42,000,00	s	32,800.00	\$	65,600.00	\$ 23.500.00	\$ 4	47.000.00	s	37.000.00	\$ 7	4.000.00	s		s -
12.	Furnish & Install Temporary 6" or 8" Terminal Cleanout Per IRWD	FA	1	\$	2.000.00		2.000.00	\$ 6,600.00	-	6,600.00	6	5.250.00	¢	5,250.00	\$ 4,000.00		4.000.00	¢	13.500.00		3,500.00	\$		\$
	Raise Manhole to Final Grade After Improvements are Complete or	FA	- 1	9	401.76	Ф	803.52	\$ 625.00		1,250.00	9	5,250.00	g g		\$ 4,000.00	9	1.300.00	9	2.000.00		4.000.00	ø e	- - +	φ -
10.	SUBTOTAL, IRWD CAPITAL IMPROVEMENTS	2	_\$		\$ <u>\$2</u>	803.52	\$ 625.00	-	1,250.00 \$225,835.00	. 3	500.00	Ψ	1,000.00 \$266,599.86	\$ 650.00	\$ <u>\$2</u>	1,300.00		2,000.00		4,000.00 44,515.00	\$		\$0.00	

1 of 1

EXHIBIT "E"

			CDANOBIN	Ui.
			DA	TE:
	POTENTIAL CHANGE (FOR IRW	OF WORK ACKNO D CAPITAL IMPR		VALUE
	ose of this form is to acknowled the a change order will be issued.		for the intent of reimbo	ursement of costs. Upor
Contract l	No.: Various/7115170	Owner:	Heritage Fie	lds El Toro, LLC
Sewer Domestic	Water X	Contractor:	FYDAQ, E and Micha	
Reclaim V	Vater	Design Engineer:		
Other		IRWD Mgr.	Kelly Lew	-/
coordination	vork including IRWD Code No. on, survey and staking. POTENTIAL CHANGE OF sion Required; X YES : itiated By:	WORK:	nted Cost: 163,839	
Work Desc	cription; Delta 11			
, Subr	nitted by: Owner Represer	ntative / Data		American Williams
	RWD's opinion the aforemention ify as a potential change in wor	ned work doe	does n	ot
	D comments (required if repres		ncur with the potential	change):
c. Revi	ewed by: IRWD Represent	ative / Date	19	
. Rece	eived and Recorded by:			
	Ov	yner Representative /	Date	

Detailed Backup Attached

Submitted by:

Recommended by:

1,

PART B - CHANGE OF WORK VALUE:

Owner Representative / Date

IRWD Representative / Date

163,839.00

November 25, 2019

Prepared by: B. Rios / K. Lew

Submitted by: K. Burton Approved by: Paul A. Cook

CONSENT CALENDAR

PLANNING AREA 12 INNOVATION PARK CAPITAL FACILITIES

SUMMARY:

Irvine Community Development Company, LLC (ICDC) is proceeding with development of Planning Area (PA) 12 Innovation Park, which includes the construction of streets, storm drains, domestic water, sewer, and recycled water improvements. As part of the development, ICDC will construct IRWD capital facilities under a proposed Supplemental Reimbursement Agreement (SRA). Staff recommends that the Board:

- Authorize the addition of the PA 12 Innovation Park Capital Domestic Water Improvements project in the amount of \$410,000 to the FY 2019-20 Capital Budget;
- Authorize the General Manager to execute a Supplemental Reimbursement Agreement with ICDC for Planning Area 12, Innovation Park, Domestic Water and Recycled Water Capital Improvements; and
- Authorize the General Manager to accept ICDC's construction contract with Paulus Engineering, Inc. in the amount of \$560,844 for the Innovation Park Domestic Water and Recycled Water Improvements.

BACKGROUND:

ICDC is moving forward with the first phase of commercial development of PA 12, Innovation Park. Innovation Park is bound by the I-5 freeway, Orange County Transportation Authority (OCTA) Railroad, Sand Canyon Avenue and Oak Creek Golf Course. The project location map is shown as Exhibit "A". As part of this development, ICDC will design and construct IRWD's domestic water and recycled water capital improvements. The required IRWD capital facilities are documented in the September 2019 PA 12 Sub-Area Master Plan Addendum and all subsequent addendums and updates prepared by Stantec Consulting Services, Inc.

The design and construction of the IRWD facilities will be performed under the terms of the Master Reimbursement Agreement between IRWD and ICDC approved by the Board in May 1997 and as further refined in the SRA. The SRA, which covers capital facilities within the Innovation Park development, is attached as Exhibit "B" and has been reviewed by IRWD's legal counsel.

The PA 12 Innovation Park Domestic Water and Recycled Water Improvements consist of installing approximately 675 feet of 12-inch domestic water pipeline, 1,400 feet of 10-inch recycled water pipeline, 1,400 feet of eight-inch recycled pipeline, and 1,900 feet of six-inch recycled pipeline. This includes 200 feet of domestic water bore and jack installation under the OCTA railroad to connect to an existing domestic water point of connection on the south side of the tracks. ICDC retained Stantec to prepare the plans and received bids from five contractors. ICDC recommends awarding the construction contract to the low bidder, Paulus Engineering, for Consent Calendar: Planning Area 12 Innovation Park Capital Facilities

November 25, 2019

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a bid amount of \$560,844 as shown in Exhibit "C". In addition, ICDC has received consultant proposals for geotechnical observation and testing, surveying, construction support services, design and field archeological and paleontological monitoring. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable. A summary of the PA 12 Innovation Park Domestic Water and Recycled Water Improvements costs is shown below.

Design (Stantec)	\$ 55,200.00
Construction (Paulus)	\$560,844.00
Geotechnical Services (NMG)	\$ 18,352.00
Construction Engineering (Stantec)	\$ 15,130.00
Survey and Staking (Adam Streeter)	\$ 15,630.00
Archeo/Paleo Monitoring (LSA)	\$ 4,350.00
ICDC Administration Fee (1%)	\$ 5,608.44
	\$675,114.44

FISCAL IMPACTS:

Project 03734 for the PA 12 Innovation Park Capital Recycled Water Improvements is included in the FY 2019-20 Capital Budget and has adequate budget. Staff requests the addition of the PA 12 Innovation Park Capital Domestic Water Improvements, Project 11395 in the amount of \$410,000 to the FY 2019-2020 Capital Budget as shown in the following table.

Project	Current	Addition	Total
No.	Budget	<reduction></reduction>	Budget
11395	\$ -0-	\$ 410,000	\$ 410,000

ENVIRONMENTAL COMPLIANCE:

Construction of capital domestic and recycled water facilities for the PA 12 Innovation 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 August 14, 2008 (SCH# 2000071014).

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on November 19, 2019.

Consent Calendar: Planning Area 12 Innovation Park Capital Facilities

November 25, 2019

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RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE ADDITION OF THE PLANNING AREA 12 INNOVATION PARK CAPITAL DOMESTIC WATER IMPROVEMENTS, PROJECT 11395 IN THE AMOUNT OF \$410,000 TO THE FY 2019-20 CAPITAL BUDGET, AUTHORIZE THE GENERAL MANAGER TO EXECUTE A SUPPLEMENTAL REIMBURSEMENT AGREEMENT WITH IRVINE COMMUNITY DEVELOPMENT COMPANY FOR PLANNING AREA 12, INNOVATION PARK, DOMESTIC WATER AND RECYCLED WATER CAPITAL IMPROVEMENTS, AND AUTHORIZE THE GENERAL MANAGER TO ACCEPT IRVINE COMMUNITY DEVELOPMENT COMPANY'S CONSTRUCTION CONTRACT WITH PAULUS ENGINEERING, INC. IN THE AMOUNT OF \$560,844 FOR THE INNOVATION PARK DOMESTIC WATER AND RECYCLED WATER IMPROVEMENTS, PROJECTS 11395 AND 03734.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Supplemental Reimbursement Agreement with ICDC for Planning Area 12, Innovation Park, Domestic Water and Recycled Water Capital Improvements

Exhibit "C" – Bid Summary, Planning Area 12, Innovation Park, Domestic Water and Recycled Water Capital Improvements

EXHIBIT "A"



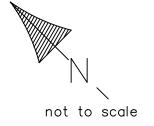


EXHIBIT "A"
LOCATION MAP

EXHIBIT "B"

Exhibit "A" to
Reimbursement Agreement

SUPPLEMENTAL REIMBURSEMENT AGREEMENT

BY AND BETWEEN

IRVINE RANCH WATER DISTRICT

AND

IRVINE COMMUNITY DEVELOPMENT COMPANY

This SUPPLEN	MENTAL REIMBURSEM	ENT AGREEMENT ("Agreement") is entered in	to
as of this day of	of, 20	_, by and between Irvine Ranch Water District,	a
California water distric	t formed and existing pursu	ant to the California Water District Law of the sta	te
*	•	Development Company ("ICDC"). All capitalize	
		hall have the meanings given such terms in the	ne
Reimbursement Agree	ment.		
	-	eviously entered into that certain Reimbursement Agreement") respecting construction of Capit	
Facilities; and	21, 1997 (Reimoursemen	in Agreement) respecting construction of Capit	aı
supplemental agreeme	nts would be entered into	eement made reference to the fact that certa by the parties regarding construction of Capit ent with the provisions of said Reimburseme	al
The state of the s	ribed below, subject to all	nter this Agreement regarding the construction of 1 of the terms of the Reimbursement Agreemen	
-	EFORE, the parties heretoet forth, do agree as follow	o, in consideration of the mutual promises are:	ıd
	ovided herein, the parties h bursement Agreement into	nereby incorporate by reference all of the terms are this Agreement.	ıd
	f the Project to which this A	Agreement pertains is:	
PA 12 Innovation Park		·	
The Project is depicted	on Exhibit 1 attached to th	nis Agreement.	

PA 12 Innovation Park ICDC SRA.docx

November 2019

- 3. The Capital Facilities to be constructed pursuant to this Agreement are as follows: [describe type, diameter, approximate linear footage, etc; include any detailed drawing as Exhibit 3 if needed] Approximately 1,020 feet of 12-inch domestic water pipeline, 1,400 feet of 10-inch recycled water pipeline, 6,960 feet of 8-inch recycled water pipeline, and 3,675 feet of 6-inch recycled water pipeline. The Capital Facilities do / do not include any facilities that are a part of the Michelson/ Los Alisos Reclamation Plants Upgrades and Distribution System Expansion Project identified in the Agreement No. 61719 2003 LRP Local Resources Program Agreement, entered into as of June 13, 2005, by and between IRWD and the Metropolitan Water District of Southern California (the "MWD Local Project").
- 4. The total costs for the Capital Facilities shall include, but not be 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 \$2,500,000.

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: "The "Costs" shall also include consultant design and consultant construction administration
assistance.
<u> </u>

- 6. In accordance with Section 10 of the Reimbursement Agreement, ICDC 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.
- 7. If the box in Section 3 above has been checked to indicate that any of the Capital Facilities are a part of the MWD Local Project, then ICDC shall include the following language in its agreements with any consultant or contractor retained by ICDC to work on the Capital Facilities:

"[Contractor / Consultant] agrees at its sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan Water District of Southern California, Municipal Water District of Orange County, and each of their respective Boards of Directors, officers, representatives, agents and employees from and against any and all claims and liability of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or the environment, or water quality problems) that arise out of or relate to any act or omission of [Contractor / Consultant] in the performance of this agreement. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability."

above.	<u> </u>
IRVINE RANCH WATER DISTRICT	IRVINE COMMUNITY DEVELOPMENT COMPANY
By: General Manager	By: Title:
	By: Title:

IN WITNESS WHEREOF, the parties have entered this Agreement as of the date set forth

Exhibit "1" to
Supplemental Reimbursement Agreement

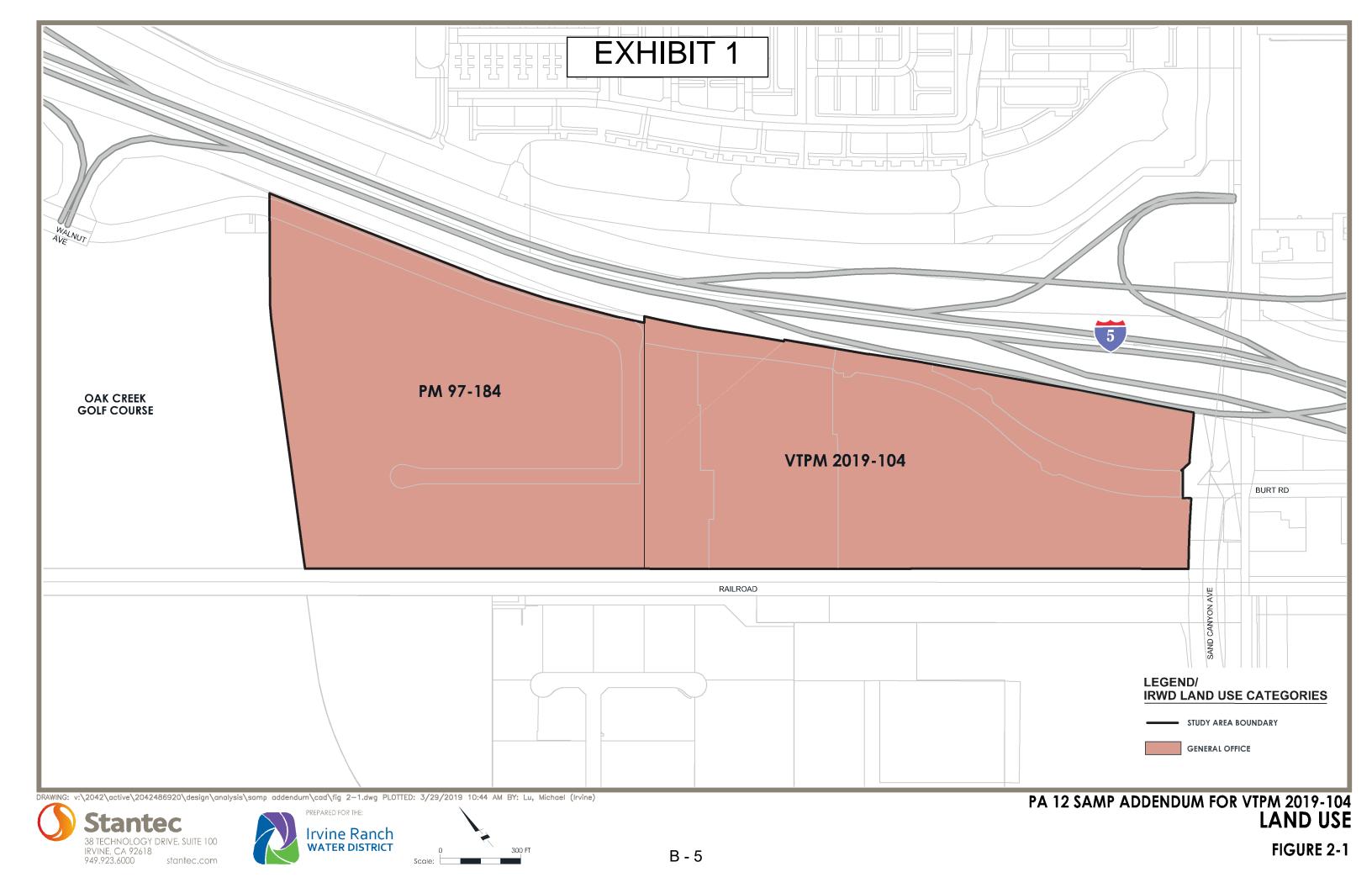


Exhibit "2" to Supplemental Reimbursement Agreement

Assignment Agreement
This ASSIGNMENT AGREEMENT is made as of, 20, by and between IRVINE COMMUNITY DEVELOPMENT COMPANY, LLC ("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 relating 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 May 21, 1997.
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: IRVINE COMMUNITY DEVELOPMENT COMPANY, LLC
By:
Title:
By:

PA 12 Innovation Park ICDC SRA.docx

Title:

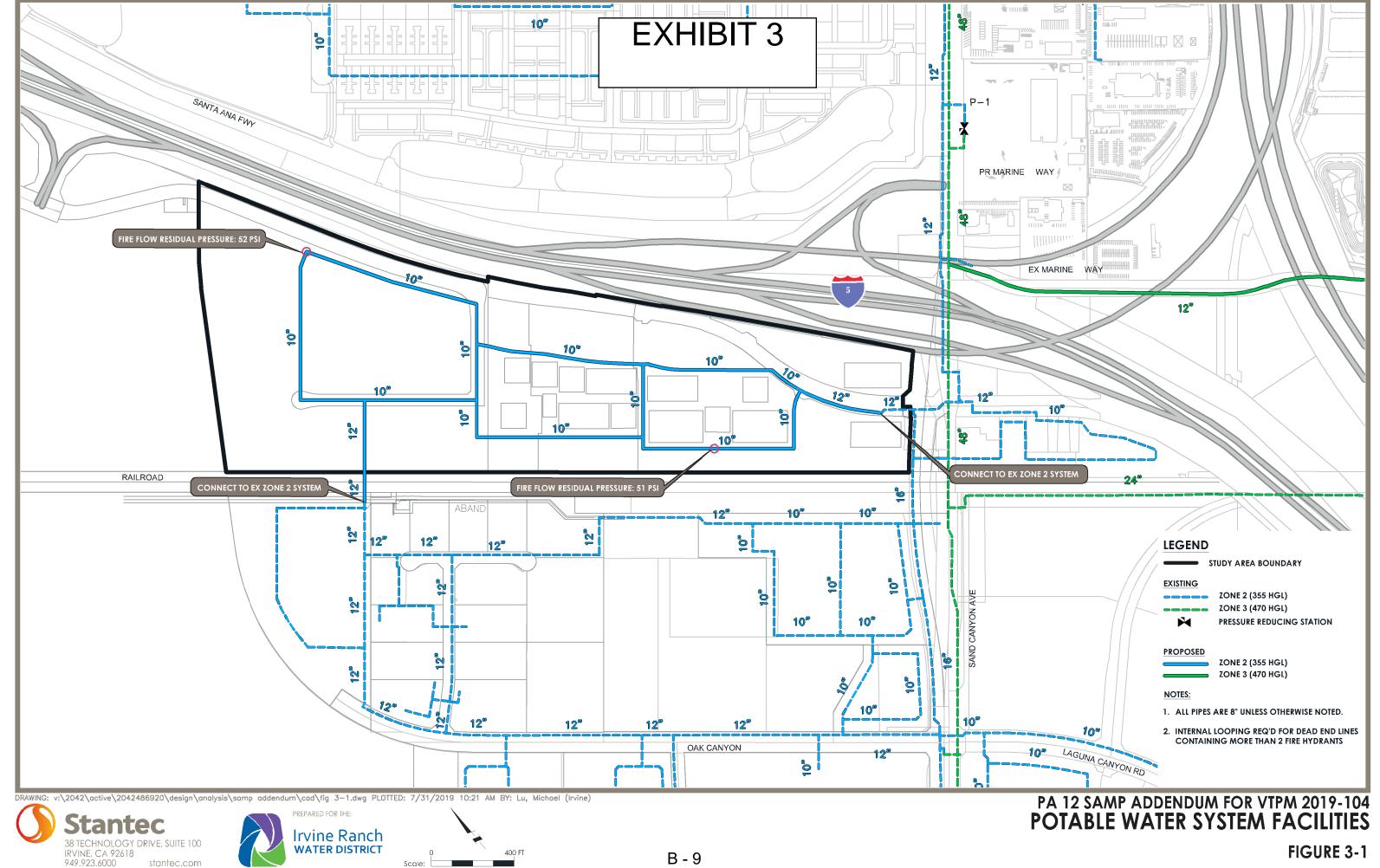
Schedule A to Assignment Agreement

matters pursu Assignee date	ant to the Supplemental R	Ignment Agreement relates to the assign deimbursement Agreement between Assign nental Reimbursement Agreement").	
Agreement:	Insert name of Project fr PA 12 Innovation Park (rom Section 2 of Supplemental Reimbu Capital Facilities	rsement
feet of 10-inch	ent Agreement: Approximely recycled water pipeline recycled water pipeline.	Capital Facilities from Section 3 sately 1,020 feet of 12-inch domestic was e, 6,960 feet of 8-inch recycled water p	ater pipeline, 1,400 pipeline, and 3,675
Contractor's 1	Name:		
License No			
Address:			
Phone #:		Fax #:	
Contact Perso	n:		

Exhibit "3" to

Supplemental Reimbursement Agreement

Domestic Water System Facilities

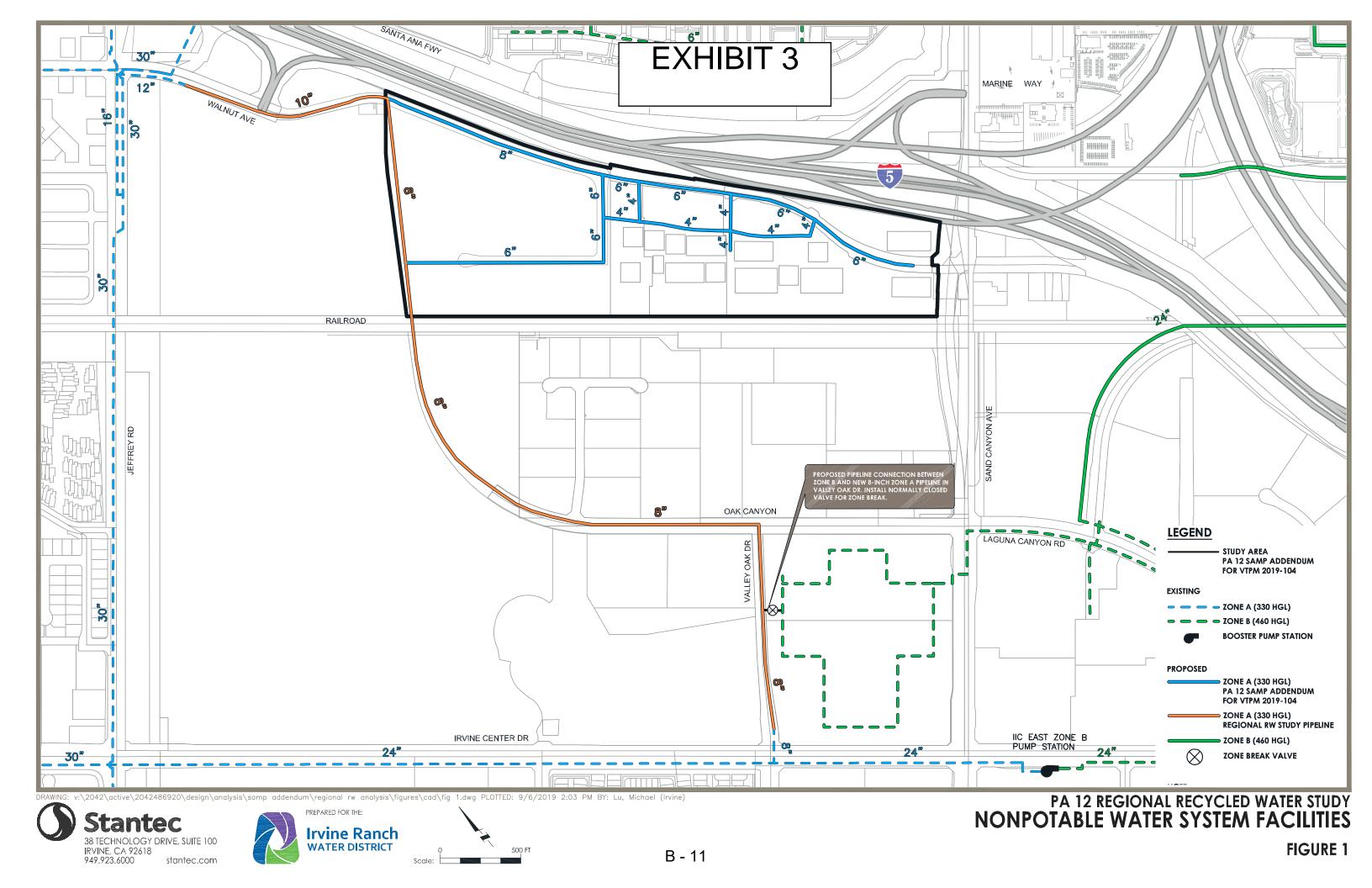


B - 9

stantec.com

Exhibit "3" to Supplemental Reimbursement Agreement

Recycled Water Facilities



Exhibits to Supplemental Reimbursement Agreement:

Exhibit 1 - Depiction of Project

Exhibit 2 - Assignment Agreement

Exhibit 3 - Description of Capital Facilities (as needed)

EXHIBIT C

c: ___Dave Conley
___Mike Morse
__Jamie Yoshida
___File with Bid Key Map
__Mary Oshima - Cost Matrix

 PRE-BID MEETING DATE:
 August 29, 2019

 BID OPENING DATE:
 September 24, 2019
 & 9/27/19 IRWD Cap

 WITNESSED BY:
 M Oshima

 E Marioneaux
 E Marioneaux

DECLINED AFTER TO PRE-BID: Sukut Construction
NO SHOW AT PREBID: N/A
DID NOT SUBMIT: N/A

BID SUMMARY
INNOVATION PARK (SPECTRUM 7)
VTPM 2019-104 & PM 97-184
CONTRACT "B1" – WET UTILITIES (PREVAILING WAGE)
NON-ASSESSMENT DISTRICT AND IRWD CAPITAL IMPROVEMENTS
BID PACKAGE B00419
Approximately 4,200 Linear Feet
TASK/PC ID NO. LD-5070.ST.01.cn01

ENGINEER'S ESTIMATE LOW BI

STANTEC CONSULTING PAULUS ENG

LOW BIDDER
PAULUS ENGINEERING

2ND BIDDER

LEATHERWOOD CONSTRUCTION

3RD BIDDER

L&S CONSTRUCTION

4TH BIDDER
SHOFFEITT PIPELINE

5TH BIDDER

KEC ENGINEERING

TASK/PC ID NO. LD-5070.ST.01.cn01											
CHECK LIST Required items to be included in bid package:		Cor	<u>nments</u>	Comment	<u>s</u>	Commen	<u>ts</u>	Comme	nts	Comme	nts
1. Signed Addendum Nos. 1-4 and 6 (Bid Addendum 5 was only applicable to C & D Contracts) 2. Corporate Seal (if applicable) 3. Correct Signatures (Page V-3) 4. Bid Totals Correctly 5. List of SubContractors 6. Equipment/Material Source Information 7. Contractors Rates/Reviewed 8. 10% Bid Bond 9. Construction Schedule 10. Non-Collusion Certificate 11. Contractor Prequalified		X X X X X X X X X	X X X X X X X X X		x x x x x x x x x x		X		X X X X X X X X		
ITEM DESCRIPTION	QTY UNIT PRICE	UNIT TOTAL PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
II. IRWD CAPITAL - DELETABLE ITEMS J. GENERAL 115 MOBILIZATION (NOT TO EXCEED 2% OF CONTRACT PRICE) - ADJUSTED TO EXCLUDE ITEMS 142 TO 148 116 DEVELOP CONSTRUCTION WATER 117 PAYMENT AND PERFORMANCE BONDS - ADJUSTED TO EXCLUDE ITEMS 142 TO 148 118 INTERIM EROSION AND SEDIMENT CONTROL 119 TRAFFIC CONTROL	1 LS \$10,000.00 1 LS \$1,500.00 1 LS \$1,500.00 1 LS \$1,500.00 1 LS \$1,500.00 1 LS \$1,500.00	\$10,000.00 \$3,847.00 \$1,500.00 \$2,404.00 \$1,500.00 \$7,950.00 \$1,500.00 \$1,924.00 \$10,000.00 \$4,809.00	\$3,847.00 \$2,404.00 \$7,950.00 \$1,924.00 \$4,809.00	\$9,500.00 \$4,000.00 \$8,700.00 \$2,000.00 \$9,000.00	\$9,500.00 \$4,000.00 \$8,700.00 \$2,000.00 \$9,000.00	\$8,000.00 \$3,000.00 \$5,000.00 \$5,000.00 \$2,500.00	\$8,000.00 \$3,000.00 \$5,000.00 \$5,000.00 \$2,500.00	\$12,000,00 \$3,500,00 \$14,000,00 \$2,500,00 \$7,500,00	\$12,000 00 \$3,500.00 \$14,000 00 \$2,500.00 \$7,500.00	\$6,800.00 \$5,000.00 \$4,500.00 \$13,000.00 \$17,000.00	\$6,800.00 \$5,000.00 \$4,500.00 \$13,000.00 \$17,000.00
 K. DOMESTIC WATER (IRWD CAPITAL PLANS) Note: All tees, bends, thrust blocks and other fittings are to be included in the pipe unit price. 120 FURNISH & INSTALL 12" C-900 (DR-14) PVC PIPE; TRENCH & BEDDING PER IRWD STD DWG W-17 121 FURNISH & INSTALL 12" (BFV) BUTTERFLY VALVE (FE) AWWA C-509, CLASS 150 & THRUST BLOCK PER IRWD STD DWGS W-22 & W-16 122 SAWCUT, REMOVE AND DISPOSE OF EXISTING AC PAVEMENT SECTION IN BURT ROAD FOR 12" CAPITAL DOMESTIC WATERLINE TRENCH 	465 LF <u>\$75.00</u> 4 EA <u>\$2,800.00</u> 158 LF <u>\$20.00</u>	\$34,875.00 \$85.00 \$11,200.00 \$2,991.00 \$3,160.00 \$48.00	\$39,525.00 \$11,964.00 \$7,584.00	\$80.00 \$4,000.00 \$14.00	\$37,200.00 \$16,000.00 \$2,212.00	\$65.00 \$3,700.00 \$9.00	\$30,225.00 \$14,800.00 \$1,422.00	\$88.00 \$3,800.00 \$19.00	\$40,920.00 \$15,200.00 \$3,002.00	\$140.00 \$5,200.00 \$59.00	\$65,100.00 \$20,800.00 \$9,322.00
BACKFILL TOP 1' OF 12" CAPITAL DOMESTIC WATERLINE TRENCH IN BURT ROAD WITH AGGREGATE BASE 124 REMOVE AND DISPOSE OF EXISTING 6" THROUGH 12" THICK CONCRETE PAVEMENT – DOMESTIC WATERLINE TRENCH AT BURT ROAD 125 ADJUST VALVE CAP TO BASE PAVE GRADE 126 ADJUST VALVE CAP TO FINISH GRADE	158 LF \$10.00 158 LF \$10.00 4 EA \$350.00 4 EA \$300.00	\$1,580.00 \$9.00 \$1,580.00 \$46.00 \$1,400.00 \$481.00 \$1,200.00 \$481.00	\$1,422.00 \$7,268.00 \$1,924.00 \$1,924.00	\$11 00 \$33 00 \$350.00 \$350.00	\$1,738.00 \$5,214.00 \$1,400.00 \$1,400.00	\$9.00 \$9.00 \$600.00 \$600.00	\$2,844.00 \$1,422.00 \$2,400.00 \$2,400.00	\$45.00 \$45.00 \$525.00 \$550.00	\$2,370 00 \$7,110 00 \$2,100.00 \$2,200.00	\$91.00 \$1,600.00 \$1,600.00	\$5,688 00 \$14,378 00 \$6,400.00 \$6,400.00
L. DOMESTIC WATER RR CROSSING (IRWD CAPITAL IMPROVEMENTS) Note: All tees, bends, thrust blocks and other fittings are to be included in the pipe unit price. REMOVE & REPLACE EXISTING BIKE TRAIL. REMOVE & REPLACE EXISTING FINCE REMOVE EXISTING PLUGICAP AND TEMPORARY BLOW OFF & CHLORINATION ASSEMBLY AND JOIN FURNISH & INSTALL 12" BUTTERFLY VALVE (FE) AWWA C-509, CLASS 150 & THRUST BLOCK PER IRWD STD DWGS W-22 & W-16. CONSTRUCT 24" O.D. WITH 3/8" THICK STEEL CASING PER IRWD STD W-14 FURNISH & INSTALL BLOWOFF ASSEMBLY PER IRWD STD W-14 FURNISH & INSTALL 12" PVC C-900, DR-14 WATER MAIN PER IRWD STD. W-17 FURNISH & INSTALL T2" DIP SPOOL, TRENCH & BEDDING PER IRWD STD W-17	1 LS \$7,500.00 1 LS \$5,000.00 1 EA \$3,500.00 160 LF \$1,000.00 1 EA \$3,500.00 1 EA \$3,500.00 1 EA \$3,500.00 1 EA \$1,500.00 1 EA \$1,500.00 17 LF \$100.00	\$7,500.00 \$9,617.00 \$5,000.00 \$3,751.00 \$3,500.00 \$5,435.00 \$2,800.00 \$788.00 \$160,000.00 \$6,558.00 \$15,975.00 \$95.00 \$1,500.00 \$1,349.00 \$1,700.00 \$166.00	\$9,617.00 \$3,751.00 \$5,435.00 \$3,391.00 \$126,080.00 \$6,558.00 \$20,235.00 \$1,349.00 \$2,822.00	\$17,000.00 \$7,300.00 \$8,400.00 \$4,600.00 \$12,500.00 \$235.00 \$17,700.00 \$425.00	\$17,000.00 \$7,300.00 \$8,400.00 \$4,600.00 \$96,000.00 \$12,500.00 \$50,055.00 \$1,700.00 \$7,225.00	\$5,100,00 \$7,500,00 \$3,000,00 \$4,100,00 \$890,00 \$6,500,00 \$82,00 \$2,050,00 \$185,00	\$5,100.00 \$7,500.00 \$3,000.00 \$4,100.00 \$142,400.00 \$6,500.00 \$17,466.00 \$2,050.00 \$3,145.00	\$21,000.00 \$9,500.00 \$3,500.00 \$3,900.00 \$725.00 \$13,500.00 \$255.00 \$1,100.00 \$450.00	\$21,000.00 \$9,500.00 \$3,500.00 \$3,900.00 \$116,000.00 \$13,500.00 \$54,315.00 \$1,100.00 \$7,650.00	\$18,500.00 \$10,200.00 \$3,800.00 \$5,600.00 \$970.00 \$12,000.00 \$105.00 \$3,000.00 \$695.00	\$18,500.00 \$10,200.00 \$3,800.00 \$5,600.00 \$155,200.00 \$12,000.00 \$22,365.00 \$3,000.00 \$11,815.00
136 FURNISH & INSTALL CATHODIC PROTECTION CASING TEST STATION PER IRWD STD. DWG CP-3 (50' EXTENSION COIL SLACK) 137 SCRRA INSURANCE - JACK AND BORE 138 SCRRA PERFORMANCE BOND - JACK AND BORE 139 SCRRA SITE SPECIFIC WORK PLAN (SSWP) - JACK AND BORE 140 SCRRA REQUIREMENTS (ALL ELSE) - JACK AND BORE 141 SCRRA FLAGGING - JACK AND BORE 142 SCRRA FLAGGING - JACK AND BORE	2 EA \$3,500.00 1 LS \$1,500.00 1 LS \$5,000.00 1 LS \$2,500.00 1 LS \$2,500.00 1 LS \$5,000.00	\$7,000.00 \$1,575.00 \$1,500.00 \$4,809.00 \$5,000 00 \$2,404.00 \$2,500 00 \$2,404.00 \$2,500 00 \$2,404.00 \$2,500 00 \$10,098.00	\$3,150.00 \$4,809.00 \$2,404.00 \$2,404.00 \$6,924.00 \$10,098.00	\$1,300,00 \$1,700.00 \$6,700.00 \$550.00 \$550.00 \$10,000.00	\$2,600.00 \$1,700.00 \$6,700.00 \$550.00 \$550.00 \$10,000.00	\$4,400.00 \$3,600.00 \$4,500.00 \$900.00 \$18,000.00 \$18,000.00	\$8,800.00 \$3,600.00 \$4,500.00 \$900.00 \$18,000.00 \$18,000.00	\$1,500.00 \$2,500.00 \$7,000.00 \$1,250.00 \$1,250.00 \$11,000.00	\$3,000.00 \$2,500.00 \$7,000.00 \$1,250.00 \$1,250.00 \$11,000.00	\$4,100.00 \$28,400.00 \$11,300.00 \$22,300.00 \$1,00 \$5,000.00	\$8,200.00 \$28,400.00 \$11,300.00 \$22,300.00 \$1.00 \$5,000.00
142 SCRRA INSURANCE - CHAIN LINK FENCE AND ACCESS GATE 143 SCRRA SITE SPECIFIC WORK PLAN (SSWP) - CHAIN LINK FENCE AND ACCESS GATE 144 SCRRA REQUIREMENTS (ALL ELSE) - CHAIN LINK FENCE AND ACCESS GATE 145 SCRRA FLAGGING - CHAIN LINK FENCE AND ACCESS GATE 146 REMOVE EXISTING CHAIN LINK FENCE INCLUDING POST FOUNDATIONS 147	LINE ITEMS 142 TO 1	148 WERE INADVERTANTLY IF	NCLUDED IN IRWD CAPITA	AL SECTION OF THE	SCHEDULE OF VALUES	S V-4 PAGES AND SHO	ULD HAVE BEEN IN B	BASE CONTRACT. THE	ESE ITEMS HAVE BEEN	I MOVED TO THE BAS	SE CONTRACT
FURNISH AND INSTALL PERMANENT CHAIN LINK FENCE PER METROLINK ENGINEERING STANDARD 5106 148 FURNISH AND INSTALL 12' WIDE ACCESS GATE PER METROLINK ENGINEERING STANDARD 5106 149 ADJUST VALVE CAP TO BASE PAVE GRADE 150 ADJUST VALVE CAP TO FINISH GRADE	2 EA \$350.00 2 EA \$300.00	\$700.00 \$481.00 \$600.00 \$481.00	\$962.00 \$962.00	\$350.00 \$350.00	\$700.00 \$700.00	\$600.00 \$600.00	\$1,200.00 \$1,200.00	\$525.00 \$550.00	\$1,050.00 \$1,100.00	\$1,400.00 \$1,400.00	\$2,800.00 \$2,800.00
 M. RECYCLED WATER (CAPITAL PLANS) Note: All tees, bends, thrust blocks and other fittings are to be included in the pipe unit price. 151 FURNISH & INSTALL 6" AWWA C-900 PVC PURPLE PIPE, (DR-14) & TRENCHING PER IRWD STD DWG W-17 	1,910 LF\$60.00	\$114,600.00 \$26.00	\$49,660.00	\$30.00	\$57,300.00	\$34.00	\$64,940.00	\$36.00	\$68,760.00	\$46.00	\$87,860.00
FURNISH & INSTALL 8" AWWA C-900 PVC PURPLE PIPE, (DR-14) & TRENCHING PER IRWD STD DWG W-17		\$89,830.00 \$31.00	\$42,842.00	\$40.00	\$55,280.00	\$45.00	\$62,190.00	\$59.00	\$81,538.00	\$62.00	\$85,684.00

BID SUMMARY
INNOVATION PARK (SPECTRUM 7)
VTPM 2019-104 & PM 97-184
CONTRACT "B1" – WET UTILITIES (PREVAILING WAGE)
NON-ASSESSMENT DISTRICT AND IRWD CAPITAL IMPROVEMENTS
BID PACKAGE B00419
Approximately 4,200 Linear Feet

ENGINEER'S ESTIMATE	LOW BIDDER	2ND BIDDER	3RD BIDDER	4TH BIDDER	5TH BIDDER
STANTEC CONSULTING	PAULUS ENGINEERING	LEATHERWOOD CONSTRUCTION	L&S CONSTRUCTION	SHOFFEITT PIPELINE	KEC ENGINEERING

TASK/PC ID NO. LD-5070.ST.01.cn01													
153 FURNISH & INSTALL 10" AWWA C-900 PVC PURPLE PIPE, (DR-14) & TRENCHING PER IRWD STD DWG W-17 154 FURNISH & INSTALL 6" (RWGV) RESILIENT WEDGE GATE VALVE (FE) AWWA C-509, CLASS 150 & THRUST	,348 LF	\$70.00	\$94,360.00	\$45.00	\$60,660.00	\$90.00	\$121,320.00	\$102.00	\$137,496.00	\$77.00	\$103,796.00	\$69.00	\$93,012.00
BLOCK PER IRWD STD DWGS W-22 & W-16		1,700.00	\$3,400.00	\$1,631.00 \$120.00	\$3,262.00	\$1,300.00	\$2,600.00	\$1,100.00	\$2,200.00	\$1,300.00	\$2,600.00	\$3,200.00	\$6,400.00
155 UTILITY TRENCH REPAIR (WALNUT AVENUE) 156 REMOVE AND DISPOSE OF EXISTING 6" THROUGH 12" THICK CONCRETE PAVEMENT – RECYCLED	600 LF	\$70.00	\$42,000.00	\$120.00	\$72,000.00	\$120.00	\$72,000.00	\$13.00	\$7,800.00	\$115.00	\$69,000.00	\$115.00	\$69,000.00
	600 LF	\$15.00	\$9,000.00	\$45.00	\$27,000.00	\$30.00	\$18,000.00	\$34.00	\$20,400.00	\$45.00	\$27,000.00	\$38.00	\$22,800.00
157 ADJUST VALVE CAP TO BASE PAVE GRADE	2 EA	\$350.00	\$700.00	\$481.00	\$962.00	\$350.00	\$700.00	\$600.00	\$1,200.00	\$525.00	\$1,050.00	\$1,600.00	\$3,200.00
158 ADJUST VALVE CAP TO FINISH GRADE		\$300.00	\$700.00 \$600.00	\$481.00	\$962.00	\$350.00	\$700.00	\$600.00	\$1,200.00	\$550.00	\$1,100.00	\$1,600.00	\$3,200.00
TOTAL IRWD CAPITAL DELETABLE ITEMS BID PRICE (SECTIONS J-M)		_\$	660,260.00		\$560,844.00	-	\$654,544.00	_	\$623,900.00	_	\$725,861.00	;-	\$868,825.00

LINE ITEMS 142 TO 148 WERE INADVERTANTLY INCLUDED IN THE IRWD CAPITAL SECTION OF THE SCHEDULE OF VALUES V-4 PAGES AND SHOULD HAVE BEEN IN THE BASE CONTRACT. THESE ITEMS HAVE BEEN MOVED TO THE BASE CONTRACT SECTION OF THIS BID SUMMARY.

M. MORSE DISCUSSED THE ENGINEER'S CLERICAL ERROR WITH K. LEW AND REQUESTED IRWD'S CONCURRENCE TO REBID PER BID ADDENDUM 6.

K. LEW CONCURRED WITH THIS APPROACH.

November 25, 2019

Prepared by: J. Corey / K. Welch Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook

CONSENT CALENDAR

SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT PERMITTING SERVICES VARIANCE NO. 2

SUMMARY:

On August 31, 2018, IRWD executed a Professional Services Agreement with Environmental Science Associates (ESA) to assist with regulatory permitting tasks for the Syphon Reservoir Improvement Project and the associated Geotechnical Investigations Project. These projects have separate permitting requirements and the scope of work recognizes the need for extensive coordination with pertinent regulatory agencies. Additional permitting services are needed to facilitate compliance with the biological and cultural resources requirements of the Mitigation Monitoring and Reporting Program (MMRP) and Lake and Streambed Alteration Agreement (LSAA) for the Geotechnical Investigations Project. To facilitate this additional work, staff recommends that the Board authorize the General Manager to execute Variance No. 2 in the amount of \$160,970 with ESA.

BACKGROUND:

Staff has been working with ESA to prepare the Environmental Impact Report (EIR) for the Syphon Reservoir Improvement Project, which would increase the recycled water storage capacity of the reservoir by approximately 4,100 acre-feet. IRWD proposes to increase the storage capacity of the reservoir by replacing the existing dam with a new engineered dam built to current standards. A location map of Syphon Reservoir is provided as Exhibit "A".

The preparation of the EIR was originally scoped to include the environmental review of additional geotechnical investigations needed to inform the project design. In July 2018, engineers at HDR recommended that the geotechnical investigations be completed as a separate phase of the project that would inform both the design of the dam and the environmental analyses to be included in the EIR. Implementation of HDR's recommendation required the development of a Mitigated Negative Declaration (MND) for the Geotechnical Investigations Project in parallel with the development of the project EIR. On June 24, 2019, the Board adopted the MND for Syphon Reservoir Geotechnical Investigations Project and approved the geotechnical investigation work.

Project Permitting Requirements:

There are specific regulatory permitting tasks associated with the Syphon Reservoir Geotechnical Investigations and Syphon Reservoir Improvement Projects. The projects involve the development and implementation of separate LSAAs under Section 1602 of the California Fish and Game Code, extensive consultation with United States Fish and Wildlife Services (USFWS) and California Department of Fish & Wildlife (CDFW), compliance with the Endangered Species Act, and mitigation planning and required monitoring.

Consent Calendar: Syphon Reservoir Geotechnical Investigations Project Permitting Services Variance No. 2 November 25, 2019 Page 2

On August 31, 2018, an agreement was executed with ESA in the amount of \$93,384 to initiate permitting work for both the Syphon Reservoir Geotechnical Investigations and the Syphon Reservoir Improvement Projects. At the time the agreement was approved, the complete scope of what would be required to secure permits for the projects was not known. Of the contracted amount, \$50,026 was associated with the Geotechnical Investigations Project and the remaining funds were reserved for permitting work for the Syphon Reservoir Improvement Project.

Habitat Restoration and Mitigation Plan:

During the preparation of the MND, an MMRP was developed in coordination with USFWS and CDFW. The resource agencies also required the urgent development of a Habitat Restoration and Mitigation Plan (HRMP) for upland impacts. The final HRMP, which was approved by USFWS and CDFW, was incorporated into the LSAA for the Geotechnical Investigations Project. ESA's efforts related to the development and agency coordination of the HRMP were outside of the original scope of work.

Variance No. 2 to Professional Services Agreement:

ESA has submitted Variance No. 2, provided as Exhibit "B", that will cover the completion of permitting services for the Geotechnical Investigations Project. The scope of work to be completed under Variance No. 2 is associated largely with resource agency coordination and providing mitigation monitoring and compliance services in support of the Geotechnical Investigations Project. The level of effort required for agency coordination and meetings were significantly greater than previously envisioned to successfully complete the LSAA and the preparation of the HRMP. Additional efforts have been required as a result of the complexity of the biological resources and the existing mitigation lands at the site as well as the complex relationship of the Geotechnical Investigations Project to the Syphon Reservoir Improvement Project. These additional efforts have been incorporated into Variance No. 2.

Variance No. 2 also includes time and budget for the following tasks to comply with mitigation and regulatory permit requirements included in the MND and the LSAA for the Geotechnical Investigations Project:

- Biological compliance services including conducting pre-construction surveys, confirming project disturbance limits and monitoring construction activities;
- Quantification of the impacts and requisite restoration and enhancement areas as a result of the geotechnical investigations;
- Procurement of appropriate seed material for the areas disturbed by the geotechnical work outside of the future reservoir inundation limit; and
- Archaeological and paleontological monitoring.

Staff has negotiated the costs associated with ESA's request for Variance No. 2 and finds the variance to be fair and reasonable. Staff recommends that the Board authorize the General Manager to execute Variance No. 2 to the Professional Services Agreement with ESA in the amount of \$160,970 for the additional permitting assistance associated with the Geotechnical Investigations Project.

Consent Calendar: Syphon Reservoir Geotechnical Investigations Project Permitting Services

Variance No. 2 November 25, 2019 Page 3

FISCAL IMPACTS:

Project 03808, Syphon Reservoir Improvement Project, is included in the FY 2019-20 Capital Budget as a flagged project. The cost for ESA to perform the additional work under Variance No. 2 is \$160,970. At this time, the existing budget and Expenditure Authorizations are sufficient to fund the work performed by ESA related to Variance No. 2.

ENVIRONMENTAL COMPLIANCE:

On June 24, 2019, the Board adopted an MND for the Syphon Reservoir Geotechnical Investigations Project. The Syphon Reservoir Geotechnical Investigations Project is subject to the California Environmental Quality Act (CEQA). IRWD is preparing an EIR 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 November 19, 2019.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 IN THE AMOUNT OF \$160,970 TO THE PROFESSIONAL SERVICES AGREEMENT WITH ESA FOR ADDITIONAL ENVIRONMENTAL PERMITTING WORK ASSOCIATED WITH THE SYPHON RESERVOIR GEOTECHNICAL INVESTIGATIONS PROJECT.

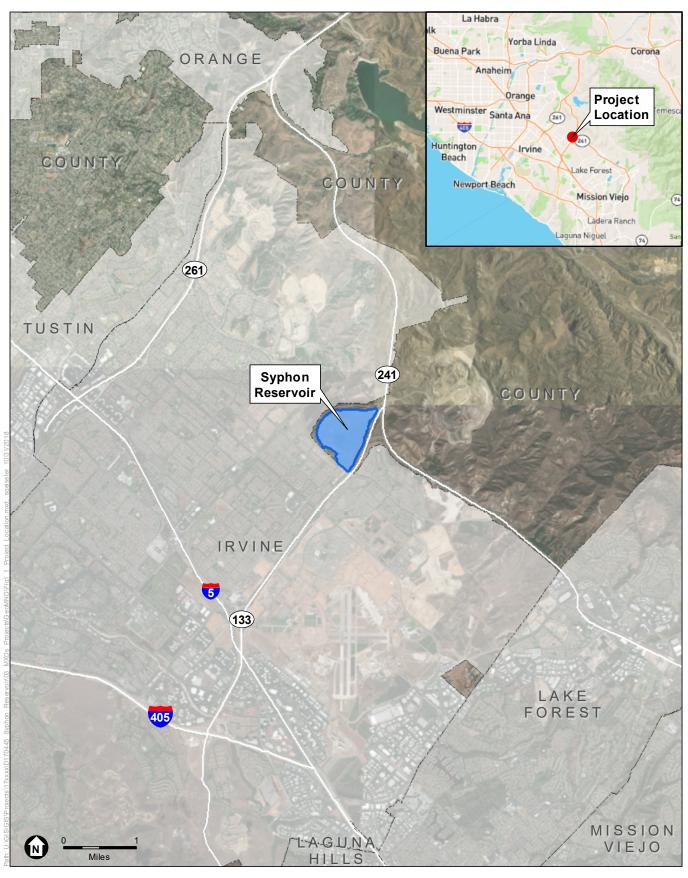
LIST OF EXHIBITS:

Exhibit "A" – Project Location Map: Syphon Reservoir

Exhibit "B" – Variance No. 2 with ESA Scope of Work and Budget

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EXHIBIT "A"



SOURCE: ESRI, 2016; OC LAFCO, 2018

IRWD Syphon Reservoir

Figure 1-1
Project Location



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EXHIBIT "B"



2121 Alton Parkway Suite 100 Irvine, CA 92606 949.753.7001 phone 949.753.7002 fax

November 6, 2019

Fiona M. Sanchez Director of Water Resources Irvine Ranch Water District 15600 Sand Canyon Avenue Irvine, CA 92718

Subject: Professional Services Variance No. 2: Syphon Reservoir Geotechnical Investigations – Monitoring

and Compliance Services

Dear Fiona:

ESA appreciates this opportunity to build on our previously-approved scope of work for the Syphon Reservoir Improvement Project Environmental Permitting Services, originally dated September 2018, and modified by Variance No. 1 in June 2019. ESA is submitting herein a second proposed modification to our scope of work to provide mitigation monitoring and compliance services in support of the Geotechnical Investigations Project. Per your request, we have prepared an itemized Scope of Work and Budget for the requisite tasks to facilitate compliance related to biological and cultural resources requirements of the Syphon Reservoir Geotechnical Investigations Project Mitigation Monitoring and Reporting Program (MMRP) mitigation measures (MMs), as well as the Lake and Streambed Alteration Agreement (LSAA) (Notification No. 1600-2019-0050-R5) issued by California Department of Fish and Wildlife (CDFW). All work will be performed by qualified ESA staff who have experience with the resources and regulations of the region. Our Scope of Work includes a new Task 5 for Biological Compliance Monitoring Services and Task 6 for Cultural Compliance Monitoring Services.

In addition, we have included as assessment of our existing tasks related to permitting for the Geotechnical Investigations Project, and as requested by IRWD, we have removed the scope and budget for Task 2, Syphon Reservoir EIR Permitting, from this contract. The Permitting Services for the Syphon Reservoir Improvement Project will be reestablished under a separate contract.

We look forward to continuing our work with IRWD on the Syphon Reservoir Improvement Project. If you would like to discuss any aspect of our proposed scope or budget, please contact Jennifer Jacobus at 213-599-4320 or jjacobus@esassoc.com, or Scott Holbrook at 949-870-1514 or sholbrook@esassoc.com.

Sincerely,

Tom Barnes Vice President

Southern California Water Practice Group

Jennifer Jacobus, Ph.D. Senior Managing Associate

Southern California Water Practice Group



2121 Alton Parkway Suite 100 Irvine, CA 92606 949.753.7001 phone 949.753.7002 fax

A. Scope of Work

Task 1: Geotechnical Investigations MND Permitting

Under Task 1A, Agency Meetings and Coordination, ESA's previously-approved scope of work assumed limited effort to compile information, coordinate with IRWD, CDFW, the Regional Water Quality Control Board (RWQCB), and U.S. Fish and Wildlife Service (UFWS) to schedule and prepare for up to three (3) meetings, and to facilitate meetings at the site and/or at the IRWD offices. Up to three (3) ESA staff were assumed to attend each meeting. The level of effort required for agency coordination and meetings was greater than previously envisioned to successfully complete the LSAA on time, given the complexity of the biological resources and mitigation lands at the site and the relationship of the Geotechnical Investigations Project to the future Syphon Reservoir Improvements Project. Four ESA staff were involved in the permitting effort (Lau, Holbrook, Tanaka, Jacobus). ESA held two internal coordination calls, had two subsequent coordination calls with IRWD to prepare for meetings with CDFW, had three conference calls with CDFW; and one site visit with CDFW (held December 10, 2018). As such, we are requesting an additional \$3,000 to be added to the budget for Task 1A.

Under Task 1D, Notification of a LSAA, other out-of-scope activities included multiple conference calls with IRWD and CDFW regarding the three primary iterations of the Draft LSAA. After issuance of the Final LSAA, IRWD also requested for ESA to initiate consultation with CDFW regarding changes with the project design (relocating a trench), and a conference call was held between ESA and CDFW on October 2, 2019 to discuss any Fish and Game Code Section 1602 requirements associated with the possible trench relocation. Meeting notes were distributed to IRWD after the call. We are requesting that the remaining budget from Task 1C, Waste Discharge Requirement (WDR), be transferred to Task 1D since there are no WDRs required for the project. In addition, we are requesting an additional \$3,500 to be added to the budget for Task 1D.

Task 3. Project Team Coordination

ESA's previously-approved scope of work included conference calls and up to two project team meetings with up to two ESA staff members and general coordination with IRWD staff or other project team members. Similar to the level of effort required for agency coordination, the level of effort required for internal and project team coordination and meetings was greater than previously envisioned to successfully complete the LSAA for the Geotechnical Investigations Project on time. As such, we request additional budget to support project team coordination for the ongoing and future compliance monitoring services described below for Tasks 5 and 6.

Task 4. Project Management/Administration

Per ESA's previously-approved scope of work, this task involves administrative oversight, invoicing, and correspondence related to contract administration. ESA is requesting additional funds to cover project management activities given the additional compliance monitoring services included in this Variance No. 2 (see Tasks 5 and 5) and the overall increase in level of effort related to permitting and compliance for the Syphon Reservoir Geotechnical Investigations.



Task 5: Biological Compliance Monitoring Services

Phase I: Pre-Construction

Task 5.1: Project Management/Coordination – Pre-Construction

ESA staff will coordinate with our internal team, IRWD, project engineers and consultants, and regulatory agencies (i.e., U.S. Fish and Wildlife Service (USFWS) and CDFW), as needed to assist with compliance with requirements of the MMRP related to biological resources and the LSAA. This task includes creation of the updated project compliance matrix relevant to the LSAA and biological mitigation from the MND, review and discussion of the revised Geotechnical Investigations Work Plan (GIWP), discussion of helicopter operations and logistics to minimize biological impacts (staging, etc.), kick-off meetings and pre-activity coordination with the project team and the contractor. In particular, this task includes communication with CDFW regarding proposed use of areas within the existing reservoir (in CDFW jurisdiction) for staging equipment and for take-off and landing helicopters to pick up and drop off drilling equipment. This task also includes CDFW notifications prior to the start of work (LSAA Measure 1.5), preparation (tailoring) and submittal of resumes of all Designated Biologists that will be responsible for the monitoring of project activities (MMRP BIO-6, LSAA Measure 1.7), and submittal of 2019 least Bell's vireo (*Vireo bellii pusillus*) focused survey reports (LSAA Measure 2.15).

Up to 110 hours of project management and coordination with the project team and regulatory agencies prior to construction are assumed for this task. As in all instances, only hours worked will be billed.

Task 5.2: Conduct General and California Gnatcatcher Pre-Construction Surveys

ESA biologists will conduct a pre-construction survey for the presence of fish, wildlife, or plants, including species of special concern, within the project footprint and a 500-foot buffer with accessible suitable habitat and establish protective measures (as required by LSAA Measures 2.7 and 2.8). The pre-construction survey will be conducted no more than five days and no less than one day before proposed activities.

Concurrently, prior to disturbance of coastal sage scrub, ESA will conduct a pre-construction survey to locate any coastal California gnatcatcher (*Polioptila californica californica*) and coastal cactus wren (*Campylorhynchus brunneicapillus*) within 100 feet of the outer extent of project footprint. The locations of any coastal California gnatcatcher or coastal cactus wren shall be clearly marked and identified on a map.

ESA will prepare a brief memo summarizing the survey field notes and results, which shall be provided to IRWD and subsequently to CDFW prior to the start of work.

Task 5.3: Confirm Demarcation of Disturbance Limits

ESA biologists will coordinate with the project team to confirm that disturbance limits are appropriately demarcated in the field (e.g., with temporary fencing or other markers) prior to work commencing to prevent



disturbance outside of the approved limits (as required by MMRP BIO-6, LSAA Measures 2.17 and 2.19). This will include all areas of coastal sage scrub habitat to be avoided under the provisions of the NCCP/HCP.

Assumptions:

- This task assumes ESA biologists will provide guidance and confirm limits are demarcated by IRWD or its contractor.
- ESA biologists do not have GPS equipment with survey-grade accuracy.

Task 5.4: Develop Worker Environmental Awareness Program

ESA will develop a Worker Environmental Awareness Program (WEAP), and prior to construction, ESA biologists will provide WEAP training to all construction crews and contractors to inform all workers on the project about the special-status species and their habitats, permit compliance requirements, and penalties for violations (as required by LSAA Condition 2.16). The WEAP training will also include information about invasive species on-site and that have the potential to invade the site, and best management practices (BMPs) to avoid dispersal into and out of the site. ESA will also prepare a brochure for workers. Interpretation shall be provided for non-English speaking workers. Any new crew will be trained on-site during morning safety tailgates. Upon completion of the WEAP training, workers will sign a form stating they attended and understand the protection measures, which will be filed on-site and be available to CDFW upon request.

Assumptions:

- This task assumes only one WEAP training prior to construction will be needed. New crew will be trained on-site during morning safety tailgates.
- This task assumes no additional annual WEAP trainings will be needed since the project will be completed within a year.

Phase II: During Construction

This scope of work presumes that geotechnical activities will take place outside of the nesting bird season identified in the MMRP (which defines nesting season as February 1 to September 1 for songbirds, and January 1 to August 31 for raptors) and LSAA (which defines nesting season as January 15 to August 31).

Task 5.5: Project Management/Coordination – During Construction

ESA staff will coordinate with IRWD, project engineers and consultants, construction supervisors and crews, and regulatory agencies (e.g., USFWS, CDFW) as needed to monitor compliance with permit conditions. In addition, ESA will set up a digital Survey 123 form to aid with daily biological monitoring reports and data collection in the field. This task includes call-in attendance at weekly project status update/progress meetings. An allowance of



up to 100 hours of project management and coordination during construction is assumed for this task. Only hours worked will be billed.

Task 5.6: Conduct Biological Monitoring

ESA biologists will monitor project construction activities to assist with project compliance with the MMRP and regulatory permit requirements. Biological monitors acceptable to USFWS/CDFW will be on-site during any clearing of coastal sage scrub (as required by MMRP BIO-6) and during any removal or crushing of sensitive vegetation (as required by LSAA Measures 1.7, 1.8, and 2.3). Biological monitors will be on-site daily when protected species may be present to implement protection measures (as required by LSAA Measure 2.9). Biological monitors must concurrently notify IRWD and CDFW of any activity that is not in compliance with the LSAA, and/or recommend any reasonable measure to avoid or minimize impacts to fish and wildlife resources (LSAA Measure 1.8). Any dead or injured protected species found along roads or in project areas shall be reported to CDFW within 24 hours, including the location, cause of death, species found, and other relevant information (LSAA Measure 2.10).

Assumptions:

- This task assumes the that full-time daily biological monitoring will be required in September and October 2019 and that half-time daily biological monitoring will be required in November and December 2019. Only hours worked will be billed.
- This scope of work presumes that geotechnical activities will take place outside of the nesting bird season identified in the MMRP (which defines nesting season as February 1 to September 1 for songbirds, and January 1 to August 31 for raptors) and LSAA (which defines nesting season as January 15 to August 31). The cost estimate for this task assumes the project will commence after the 2019 nesting season and be completed before the 2020 nesting season. In the event that geotechnical activities extend into the 2020 nesting season, nesting bird surveys and additional biological monitoring and reporting may be needed, and is not included within this task.
- It should be noted that if geotechnical activities continue into the nesting bird season in 2020 and active nests are found on-site, there may be associated avoidance buffers (e.g., up to 300-500 feet) where no work may occur until nesting is complete, which could significantly delay construction.
- Should additional biological monitoring services be needed (e.g., multiple monitors are needed on-site per day that cannot be accommodated within the scope/budget for this task, and/or additional monitoring is needed for a longer duration), a Professional Services Variance request would be submitted.

Task 5.7: Notification of Special-Status Species and Invasive Species to CDFW

If any special-status species are observed, ESA biologists will submit forms to the California Natural Diversity Database (CNDDB) within five days of the sighting (as required by LSAA Measure 2.12). This task includes



filling out the online PDF form, providing the form to IRWD for review prior to submittal, and emailing the form to the CNDDB.

If any new occurrences of invasive species are observed, ESA biologists will submit Suspect Invasive Species Report forms to CDFW (as required by LSAA Measure 2.41). ESA biologists will provide the form to IRWD for review prior to submittal to CDFW.

An allowance of up to 16 hours is assumed for this task for preparation and submittal of forms to CNDDB and to CDFW. Only hours worked will be billed.

Task 5.8: Assess Existing Native Plant Coverage, Quantify Actual Impacts, Implement Initial Re-seeding Treatment, and Prepare Documentation

This task includes the steps required to quantify and tabulate the actual area affected by the geotechnical investigations; to characterize and determine the total area of supplemental mitigation required by the Habitat Restoration and Enhancement Plan (including both restoration of areas directly disturbed by geotechnical activities and enhancement of other areas to mitigate for temporal loss of habitat); and to implement initial seeding and soil amendments in the restoration and enhancement areas, respectively.

ESA proposes to assess native plant coverage and diversity in each area affected by the geotechnical investigation where there is at least 5% native plant cover observed during the on-site biological monitoring (as described in Task 5.6 above). As the effort will be performed simultaneously with on-site monitoring, there would be no additional charges for this coverage assessment within the geotechnical work areas. However, an additional effort is included under this task to determine the existing native coverage and diversity within the discrete patch areas identified for supplemental enhancement apart from the geotechnical work areas (i.e., the Habitat Restoration and Enhancement Plan enhancement areas). This task includes the pre-activity communications with USFWS and CDFW regarding the methods and timing for this assessment. A table of impacts will be prepared that quantifies the areas actually affected by the geotechnical work, categorized according to the native plant cover within various discrete work areas and along various access routes that were disturbed. Identifying the areas affected according to native plant cover and diversity will clarify which areas on-site must be treated to replace native cover where it is impacted outside the future reservoir impact limit and how much native cover would need to be restored to provide equivalent "restoration." Tabulating the actual impacts will also provide the benchmark to be used to determine the total area of supplemental mitigation (enhancement) needed to compensate for the temporal loss of native cover in the geotechnical areas. The final tables of impacts and requisite mitigation will be presented in the final construction report prepared under Task 5.9 below.

In addition to quantifying the impacts and requisite restoration and enhancement areas, this task includes procuring materials and coordinating with the geotechnical contractor to assist with a simple post-activity soil amendment (i.e., mycorrhizal inoculum) to be performed in the affected upland areas beyond the future reservoir inundation limits. ESA would spread the amendment and document the amendment process. As discussed with



IRWD, the amendment process would require a small excavator or backhoe to rip the soil to a depth of 4 to 6 inches after the amendment is spread. ESA will also procure appropriate seed and manually spread the seed material within all areas disturbed by geotechnical work outside the future reservoir inundation limit. Any leftover seed from this effort will be held for application in the designated enhancement areas next year. Separate from the construction report prepared under Task 5.9, below, ESA will also prepare a detailed memorandum describing the initial treatment (i.e., soils amendment and seeding) along with photosets comparing the preactivity conditions within selected work areas and access routes with the post-activity conditions after seed has been spread.

Assumptions:

- This task excludes maintenance or monitoring/documentation of the seeded areas beyond the initial preparations and excludes any work in the enhancement areas beyond initial application of the soil amendment. A restoration contractor will need to be engaged to perform the necessary maintenance of the seeded areas that were disturbed by the geotechnical work and also to perform site preparations (i.e., initial weed treatment/removal and soil amendment), seeding, and maintenance within the designated enhancement areas. It will be appropriate to determine the scope of the enhancement effort once the actual impacts associated with geotechnical work are known. That will not be clear until most or all the geotechnical work is completed. A separate scope and cost estimate will be prepared and submitted to IRWD to cover such restoration and enhancement activities if requested by IRWD.
- The objectives of this task are limited to: 1) clearly identifying the existing native plant coverage within impacted areas and enhancement areas and quantifying the actual geotechnical work impacts in terms of area and native cover; 2) assuring that the areas disturbed by geotechnical investigations outside the future reservoir inundation limit are prepared and seeded prior to this year's winter rainy season; and 3) documenting the impacts and the initial preparations and seeding performed immediately after the geotechnical work is completed.
- This task includes an estimated allowance of \$1,200 for the cost of seed.

Phase III: Post-Construction

Task 5.9: Prepare Final Construction Report

Within two weeks of completion of the project, ESA will prepare a final construction report for submittal to CDFW (as required by LSAA Measure 4.3). The report will include biological monitoring notes, photographs before and after project-related activities, including the surrounding staging areas, as well as the total amount of area impacted post-project. ESA will provide a draft report to IRWD for review and comment and then will incorporate revisions and submit electronically to CDFW.



Task 6. Cultural Compliance Monitoring Services

Task 6.1 Conduct Archaeological and Paleontological Monitoring

An ESA staff person cross trained in archaeology and paleontology will monitor project construction activities to assist with project compliance with the MMRP. The monitors will work under the direction of a Qualified Archaeologist and a Qualified Paleontologist. Per the MMRP, monitoring shall include the following: ensuring avoidance of the two historical resources on site (per MM CR-1); archaeological monitoring of any ground disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation (per MM CR-2); and paleontological monitoring of ground-disturbing activities within geologic formations with a high sensitivity for paleontological resources (per MM GEO-3). As noted in GEO-3, boring or augering of cores shall only require paleontological spot checks. Per CR-2 and GEO-3, the frequency and duration of archaeological and paleontological monitoring can be reduced based on an assessment of resource sensitivity and the potential for project-related impacts. If work occurs in multiple locations, two or more monitors may be required. Archaeological/Paleontological monitors will notify IRWD of any archaeological or paleontological discoveries, and any activity that is not in compliance with the MMRP. Monitors will keep daily logs. ESA will provide IRWD with weekly summaries of monitoring activities.

Assumptions:

- This task assumes one monitor for a total of 15 full-time (8-hour) days during trenching or other excavation and 14 part-time (4-hour) days (for spot checks to be conducted every other day during boring), up to 184 hours total. Should ground disturbance requiring monitoring exceed the 184 total hours assumed in this scope of work or should additional monitors be needed (e.g., work occurs in multiple locations requiring more than one monitor), a Professional Services Variance request would be submitted.
- A 5-gallon soil sample will be collected from each of the remaining trenches and examined for the presence of micro-fossils (which are not visible to the naked eye and samples must be processed offsite). Costs assume that no more than five samples will be processed.
- Costs assume two half-day (4-hour) site visits for the Qualified Archaeologist and Qualified Paleontologist.
- This task assumes no archaeological or paleontological resources will be encountered or require treatment. If such discoveries are made, a Professional Services Variance request would be submitted for resource documentation and recovery.

Task 6.2 Prepare Archaeological and Paleontological Resources Monitoring Reports

Within six weeks of completion of the project, ESA will prepare final Archaeological and Paleontological Resources Monitoring Reports (one for each) for submittal to IRWD (per MM CR-3 and GEO-3). The Archaeological Resources Monitoring Report will also be submitted to the SCCIC and any Native American tribes that request a copy (per MM CR-3). The reports will summarize all monitoring activities, include photographs of project-related activities, including the surrounding staging areas, and document any encountered



resources. ESA will provide draft electronic reports to IRWD for review and comment, and incorporate revisions into final electronic versions.

Assumptions:

- This task assumes negative findings reports will be prepared. If discoveries are made, a Professional Services Variance request would be submitted for additional reporting.
- This task assumes one round of revisions following submittal of the draft reports.

Task 7. Additional Environmental Compliance Support

During the course of providing environmental permitting and compliance support under this contract, IRWD may identify additional tasks that require support from ESA due to unforeseen issues that arise during the construction implementation, permitting, and agency coordination process. Tasks performed under this Task 7 would be requested by IRWD. ESA would develop a scope of work for IRWD staff approval prior to conducting any work under this Task 7.

B.Cost

Commensurate with the level of effort associated with the tasks described above, we are requesting a net budget amendment of \$160,970. This includes \$204,328 that corresponds to the level of effort associated with the above-described scope of work, plus a credit of \$43,358 for the remaining budget associated with Task 2, Syphon Reservoir EIR Permitting, that is being removed from the scope of work. The detailed budget calculations are shown in the attached **Table 1**.

C. Professional Services Variance

ESA's Professional Services Variance (Exhibit C) is included at the end of this proposal.

Table 1: Cost Proposal
ESA Labor Detail and Expense Summary - Syphon Reservoir Geotechnical Investigations, Environmental Permitting Services Variance No. 2

				JACOBUS	RIOS	SAM										
	Employee Names			EHRINGER	STEWART	SPANO										
	, ,	KOUTNIK	BURNS	LAU	GEISSLER	CLARK										
		BARNES	BEVER	HOLBROOK	TANAKA	G-BLACKWOOD	Karla	Karl	Adrienne		KANESHIRO	GICK	M. LE			
		DARNES	DEVER	HOLDROOK	IANANA	O-BLACKWOOD	Naria	Raii	Adriente		KANLOIIIKO	GIOR	IVI. LL		<u> </u>	
	Labor Category	Sr Director II	Director II	Managing Associate III	Managing Associate I	Senior Associate II	Senior Associate	Associate III	Associate II	Subtotal	Project Technician III	Project Technician II	Project Technician I	Subtotal	Total Hours	Labor Price
Task #	Task Name/Description	\$ 270	\$ 205	\$ 185	\$ 140	\$ 125	\$ 115	\$ 110	\$ 95		\$ 120	\$ 100	\$ 85			
1.0	Syphon Geotechnical Investigations MND Permitting															
	1A. Agency Meetings and Coordination			12	6					\$ 3,067				\$ -	18.00 \$	3,067
	1C. Waste Discharge Requirement - Transfer to Task 1D			-16	-6	-4				\$ (4,288)				\$ -	(26.00) \$	(4,288)
	1D. Notification of LSAA - Transfer from Task 1C			16	6	4				\$ 4,288				\$ -	26.00 \$	
	1D. Notification of LSAA - Additional Budget			12	4					\$ 2,786		8		\$ 800	24.00 \$	3,586
3.0	Project Team Coordination	1		15	10					\$ 4,454				\$ -	26.00 \$	
4.0	Project Management/Administration	1		32						\$ 6,204				\$ -	33.00 \$	6,204
5.0	Biological Compliance Monitoring Services									\$ -				\$ -	- \$	-
	Phase I: Pre-Construction															
5.1	Pre-Construction Project Management/Coordination									\$ -				\$ -	- \$	
	Prepare/Update Compliance Matrix				6					\$ 842				\$ -	6.00 \$	
	Internal Team Coordination				40					\$ 5,611				\$ -	40.00 \$	5,611
	IRWD/Project Team Coordination			16	24					\$ 6,334				\$ -	40.00 \$	6,334
	Agency Coordination			16	14					\$ 4,931				\$ -	30.00 \$	4,931
5.2	Pre-Construction California Gnatcatcher Surveys				16			16		\$ 4,005				\$ -	32.00 \$	
	Memo			4	8			8		\$ 2,744		2		\$ 200	22.00 \$	
5.3	Confirm Demarcation of Disturbance Limits			1	5			22		\$ 3,307				\$ -	28.00 \$	
5.4	Develop Worker Environmental Awareness Program			1	16					\$ 2,430	8			\$ 960	25.00 \$	3,390
	Phase II: During Construction									\$ -				\$ -	- \$	-
5.5	Project Management/Coordination during Construction									\$ -				\$ -	- \$	-
	Update Compliance Matrix (4 hrs/month from Sep-Dec)				16					\$ 2,245				\$ -	16.00 \$	
	PM/Coordination				40					\$ 5,611				\$ -	40.00 \$	5,611
	IRWD/Project Team Coordination			20	20					\$ 6,514				\$ -	40.00 \$	
	Agency Coordination			10	10					\$ 3,257				\$ -	20.00 \$	3,257
5.6	Conduct Biological Monitoring									\$ -				\$ -	- \$	
	Sep - 1 month full-time			8	32	40		60		\$ 17,591				\$ -	140.00 \$	
	Oct - 1 month full-time			8	24	20	20	40		\$ 14,060				\$ -	112.00 \$	
	Nov - 1 month half-time			4	16	16	8	32		\$ 9,434				\$ -	76.00 \$	
	Dec - 1 month half-time			4	16	16	8	32		\$ 9,434				\$ -	76.00 \$	9,434
5.7	CNDDB/Invasive Species Notifications					8		8		\$ 1,884				\$ -	16.00 \$	1,884
5.8	Native Cover Impacts, Initial Treatment Documentation									\$ -				\$ -	- \$	
	HREP areas - Native Cover Assessment			4		8		8		\$ 2,625				\$ -	20.00 \$	
	Initial Treatments (incl. coordination w/AECOM)			12		8		16		\$ 4,989				\$ -	36.00 \$	4,989
	Memo Report (Prep & Seed Applied)			8		14				\$ 3,240	4			\$ 480	26.00 \$	3,720
	Phase III: Post-Construction									\$ -				\$ -	- \$	-
5.9	Prepare Final Construction Report			2	8	16		4		\$ 3,941				\$ -	30.00 \$	3,941

											1		l		1		
					JACOBUS	RIOS	SAM										
	Employee Names				EHRINGER	STEWART	SPANO										
		KOUTI	NIK	BURNS	LAU	GEISSLER	CLARK										
		BARN	ES	BEVER	HOLBROOK	TANAKA	G-BLACKWOOD	Karla	Karl	Adrienne		KANESHIRO	GICK	M. LE			
	Labor Category	1			Managing	Managing		Senior Associate				Project	Project	Project		1	
		Sr Direct	tor II	Director II	Associate III	Associate I	Senior Associate II	I	Associate III	Associate II	Subtotal	Technician III	Technician II	Technician I	Subtotal	Total Hours	Labor Price
Task #	Task Name/Description	\$	270	\$ 205	\$ 185	\$ 140	\$ 125	\$ 115	\$ 110	\$ 95		\$ 120	\$ 100	\$ 85			
6.0	Cultural Compliance Monitoring Services																
6.1	Archaeological and Paleontological Monitoring				12	32	184				\$ 29,799				\$ -	228.00	\$ 29,799
	Coordination of Monitors/PM				40	8	8				\$ 9,543				\$ -	56.00	\$ 9,543
6.2	Prepare Archaeological and Paleontological Monitoring Reports				8	8	48				\$ 8,628		4		\$ 400	68.00	\$ 9,028
	GIS/Graphics time					8	8				\$ 2,126				\$ -	16.00	\$ 2,126
7.0	Additional Environmental Compliance Support	1		5	24	16	8	4	4	2	\$ 10,084				\$ -	64.00	\$ 10,084
											\$ -				\$ -	-	\$ -
Total Hou	rs		3	5	273	403	402	40	250	2	1378	12	14	-	26	1,404	
Total Lab	or Costs	\$	810	\$ 1,025	\$ 50,624	\$ 56,534	\$ 50,435	\$ 4,600	\$ 27,500	\$ 190	\$ 191,719	\$ 1,440	\$ 1,400	\$ -	\$ 2,840		\$ 194,559
Percent of	Effort - Labor Hours Only	0.2%	6	0.4%	19.4%	28.7%	28.6%	2.8%	17.8%	0.1%	98.1%	0.9%	1.0%	0.0%	1.9%	100.0%	
Percent of	Effort - Total Project Cost	0.4%	6	0.5%	24.8%	27.7%	24.7%	2.3%	13.5%	0.1%		0.7%	0.7%	0.0%		1	95.2%

ESA Labor Cost			\$ 194,559
Labor Cost Communication	r Fee	3%	\$ 5,837
ESA Non-Labor Expenses			
Reimbursable Expenses	(see Attachment	: A for detail)	\$ 3,597
ESA Equipment Usage	(see Attachment	: A for detail)	\$ 335
Subtotal ESA Non-Labor Exp	enses		\$ 3,932

VARIANCE No. 2 TOTAL	\$ 204,328
CREDIT: Remove Task 2 EIR Permitting	\$ (43,358)
TOTAL BUDGET AMENDMENT	\$ 160.970

Attachment A

Cost Proposal: ESA Non-Labor Expenses Summary

Reimburs	able E	xpenses

Project Supplies	\$ 1,200
Printing/Reproduction	\$ 260
Document and Map Reproductions (CD + Digital Photo)	\$ -
Postage and Deliveries	\$ 50
Mileage (Round Trip = 20 miles x \$0.58 = \$11.60 per trip)	\$ 1,618
Vehicle Rental	\$ -
Lodging	\$ -
Airfare	\$ -
Other Travel Related	\$ -
-	\$ -
-	\$ -
<u>-</u>	\$ -
Subtotal Reimbursable Expenses	\$ 3,128
15% Fee on Reimbursable Expenses	\$ 469
Total Reimbursable Expenses	\$ 3,597

ESA Equipment Usage

General Equipment:	
Company Vehicle Usage	\$ -
HP Plotter	\$ -
Computer Time (GIS)	\$ -
Trimble GPS	\$ -
Tablet GPS	\$ 335
Laser level	\$ -
Garmin GPS or equivalent	\$ -
Laptop Computers	\$ -
LCD Projector	\$ -
Noise Meter	\$ -
Electrofisher	\$ -
Sample Pump	\$ -
Surveying Kit	\$ -
Total Station Set	\$ -
Field Traps	\$ -
Digital Planimeter	\$ -
Cameras/Video/Cell Phone	\$ -
Miscellaneous Small Equipment	\$ -
Stilling Well/Coring Pipe (3 inch aluminum)	\$ -
Total Equipment Usage Costs	\$ 335

IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Project 11t								
Project No.: 03808 (Task 2 Environmental) Date: November 6, 2019								
	Order No.: <u>609141</u>	Variance No.: 2						
Originator	: [] IRWD [X]	ENGINEER/COM	NSULTAN'	T []O	ther (Expla	in)		
Biological C	n of Variance (attach any bacompliance Monitoring and Cultural	Compliance Monito						
Project. Rem	nove Task 2, Syphon Reservoir EIR	Permitting from the	scope of wor	k. (See attacl	ned letter pro	posal with scop	e of work.)	
Engineerin	ng & Management Cost Impac	et:						
	Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon.	Total \$	
Biologica Monitoria	al and Cultural Compliance						\$204,328	
Remove 'Permittin	Task 2 Syphon Reservoir EIR	2					-\$43,358	
						Total \$ =	\$160,970	
Schedule I	mpact:							
Task No.	Task Description	Original Schedule		Schedule Variance			New Schedule	
Required A	Approval Determination:							
Total Ori	Total Original Contract \$93,384		[] Director: Cumulative total of Variances less than or equal to \$50,000.					
	Variances \$7,462							
This Variance \$ <u>160,970</u>			Execut	ive Director:	Cumulative	total of Varianc	es less than	
				al to \$75,000.				
	m of Variances stract Amount	\$ <u>168,432</u> \$ <u>261,816</u>	or equa	al to \$75,000. al Manager: C	Cumulative to	otal of Variance	s less than or	
New Con Percentag	tract Amount ge of Total Variances	\$ <u>261,816</u>	or equa	al to \$75,000. Il Manager: Co \$100,000.		otal of Variances		
New Con Percentag	tract Amount		or equa	al to \$75,000. Il Manager: Co \$100,000.				
New Con Percentag to Origi	tract Amount ge of Total Variances	\$ <u>261,816</u> 180%	or equal [] Genera equal to [x] Board:	al to \$75,000. Il Manager: Co \$100,000. Cumulative	total of Varia	otal of Variances	ın \$100,000.	
New Con Percentag to Origi ENGINEE	etract Amount ge of Total Variances nal Contract ER/CONSULTANT: Environs Company Name	\$261,816 180% mental Science As 11/06/19	or equal or equal to [x] Board:	al to \$75,000. Il Manager: Co \$100,000. Cumulative	total of Varia	otal of Variances ances greater tha	ın \$100,000.	
New Con Percentag to Origi ENGINEE	atract Amount ge of Total Variances nal Contract CR/CONSULTANT: Environm Company Name acom gineer/Manager	\$ <u>261,816</u> 180% mental Science As	or equal or equal to [x] Board:	al to \$75,000. Il Manager: Co \$100,000. Cumulative	total of Varia	otal of Variances	ın \$100,000.	

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: Syphon Reservoir Improvement Project, Environmental Permitting Services					
Project No.: 03808 Project Manager: Jo Ann Corey					
Variance		Dat	es	Variance	
No.	Description	Initiated Approved		Amount	
1	CDFW Permit Fee for LSAA	9/17/2018	June 2019	\$7,462	
2	Biological and Cultural Compliance Monitoring for Syphon Geotechnical Investigations Project;	11/06/2019		\$160,970	
	Remove Task 2, Syphon Reservoir EIR Permitting				

November 25, 2019

Prepared by: F. Sanchez Submitted by: P. Weghorst

Approved by: Paul A. Cook

CONSENT CALENDAR

KERN FAN GROUNDWATER STORAGE PROJECT VARIANCE FOR PROFESSIONAL SERVICES WITH THE HALLMARK GROUP

SUMMARY:

On November 5, 2018, staff executed a Professional Services Agreement with Hallmark Group to assist with the development of a Memorandum of Understanding (MOU) that will ultimately lead to an agreement with the California Department of Water Resources (DWR) for the construction of a turnout from the California Aqueduct and the operation of Kern Fan Groundwater Storage Project (Kern Fan Project). In early 2019, staff executed two variances with Hallmark to facilitate meetings and to provide additional support and assistance to secure approval of a new turnout on the California Aqueduct and the development of the MOU. Additional work and coordination with IRWD, Rosedale-Rio Bravo Water Storage District, Kern County Water Agency (KCWA), and other consultants is needed to refine and model the information necessary to obtain DWR approval for the new turnout as well as to prepare terms for the agreement with DWR. To facilitate this additional work, staff has negotiated Variance No. 3 to the Professional Services Agreement with Hallmark. Staff recommends that the Board authorize the General Manager to execute Variance No. 3 in the amount of \$77,060 with Hallmark.

BACKGROUND:

Proposition 1, also known as the Water Quality, Supply and Infrastructure Improvement Act of 2014, dedicated \$2.7 billion for investments in new water storage projects through the Water Storage Investment Program (WSIP). In August 2017, IRWD and Rosedale jointly submitted an application to the California Water Commission (CWC) for the proposed Kern Fan Project with a request for \$86 million in WSIP grant funding. In July 2018, CWC conditionally awarded \$67.5 million in grant funding to the project.

The proposed Kern Fan Project would develop a regional water bank in the Kern Fan area to capture, recharge and store unallocated Article 21 water from the State Water Project (SWP) during wet hydrologic periods. IRWD and Rosedale would construct a new dedicated conveyance canal from the California Aqueduct to ensure the ability to convey flows from the SWP to the new recharge facilities. A new turnout on the California Aqueduct would be used to divert SWP water into the Kern Fan Project canal. The stored water would be extracted when needed to provide ecosystem, emergency supply, and water supply benefits. The construction of the turnout and subsequent Kern Fan Project operations would be coordinated with the SWP through an agreement with DWR.

The preparation of terms for the agreement with DWR is a critical path item necessary for the successful implementation of the Kern Fan Project. In November 2018, IRWD executed a Professional Services Agreement with Hallmark to assist IRWD and Rosedale with the

Consent Calendar: Kern Fan Groundwater Storage Project Variance for Professional Services with the Hallmark Group
November 25, 2019
Page 2

development of an MOU with DWR that will establish the terms for an agreement that will facilitate the operation of the Kern Fan Project. Since that time, Hallmark has provided support to IRWD and Rosedale in discussions with DWR and in coordinating efforts with KCWA.

Variance No. 3 with Hallmark:

Hallmark submitted Variance No. 3, provided as Exhibit "A", for work that will continue efforts to secure DWR approval of the proposed new turnout. The level of effort required for agency coordination and meetings among IRWD, Rosedale, KCWA and DWR have been significantly greater than previously envisioned. The additional efforts are required as a result of the complexity of the Aqueduct subsidence and capacity issues. The scope of work to be completed under this variance will largely be associated with coordinating and working with DWR and KCWA to obtain DWR approval of the proposed turnout. Hallmark will also develop a term sheet for an agreement with DWR for the construction of the turnout from the California Aqueduct and the operation of the Kern Fan Project. Hallmark anticipates resolving the turnout issues with DWR and finalizing a term sheet by April 2020. Work on the development of the MOU will follow development of the term sheet.

Staff has negotiated the costs associated with Hallmark's request for Variance No. 3 and finds the variance to be fair and reasonable. Staff recommends that the Board authorize the General Manager to execute Variance No. 3 to the Professional Services Agreement with Hallmark in the amount of \$77,060.

FISCAL IMPACTS:

Project 10854, the Kern Fan Groundwater Storage Project, is included in the FY 2019-20 Capital Budget. The cost for Hallmark to perform the additional work under Variance No. 3 is \$77,060. This variance requires Board approval because the cumulative total of the three variances (\$5,412 + \$22,183 + \$77,060) exceeds \$100,000. The existing budget and Expenditure Authorizations are sufficient to fund the work performed by Hallmark through Variance No. 3. The costs associated with this work will be ultimately shared with Rosedale pursuant to a cost-share agreement executed between IRWD and Rosedale on November 14, 2018.

ENVIRONMENTAL COMPLIANCE:

A Final Environmental Impact Report (EIR) for the Stockdale Integrated Banking Project was prepared, certified and approved in compliance with 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. Rosedale, as lead agency, filed a Notice of Determination for the Stockdale Integrated Banking Project with the County of Kern. IRWD, as a responsible agency, filed Notices of Determination with the County of Orange and with the County of Kern. The EIR includes a program-level analysis of impacts of a third project site. Environmental consultants at ESA will prepare a new supplemental EIR that will provide a project-level environmental review of the construction and operation of both the phase one and phase two facilities contemplated for the proposed Kern Fan Project.

Consent Calendar: Kern Fan Groundwater Storage Project Variance for Professional Services with the Hallmark Group
November 25, 2019
Page 3

COMMITTEE STATUS:

This item was reviewed by the Supply Reliability Programs Committee on November 21, 2019.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 3 IN THE AMOUNT OF \$77,060 TO THE PROFESSIONAL SERVICES AGREEMENT WITH HALLMARK GROUP FOR THE DEVELOPMENT OF TERMS FOR AN AGREEMENT WITH THE CALIFORNIA DEPARTMENT OF WATER RESOURCES FOR THE CONSTRUCTION OF A TURNOUT FROM THE CALIFORNIA AQUEDUCT AND THE OPERATION OF THE KERN FAN GROUNDWATER STORAGE PROJECT.

LIST OF EXHIBITS:

Exhibit "A" – Variance No. 3 with Hallmark Scope of Work and Budget

Note: This page is intentionally left blank.

Exhibit "A" IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

110,000 110	le: Kern Fan Groundwater	Stora	<u>ge Project</u>						
Project No Purchase (o.: Order No.:		10854		Date: Varia	11/8 nce No.: <u>3</u>			
Originator	: [X] IRWD []	ENG	INEER/CONS	SULTA	ANT	[] Ot	ther (Expla	uin)	
Descriptio Cost variandecision of	n of Variance (attach any b nce and modification of sco n the project. Completion e	oack-u	p material): provide contined April 2020.	nued s See A	uppoi ttach	rt for critica	al path iten	ns and go/no	go
Engineerin	ng & Management Cost Imp	pact:							
	Classification		Manhours	Bill Ra		Labor \$	Direct Costs	Subcon. \$	Total \$
See Attaction for support agreement	chment 1 for scope of work ort to develop critical path nt terms for Kern Fan Proje	ct.	306	Vari Se scop	e				\$77,060
									\$77,060
Schedule I	mnact							Total \$ =	\$77,000
Task	Task		Original			Schedu	le	Ne	ew.
No.	D					Schodu	10	110	, , , ,
	Description		Schedule			Varianc		Sche	
	Description		Schedule						
	Description		Schedule						
Required A			Schedule						
	Approval Determination:	\$5		LID:		Varianc	ee	Sche	dule
Total Ori	Approval Determination: ginal Contract	\$5	Schedule 4,481		rector:	Variance Cumulative	ee		dule
Total Ori	Approval Determination: ginal Contract Variances \$ 27,593	\$5		\$	50,000	Variance Cumulative	total of Varia	Sche	dule or equal to
Total Ori Previous This Vari	Approval Determination: ginal Contract Variances \$ 27,593	\$ <u>1</u>		\$ []Ex o	50,000 ecutiv r equa	Cumulative). e Director: C l to \$75,000. Manager: Cur	total of Varia	Sche	or equal to
Total Ori Previous This Vari Total Sur New Con	Approval Determination: ginal Contract Variances \$\frac{27,593}{77,060}\$ in of Variances	\$ <u>1</u>	4,481	\$ [] Ex o	50,000 ecutiver equationeral I	Cumulative). e Director: C 1 to \$75,000. Manager: Cum 0 \$100,000.	total of Varia	ances less than	or equal to s less than less than or
Total Ori Previous This Vari Total Sur New Con Percentag to Origi	Approval Determination: ginal Contract Variances \$\frac{27,593}{77,060} In of Variances Itract Amount ge of Total Variances nal Contract CR/CONSULTANT:	\$ <u>1</u> \$ <u>1</u> Hallma	4,481 104,653 159,134	\$ [] Ex o [] Ge e [x] Bo	50,000 ecutive r equal neral I qual to pard: (Cumulative). e Director: C 1 to \$75,000. Manager: Cum 0 \$100,000.	total of Varia	ances less than tal of Variances of Variances ances greater than	or equal to s less than less than or
Total Ori Previous This Vari Total Sur New Con Percentag to Origi ENGINEE	Approval Determination: ginal Contract Variances \$\frac{27,593}{77,060} In of Variances Itract Amount ge of Total Variances nal Contract CR/CONSULTANT:	\$ <u>1</u> \$ <u>1</u> Hallma Comp	4,481 104,653 159,134 192_% ark Group	\$ Ex o	so,000 ecutive requal requal to pard: Control VINE	Cumulative Output Cumulative Cumulative Cumulative Cumulative Cumulative to	total of Variate umulative total of Variate of Variate WATER D	ances less than tal of Variances of Variances ances greater than	or equal to s less than less than or

TASK 1: TURNOUT RESOLUTION VARIANCE 3

Background – Hallmark was engaged to assist the Kern Fan Groundwater Storage Project team (Project Team) with development of terms for a turnout agreement with DWR which is required for the Kern Fan Groundwater Storage Project to be viable. It was anticipated resolution of this issue would be completed by July 2019. The effort was compounded by several factors including DWR's determination not to allow any new turnouts on the California Aqueduct due to operational constraints caused by subsidence. Hallmark and the Project Team spent considerable time understanding the location and impact subsidence may have on water deliveries in Kern County. We have identified information to be modeled to demonstrate that the turnout required for the project will not negatively impact current water deliveries.

Due to a shortage of DWR staff time, a meaningful dialogue to review data developed by the Project Team has yet to occur. Going forward, Hallmark will continue to work with the Project Team to refine and develop the information necessary to gain approval for the turnout. Among the information being developed is modeling the effects proposed WSIP projects may have on aqueduct operations. Also, in development is the modeling of pulse flows which is a central component of the Project.

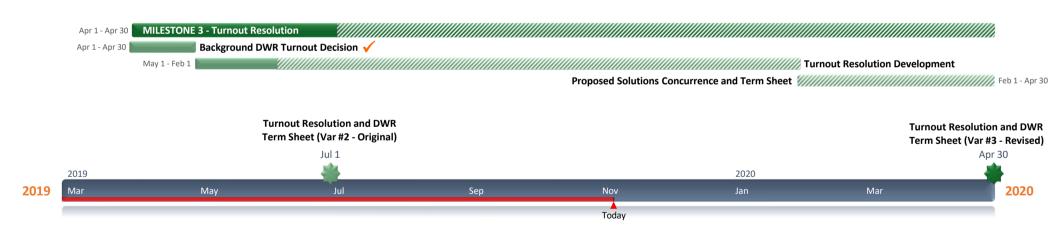
Hallmark will participate in tabletop discussions with DWR, develop strategies, propose solutions and support the Project Team and the Kern County Water Agency in negotiations to develop a term sheet acceptable to the principals involved in the Project.

Hallmark has \$14,526 left in the MOU task order. At this time, it is unknown if the available funds will be enough for development of a MOU with DWR for operations of the facility, or if DWR would consider entering into such a MOU. This task will be revisited as more information becomes available.

Kern Fan Groundwater Storage Project

Revised Turnout Resolution Schedule – November 8, 2019







Hallmark Group Scope of Work - Kern Fan Groundwater Storage Project - Variance #3

	Classification	Strategic Advisor		Program Manager	М	Project Ianager		Project Controls	C	Project oordinator		Project Admin		Total Hours
	D + /UD	Gardner		Beck	(Starkey		Harris		Blakslee		Ballard		
	Rate / HR	326	_	250	_	202	_	140		125	_	100	_	00
Total Labor		48		96		96		18		24		24		306
Task 1	Go/No-Go Critical Tasks	48		96		96		18		24		24		306
	Turnout Decision, layering WSIP Project integration and verification of pulse flows	48		96		96		18		24		24		306
Total Estimat	ted Hours	48		96		96		18		24		24		306
		Strategic		Program	Sr.	Project		Project		Project		Project		Total
	Classification	Advisor		Manager	М	lanager		Controls	C	oordinator		Admin		
		Gardner		Beck	9	Starkey		Harris		Blakslee		Ballard		Cost
	Rate / HR	326		250		202		140		125		100		
Total Labor		\$ 15,648	\$	24,000	\$ 1	19,392	\$	2,520	\$	3,000	\$	2,400	\$	66,960
Task 1	Go/No-Go Critical Tasks	\$ 15,648	\$	24,000	\$ 1	19,392	\$	2,520	\$	3,000	\$	2,400	\$	66,960
	Turnout Decision, layering WSIP Project integration and verification of pulse flows	\$ 15,648	\$	24,000	\$ 1	19,392	\$	2,520	\$	3,000	\$	2,400	\$	66,960
Total Other [Direct Costs												\$	10,100
Travel													\$	8,700
Printing / Rep	prographics												\$	700
٠	.ine [Approx. \$100/ mo based on usage]												\$	700

November 25, 2019

Prepared by: H. Cho / M. Cortez

Submitted by: K. Burton Approved by: Paul A. Cook

ACTION CALENDAR

SAN JOAQUIN RESERVOIR FILTRATION VARIANCE NO. 2

SUMMARY:

The San Joaquin Reservoir Filtration project will install a filtration system and disinfection improvements at the reservoir to mitigate algae and debris entering the recycled water system. Staff recommends that the Board authorize the General Manager to execute Variance No. 2 in the amount of \$347,129 to Carollo Engineers for the San Joaquin Reservoir Filtration.

BACKGROUND:

IRWD's recycled water customers in the Newport Coast area have reported clogged irrigation equipment and filters on the customer side of the service meter and increased maintenance costs. Staff has identified the San Joaquin reservoir as a source of algae and debris entering the recycled water distribution system. Currently, IRWD does not have a filtration system for water drafting out of the reservoir into the distribution system. In February 2019, IRWD retained Carollo Engineers to design filtration and disinfection improvements at San Joaquin Reservoir to mitigate against algae and debris entering the Zone B system.

Design Services – Variance No. 2:

Variance No. 2 includes additional design work due to: 1) a change to the filtration system requirements, 2) addition of a concrete masonry block building to enclose the filtration system for noise abatement purposes, and 3) inclusion of a piping system to return filter backwash waste into the reservoir.

The original design scope of work included siting the proposed filtration system under a canopy structure near the reservoir's control building. The project area is shown in Exhibit "A". Based on water quality testing performed by PACE Advanced Water Engineering, the proposed filter system was to be sized with 10-micron filters for algae removal. During preliminary design, Carollo had discussions with irrigation system manufacturers and determined that current irrigation componentry (e.g., emitter and filters) are based on water filtered to a range of 70 microns to 130 microns. Therefore, the proposed filtration system will use 70-micron disc-type filters.

Depending on the reservoir's water quality, the disc filtration system may need up to six backwashes per hour to remove algae and debris from the filters. Consequently, pneumatically actuated valves will be used due to the frequent cycles of opening and closing. Pneumatic valves generate noise when in operation (more noise than motor actuated valves that are used at existing strainer facilities in the District), and staff recommends enclosing the equipment in a building for noise abatement instead of covering the equipment with a canopy. The building will substantially minimize this noise from reaching the residential developments surrounding the

Action Calendar: San Joaquin Reservoir Filtration Variance No. 2

November 25, 2019

Page 2

reservoir. The building will also house an electrical room, have heating, ventilation and air conditioning, and a building drainage system for disc filter replacement activities.

The original design scope of work also included evaluating the use of the existing reservoir seepage drain system to convey the filter backwash material back into the reservoir because there are no nearby sewer facilities. The anticipated amount of backwash flow is approximately 600 gallons per minute; Carollo found the seepage return system to have inadequate capacity to convey both the reservoir seepage and the filter backwash flow. Carollo also reviewed the option of conveying the backwash waste to the nearest sewer. This is not a cost effective option since the new sewer would be approximately 3,000 feet in length and the existing sewers between San Joaquin Reservoir and Michelson Water Recycling Plant, as well as two sewage lift stations, would have to be upsized.

Another alternative for the backwash waste is dewatering the solids in the backwash waste and trucking to off-site disposal similar to the centrifuge operation at the Baker Plant. Due to the presence of algae in San Joaquin Reservoir, a Dissolved Air Floatation (DAF) system would be required in addition to centrifuges to separate the floating algae from the backwash waste. A DAF and centrifuge facility would be housed in a separate building, at a cost of approximately \$4.5 million. The facility would operate for only six months out of the year when water is flowing out of the reservoir and would likely require a full-time operator on site during normal work hours to monitor the process.

The recommended option for the backwash waste is conveying the waste to the back of the reservoir via a new pipeline. Returning the waste to the back of the reservoir will minimize the waste from entering the reservoir outlet valves near the front of the reservoir. Returning the backwash waste to the reservoir will likely be Phase I of filter backwash waste disposal. In the interim, staff procured ultrasonic buoys from LG Sonic that mitigate against algae growth, and these units will be deployed this month in the reservoir. The buoys use ultrasound to slow the growth of algae in the top few feet below the water surface where the algae grow in the presence of sunlight. If the buoys are successful in controlling the algae, then a Phase II may not be required. If the buoys are unsuccessful, a DAF and centrifuge facility may be needed in combination with the backwash waste return line constructed in Phase I.

The total cost of Variance No. 2 to the Carollo Professional Services Agreement is \$347,129. The cost for the additional work involving the change to a 70-micron filter screen size and researching options to dispose of or return the backwash waste to the reservoir is \$45,032. With regard to the new building, Carollo determined that an additional 68 plan sheets are required for the additional design elements resulting in a fee increase of \$302,097. The unit cost per sheet is approximately \$4,400, which staff determined to be reasonable. Variance No. 2 is shown in Exhibit "B".

FISCAL IMPACTS:

San Joaquin Reservoir Filtration, Project 10379, is included in the FY 2019-20 Capital Budget. The existing budget is sufficient to fund the additional engineering services.

Action Calendar: San Joaquin Reservoir Filtration Variance No. 2

November 25, 2019

Page 3

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 November 19, 2019.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 IN THE AMOUNT OF \$347,129 TO CAROLLO ENGINEERS FOR THE SAN JOAQUIN RESERVOIR FILTRATION, PROJECT 10379.

LIST OF EXHIBITS:

Exhibit "A" – Site Plan

Exhibit "B" - Carollo Engineers' Variance No. 2

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EXHIBIT "A"



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IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE EXHIBIT "B"

Projec	t Title: <u>San Joaquin Reservoir Filt</u> t No.: <u>10379</u> se Order No.:	ration Project	Date Vari	e: 10/4/19 ance No.: 2			
Origin	ator: [] IRWD [X] El	NGINEER/CON	SULTANT	[] Otl	ner (Expla	nin)	
Discuss modific architec	ption of Variance (attach any back ions and decisions during the Preliminary ations to the filtration facility (number of tural, and HVAC requirements, new filte al room. This has resulted in efforts outside	Design phase have filtration stages, der waste washwater	egree of filtrat	ion, capacity), and return line	a new filtra , and modif	tion building wications to the f	rith structural, filtration buildir
Engine	ering & Management Cost Impac	t:					
	Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Prelin	ninary Design	230	Varies -	\$45,032	-	-	\$45,032
Final	Design	1,625	Refer to	\$302,097	-	-	\$302,097
			attached fee				
			table.				
						Total \$ =	\$347,129
Schedu	ile Impact:			0.1.1	1		
Task	Task Description	Original S	Schedule	Schedu Varian		New Sch	iedule
3/4	Preliminary Design/ Final Design	Novemb	er 2019	+4 mon	ths	March 2	2020
Requir	ed Approval Determination:						
Total	Original Contract	\$ <u>634,888</u>	[] Directo	or: Cumulative	total of Va	riances less tha	n or equal to
Previ	ous Variances \$ 84,444		\$50,000	0.			
	Variance \$\frac{347,129}{}				Cumulative	total of Variand	es less than
		\$ 431,573		il to \$75,000.			
New	Contract Amount	\$_1,066,461		l Manager: Cu o \$100,000.	ımulative to	otal of Variance	s less than or
	ntage of Total Variances riginal Contract	68_%	[X]Board:	Cumulative to	otal of Varia	ances greater th	an \$100,000.
ENGIN	IEER/CONSULTANT: <u>Carollo E</u>	ngineers Inc	ī	DVINE DAI	NCH WA	TER DISTR	ICT
	Company Name	ngmeers, me.,	_ 1	a B	1 MA	TER DISTR	101
ame	A. Meyerboler	10/4/19	the Kan	: I Di			1/19
moject	Engineer Manager	Date 10/4/19	Departm	ent Director		Date	
Engine	er's/Consultant's Management	Date	General	Manager/Bo	oard	Date	

IRVINE RANCH WATER DISTRICT

PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: San Jo	aquin Reservoir Filtrati	on Project		
Project No.: <u>10379</u>	Project	Manager: Jim	Meyerhofer	
Variance		Date	es	Variance
No.	Description	Initiated	Approved	Amount
1	Pilot Study	10/2/19		\$84,444
2	Preliminary Design/ Final Design	10/4/19		\$347,129

B - 2



October 4, 2019

Mr. Harry Cho, P.E. Senior Engineer Irvine Ranch Water District 3512 Michelson Drive Irvine Ranch, CA 92612

Subject: San Joaquin Reservoir Filtration Project

Variance 2 Request

Dear Mr. Cho:

Discussions and decisions during the Preliminary Design phase of the San Joaquin Reservoir (SJR) Filtration Project have led to changes from the original basis of design. These changes include modifications to the filtration facility (number of filtration stages, degree of filtration, capacity), a new filtration building with structural, architectural, and HVAC requirements, new filter waste washwater return pumps and return line, and modifications to the control building electrical room. This has resulted in efforts outside the original scope of work and planned budget, described as follows.

Preliminary Design

In the RFP, IRWD identified the need to filter up to 25 cfs of SJR water to 10 microns (µm) by adding a filtration system and replacing the existing booster pumps. The RFP assumed that the new filtration system would be housed under a canopy on a concrete slab. In addition, the RFP assumed that the existing Seepage Return Pump Station and return pipeline would be used to return filter waste washwater to the reservoir.

Carollo sized and laid out a 25 cfs, two stage, 10 μ m filtration facility. Pumping requirements were established for the associated booster pumps and backwash pumps. Based on the anticipated backwash flow rates and volumes, Carollo determined that the existing Seepage Return Pump Station and return pipeline was undersized to serve this additional flow. Therefore, Carollo also sized a new filter waste washwater equalization basin, return pumps, and return pipeline.

IRWD communicated to Carollo that any additional noise resulting from the new filtration facility would be unacceptable by the neighboring community. After collecting noise data from existing facilities, Carollo recommended that the filtration system be housed in a new building to attenuate noise from the frequent backwashing of the strainers. Carollo developed a Sketchup model to reflect this revised baseline design.

As a result of discussions with District staff and equipment manufacturers, the decision was made to increase the filtration limit to 70 μ m, which is the accepted standard in the irrigation industry for misters (200 mesh screens). To accommodate this change, Carollo revised the model and pumping requirements to reflect a 25 cfs, single stage filtration facility. During this time it was discovered that the existing pump station configuration was limited to 18.5 cfs. Therefore, Carollo developed one solution that would meet the District's RFP capacity requirement (new pump station in the filtration facility) and two alternative solutions that would utilize the existing booster pump station as originally intended:

 Replace the existing pumps with higher head units of the same capacity and have a smaller screening facility.



Replace the existing pumps with higher head units and a full size screening facility, operating all 3
pumps at peak flow- no standby.

The first draft preliminary design report was submitted in June based on the above revisions.

After further discussion, the District concluded that a lower capacity system that could utilize the existing pump station would be acceptable. Therefore, Carollo revised the preliminary design based on a single stage, 18.5 cfs filtration system. Per the District's request, Carollo also investigated the concept of returning filter waste washwater with reservoir inflow by analyzing historical data. This method was determined to be infeasible. The preliminary design report was revised based on the following District decisions:

- Operate pumps in a 2 duty + 1 standby configuration, where the net flow delivered is 18.5 cfs during normal filtration and less (14.5 cfs) during a backwash cycle
- Utilize existing pump room in Control Building
- Ultimate capacity will not increase beyond 18.5 cfs gross
- Ultimate degrees of filtration will not decrease (70 micron)
- Abandon concept of returning filter waste washwater with reservoir inflow
- Enlarge electrical room to accommodate new booster pump VFDs

The revised draft preliminary design report was submitted in August.

Final Design

As described above, the recommended project is more complex than originally envisioned. The added project complexity is driven by the requirement for a new building instead of a canopy to eliminate noise concerns. Design of a new building will require additional effort from a structural, architectural, and HVAC perspective. In addition to the new building, a new filter waste washwater equalization basin and return pipeline are required. Lastly the electrical modifications (enlarging the existing electrical room) have become more complex than originally anticipated.

Our estimated effort to complete the additional scope described above is attached to this letter as Exhibits A.1 and A.2. We have also included IRWD's Professional Services Variance as Exhibit C. We appreciate your consideration in approving the requested variance issued.

Sincerely,

CAROLLO ENGINEERS, INC.

Jim Meyerhofer, PE

Enclosures: Budget Tables, Scope of Work (Exhibits A.1 & A.2)

Professional Services Variance (Exhibit C)

B - 4 carollo.com

Irvine Ranch Water District San Joaquin Reservoir Filtration Project Estimated Fee - Preliminary Design

Exhibit A.1

TASK	Project Manager Meyerhofer	Project Engineer Ottoboni	White	Murphy	Gatney	Нејка	Davis	Slattery	Tech	Word Processing	Carollo Task Hours	Carollo Labor Cost	Other Direct Costs	Total Project Cost
	\$233.00	\$205.00	\$233.00	\$170.00	\$233.00	\$170.00	\$233.00	\$233.00	\$175.00	\$126.00				
Task 3 - Preliminary Design		24	24	74	24	24	8	36		16	230	\$ 45,032.00	-	\$ 45,032.00
Task Subtotal	0	24	24	74	24	24	8	36	0	16	230	\$ 45,032.00	\$ -	\$ 45,032.00

Irvine Ranch Water District San Joaquin Reservoir Filtration Project Estimated Fee - Final Design

Exhibit A.2

ORIGINAL FINAL DESIGN ESTIMATED FEE

TASK	WORK ELEMENT	Project Manager Meyerhofer	Project Engineer Bundy	Murphy	Goddard	Rasmus	Hedlund	Doering	White	Roquebert	Weishaar	Technician	Word Processing	Carollo Task Hours	Carollo Task Subtotal	Other Direct Costs	Total
		\$ 2	33 \$ 20	5 \$ 170	\$ 170	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 205	\$ 175	\$ 126				
3	Final Design																
3.1	Project Manual	2	8	8	4		8	4	8	4	2	16	16	80	\$ 14,964	\$ -	\$ 14,964
3.2	Construction Plans													0	\$ -	\$ -	\$ -
3.2.1	60% Design	16	60	80	24			40				306	16	542	\$ 98,594	\$ 750	\$ 99,344
3.2.2	90% Design	8	60	80	8			22				250	16	444	\$ 80,016	\$ 750	\$ 80,766
3.2.3	100% Design	8	60	80	4			22				112	40	326	\$ 58,210	\$ 750	\$ 58,960
3.2.4	Final Design	2	56	36	2			12				74	40	222	\$ 39,192	\$ 750	\$ 39,942
3.3	Electrical/Instrumentation Design		20	80			140					168		408	\$ 79,720	\$ -	\$ 79,720
3.3.1	SCE Final Service Plan		16				24							40	\$ 8,872	\$ -	\$ 8,872
3.4	Construction Phasing		16	16										32	\$ 6,000	\$ -	\$ 6,000
3.5	Permits		8			40								48	\$ 10,960	\$ -	\$ 10,960
3.6	Project Schedule	2	16											18	\$ 3,746	\$ -	\$ 3,746
3.7	Opinion of Probable Construction Costs	2	8						40					50	\$ 11,426	\$ -	\$ 11,426
	TASK HOURS	40	328	380	42	40	172	100	48	4	2	926	128	2,210			
	TASK COST	\$ 9,3	20 \$ 67,24	0 \$ 64,600	\$ 7,140	\$ 9,320	\$ 40,076	\$ 23,300	\$ 11,184	\$ 932	\$ 410	\$ 162,050	\$ 16,128		\$ 411,700	\$ 3,000	\$ 414,700

REVISED FINAL DESIGN ESTIMATED FEE

		5	10								Electrical I/C			Structural and	Architectural		Civ	il	HVAC and	d Plumbing					
TASK	WORK ELEMENT	Project Manage	Project Engine	Murphy	Goddard	Rasmus	White	Technician	Word Processing	Hedlund	Slattery	Sr. Engineer	Structural Engineer	Sr. Engineer	Architect	Technician	Civil Engineer	Technician	Civil Engineer	Technician	Carollo Task Hours	Subcontractor Task Hours	Total Task Hours	Other Direct Costs	Total
		\$	233 \$	205 \$	170 \$ 1	70 \$ 233	\$ 233	\$ 175	\$ 126	\$ 233	\$ 205	\$ 170	\$ 233	\$ 164	\$ 165	\$ 130	\$ 205	\$ 156	\$ 175	\$ 126					
3	Final Design																								
3.1	Project Manual	2	40					16	16	8	8										90	0	90	\$ -	\$ 16,986
3.2	Construction Plans																				0	0	0	\$ -	\$ -
3.2.1	60% Design	16	300	40	16		96	206	16				80	80	40	140	160	80	20	30	690	630	1,320	\$ 750	\$ 245,052
3.2.2	90% Design	8	200	20			42	150	16				28	30	20	60	40	40	10	20	436	248	684	\$ 750	\$ 126,320
3.2.3	100% Design	8	160	20			42	112	12				20	21	10	40	40	24	10	10	354	175	529	\$ 750	\$ 99,620
3.2.4	Final Design	2	56				42	74	12				20	20	10	40	30	20	10	10	186	160	346	\$ 750	\$ 64,014
3.3	Electrical/Instrumentation Design							269	34	49	159	135									646	0	646	\$ -	\$ 118,321
3.3.1	SCE Final Service Plan		16							24											40	0	40	\$ -	\$ 8,872
3.4	Construction Phasing		16																		16	0	16	\$ -	\$ 3,280
3.5	Permits		40			40															80	0	80	\$ -	\$ 17,520
3.6	Project Schedule	2	16																		18	0	18	\$ -	\$ 3,746
3.7	Opinion of Probable Construction Costs	2	8				40				8										58	8	66	\$ -	\$ 13,066
		ASK HOURS 40	852	80	16	40	262	827	106	81	175	135	148	151	80	280	270	164	50	70	2,614	1,221	3,835		
		TASK COST \$ 9	,320 \$ 174,	560 \$ 13	3,600 \$ 2,7	20 \$ 9,320	\$ 61,046	\$ 144,725	\$ 13,356	\$ 18,873	\$ 35,875	\$ 22,950	\$ 34,484	\$ 24,764	\$ 13,200	\$ 36,400	\$ 55,350	\$ 25,584	\$ 8,750	\$ 8,820				\$ 3,000	\$ 716,797

November 25, 2019

Prepared by: I. Swift / J. Zepeda Submitted by: W. Chambers Approved by: Paul A. Cook

ACTION CALENDAR

TURTLE RIDGE NATURAL TREATMENT SYSTEM FACILITY SEDIMENT REMOVAL CONTRACT AWARD

SUMMARY:

IRWD's Turtle Ridge Natural Treatment System (NTS) facility requires sediment removal to increase water storage volume and remove accumulated pollutants. Staff recommends that the Board authorize the General Manager to execute a contract with New Dimension General Construction, Inc. in the amount of \$158,800 for sediment removal at the Turtle Ridge NTS facility.

BACKGROUND:

The Turtle Ridge NTS facility was constructed in 2006 and began receiving urban runoff in early 2008. As part of the routine maintenance of this facility, small amounts of sediment are removed from the inlet structure. The sediment is tested annually to monitor pollutant levels. Within the NTS pond and the channel, sediment will accumulate until the sediment removal work is initiated. With approximately 11 years' worth of sediment accumulated in the Turtle Ridge NTS pond and channel, the water storage capacity has been reduced. This reduced storage capacity has decreased the residence time of the urban runoff as it flows through the facility, thereby impairing the facility's ability to remove pollutants from the water. Staff has determined that this sediment removal project is now needed to restore the effectiveness of this facility.

Construction Bid Process:

Staff issued a Request for Proposal (RFP) for sediment removal and received bids from five contractors as listed below.

Contractors	Bids
New Dimension General Construction,	\$158,800
Downstream Services, Inc.	\$163,613
Paulus Engineering	\$204,600
CJW Construction	\$384,000
SOL Construction, Inc.	\$415,800

New Dimension General Construction, Inc. was the apparent low bidder with a bid of \$158,800. A copy of New Dimension's bid proposal is attached as Exhibit "A". New Dimension will remove the sediment from the facility and will deliver the material to IRWD's operations yard. Staff will determine final disposal options. Staff will also work with the contractor to ensure the city streets are not impacted by the hauling operations. Based on IRWD's experience with this firm, staff recommends awarding the contract to New Dimension General Construction, Inc.

Action Calendar: Turtle Ridge Natural Treatment System Facility Sediment Removal Contract

Award

November 25, 2019

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FISCAL IMPACTS:

Sufficient funds are included in the Fiscal Year 2019-2020 Operating Budget.

ENVIRONMENTAL COMPLIANCE:

The sediment removal activities performed under this contract will be in accordance with provisions of the NTS Master Plan and Environmental Impact Report. In addition, these actions are considered routine maintenance and not a "project" under the California Environmental Quality Act.

COMMITTEE STATUS:

Construction contract awards are not typically submitted to a Committee.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A CONTRACT WITH NEW DIMENSION GENERAL CONSTRUCTION IN THE AMOUNT OF \$158,800 FOR SEDIMENT REMOVAL AT THE TURTLE RIDGE NATURAL TREATMENT SYSTEM FACILITY.

LIST OF EXHIBITS:

Exhibit "A" – Bid proposal from New Dimension



License 865303

office 714.492.5929 719.5 Monroe Way, Placentia, CA 92870

EXHIBIT "A"

Proposal

Dir Reg # 1000003878

Date	Estimate #
9/25/2019	3482

Name / Address

Irvine Ranch Water District 3512 Michelson Dr Irvine, Ca 92612 Location

Turtle Ridge NTS Basin C/L Shady Canyon Drive Irvine, CA

Description	Qty	Cost	Total
Material and Labor Supplied by New Dimension to:	1	158,800.00	158,800.00
 Excavate 3,000 cubic yards of sediment at or below the toe line. Sediment shall be dumped at IRWD's dump yard. Remove two concrete aerator vaults from pond with crane. Reinstall after work is completed. IRWD will remove aerators prior to excavation. Provide traffic control per Section III. Safety and Regulatory Requirements below, on both pedestrian sidewalk and roadway. This should be scheduled a minimum of two weeks before work begins. Work shall commence following the end of nesting season (September 15th) and be completed prior to beginning of the rainy season. No work shall be conducted during an active rain event. 			
Work Schedule Time Line: 4-6 weeks			
*Duration of project can vary due to silt conditions and weather			
Equipment List:			
1. Track Bobcat 2. Mini Excavator 3. Extended Reach Excavation 4. Wheel Loader 5. Super Ten Sump Trucks *Note: Equipment used onsite can vary depending on site conditions but will not be anything other than what is listed.		<i>y</i>	
	Т	otal	\$158,800.00

Acceptance Signature

Date

Note: This page is intentionally left blank.

November 25, 2019 Prepared by: K. Welch

Submitted by: F. Sanchez / P. Weghorst

. Cook.

Approved by: Paul A. Cook

ACTION CALENDAR

REVISED TERMS FOR A 4-FOR-1 PILOT EXCHANGE PROGRAM WITH MOJAVE WATER AGENCY

SUMMARY:

Staff has worked with Mojave Water Agency to update the terms for the pilot exchange program to allow Mojave to bank its State Water Project (SWP) water before the end of 2021. If IRWD and Mojave approve an exchange agreement when the initial SWP allocation is below 25% at the beginning of the year, then it is likely that Department of Water Resources (DWR) will approve the 4-for-1 exchange program. Staff recommends that the Board authorize the General Manager to execute a 4-for-1 pilot exchange letter agreement and a side agreement to compensate Mojave for the water delivered into storage that incorporates the proposed updated terms, both subject to substantive changes approved by the Supply Reliability Programs Committee or subject to non-substantive changes.

BACKGROUND:

Mojave is an SWP Contractor that currently has Table A water supplies in excess of its demands. These supplies also exceed the storage capacity of Mojave's water banking capacities that were developed through its Mojave Basin Conjunctive Use Program. On March 11, 2019, the IRWD Board authorized the General Manager to execute a letter agreement with Mojave to implement a 4-for-1 pilot exchange and a side agreement to compensate Mojave for SWP exchange water delivered into storage. The pilot exchange was executed but not implemented because IRWD and Mojave had approved the exchange *after* DWR had increased the SWP allocation to 70%. DWR requires that the SWP allocation that is in place at the time when a 4-for-1 exchange program agreement is executed be less than 25%.

Staff has worked with Mojave to update the terms for the exchange so that Mojave could bank its SWP supplies in IRWD's water bank prior to the end of 2021. If IRWD and Mojave approve an exchange agreement based on the updated terms at the beginning of 2020 (when the initial SWP allocation could be below 25%), then it is likely that DWR will approve the 4-for-1 exchange program.

Proposed Exchange Program Terms:

The proposed updated terms provided as Exhibit "A" are substantially the same as those previously approved with Mojave. The revisions from the previously approved terms are shown as tracked changes in red. Revisions include some clarifications requested by DWR as it relates to Metropolitan Water District of Southern California's role in the exchange of SWP water on behalf of IRWD. The terms also reflect a delivery schedule of water through the end of 2021.

Action Calendar: Revised Terms for a 4-for-1 Pilot Exchange Program with Mojave Water

Agency

November 25, 2019

Page 2

Through this proposed pilot program, IRWD would receive three acre-feet (AF) for every four AF of SWP water that Mojave delivers into storage at IRWD's water bank, with Mojave receiving compensation for the water through a separate agreement. The terms would allow Mojave, at its discretion, to deliver up to 20,000 AF of SWP Table A water to IRWD's water bank through the end of 2021.

Mojave would be able to deliver water into IRWD's water bank only if recharge capacity is available after IRWD completes the recharge of water available from its other exchange programs. In this way, IRWD retains its discretion as to whether Mojave can deliver water to IRWD's water bank. Within 10 years, IRWD would return 25% of the water to Mojave through the use of the IRWD's water bank wells (or alternatively through exchanges). The water would be returned when requested by Mojave on a second priority basis, with IRWD retaining first priority. The revised terms reflect that IRWD would return water to Mojave at an annual rate of no more than one-third of the amount delivered into storage that is allocated to Mojave. Mojave could request to recover more water should IRWD determine that capacity is available.

FISCAL IMPACTS:

IRWD proposes to compensate Mojave in the amount of \$177 per AF for the SWP water it delivers into storage at IRWD's water bank. In addition, IRWD proposes to pay the costs associated with recharging the water and the costs of recovering Mojave's share of the water through the use of IRWD's water bank wells. Mojave would pay for all costs associated with the use of its capacities in the SWP to deliver water for recharge and to convey recovered return water to Mojave's service area. The effective cost of the water to IRWD would be consistent with the cost of water from IRWD's programs in Dudley Ridge. The source of funds for providing the \$177 per AF compensation would be IRWD's over-allocation revenue.

ENVIRONMENTAL COMPLIANCE:

Final Environmental Impact Reports for the Strand Ranch and Stockdale Integrated Banking Project were prepared, certified and approved 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. Rosedale-Rio Bravo Water Storage District, as lead agency, filed Notice of Determinations for both the Strand Ranch and Stockdale Integrated Banking Projects with the County of Kern. IRWD, as a responsible agency, filed Notice of Determinations with the County of Orange and with the County of Kern.

COMMITTEE STATUS:

This item was reviewed by the Supply Reliability Programs Committee on November 21, 2019.

Action Calendar: Revised Terms for a 4-for-1 Pilot Exchange Program with Mojave Water

Agency

November 25, 2019

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RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE A 4-FOR-1 PILOT EXCHANGE LETTER AGREEMENT AND A SIDE AGREEMENT TO COMPENSATE MOJAVE WATER AGENCY FOR THE WATER DELIVERED INTO STORAGE THAT INCORPORATES THE PROPOSED EXCHANGE AND COMPENSATION TERMS, BOTH AGREEMENTS SUBJECT TO SUBSTANTIVE CHANGES APPROVED BY THE SUPPLY RELIABILITY PROGRAMS COMMITTEE OR SUBJECT TO NON-SUBSTANTIVE CHANGES.

LIST OF EXHIBITS:

Exhibit "A" – Proposed Revised Terms for a 4-for-1 Pilot Exchange Program between Irvine Ranch Water District and Mojave Water Agency

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Exhibit "A"

Terms for a 4-For-1 Pilot Exchange Program Between Irvine Ranch Water District and Mojave Water Agency November March XX5, 2019

Parties	The Irvine Ranch Water District (IRWD) and the Mojave Water Agency (Mojave)
State Contractors	Mojave Water Agency (Mojave) has a long-term water supply contract with the Department of Water Resources (DWR) that permits MWA to receive water supply, storage and conveyance services from the State Water Project (SWP). Metropolitan Water District of Southern California (Metropolitan) has a long-term water supply contract with the DWR. IRWD receives SWP supplies from Municipal Water District of Orange County, a member unit of Metropolitan.
Description	IRWD and Mojave would implement a Pilot Exchange Program (Exchange Program) that would allow Mojave to schedule and deliver unused excess State Water Project (SWP) water to Metropolitan on IRWD's behalf on a 4-to-1 exchange ratio basis. As part of the exchange, the water may be temporarily managed in into storage at IRWD's Strand and Stockdale Integrated Banking Projects (IRWD Water Bank) on a 4-to-1 exchange ratio basis. The Exchange Program would manage unused SWP supplies for water is available to Mojave and would provide increased water supply for both Mojave and Metropolitan including IRWD as a sub-agency of Metropolitan. through its existing SWP Contract with the Department of Water Resources (DWR). Recharge and recovery facilities at both the Strand Ranch and Stockdale Integrated Banking Projects could be used to deliver water in and out of storage at the IRWD Water Bank.
Term	Ten years from the <u>effective</u> date <u>of the Exchange Program Agreement</u> . <u>that Mojave's water is delivered into storage in the IRWD Water Bank under the Exchange Program</u> . Delivery of the water into storage would be accomplished prior to the end of calendar year 20210. Upon mutual agreement, the term may be extended as described under Return Water below.
IRWD's Water Bank	The IRWD Water Bank, located in Kern County, is owned by IRWD and operated by Rosedale-Rio Bravo Water Storage District (Rosedale). IRWD holds first priority rights to the use of the recharge and recovery facilities except for when the Kern River Watermaster offers water to all takers willing to sign a notice/order or the Kern River Watermaster offers Kern River water to the California Aqueduct/Kern River Intertie. Under such conditions, Rosedale has first priority right to the use of the recharge facilities.
Quantity	Up to 20,000 acre-feet (AF) of Mojave's SWP water supplies may be delivered to Metropolitan at the IRWD Water Bank for storage. The storage account balance to be allocated to Mojave would be equal to twenty-five percent (25%) of the amount of water delivered into storage (i.e., if 20,000 AF is delivered, 5,000 AF will be owed to Mojave Water Agency in return). Seventy-five percent (75%) of the water delivered into storage would be available deemed transferred to Metropolitan and IRWD at the time the water has been recharged at the IRWD Water Bank.

Exchange Water	Mojave expects to supply the specified Quantity of its SWP water supplies to the IRWD Water Bank by the end of 2021 When the SWP allocation is equal to or greater than 65% (or less at Mojave's discretion), Mojave will notify IRWD of its intent to schedule and deliver up to 20,000 AF of SWP water (Exchange Water), to the IRWD Water Bank. The Parties would cooperate in scheduling the Exchange Water deliveries with deliveries associated with other IRWD exchange programs. The recharge of Exchange Water would be subject to available recharge capacity, as well as provisions of IRWD's Coordinated Operating, Water Storage, Exchange and Delivery Agreement with Metropolitan and the Municipal Water District of Orange County (Coordinated Agreement). Mojave shall schedule delivery of Exchange Water for recharge at the IRWD Water Bank during times when IRWD determines that recharge capacity is available. Within 30 days of DWR's approval of Mojave's delivery schedule, Mojave shall prepare an invoice for compensation by IRWD in an amount per AF as defined under separate agreement between the Parties.
Return Water	Water shall be returned, when requested by Mojave by the end of the tenth calendar year after the delivery of Exchange Water. When the first year occurs with a final SWP allocation equal to or less than 25%, Mojave will notify IRWD of its request to take delivery of all or a portion of its share of the Exchange Water (Return Water). Returns from the IRWD Water Bank would be at an annual rate of no more than one-third of the amount delivered into storage allocated to Mojave, after losses and not to exceed 1,650 AF per year. IRWD may allow Mojave to recover more water in a year, should IRWD determine that the use of additional recovery capacity by Mojave would not infringe on IRWD's ability to recover water for itself and/or IRWD's other partners. The Return Water delivered to Mojave shall be by Water will occur by recovery and exchange of water from the IRWD Water Bank with subsequent delivery through the Cross Valley Canal (CVC) and California Aqueduct or shall be from Metropolitan's future approved SWP Table A water. IRWD shall use its first priority recovery well capacity in the IRWD Water Bank to recover Return Water for Mojave after meeting IRWD's own water supply needs. Mojave's Return Water may not remain in storage beyond the end of the tenth calendar year after the delivery of water into storage in the IRWD Water Bank. Upon mutual agreement, the Term of this Exchange Program may be extended for an additional 10 years or up to the current term of Mojave's contract with DWR, whichever is shorter, should the return water not be returned for reasons such as hydrologic conditions, allocation percentages, capacity/conveyance limitations, economic hardships, health and safety issues, etc.
Quality	The quality of Exchange Water and Return Water will be limited as follows: If and to the extent that either party delivers water to and into the California Aqueduct, the quality of water shall meet the water quality standards established by DWR for pump-in to the California Aqueduct.
Delivery Points	Mojave will deliver Exchange Water to the IRWD point of delivery (IRWD POD) which will be the Strand Ranch and/or Stockdale West Turnouts on the CVC, other Rosedale diversion locations as specified by Rosedale, or as directed by Metropolitan Water District of Southern California (Metropolitan). IRWD will use IRWD Water Bank wells to extract Return Water for delivery to the pump-in location at Reach 12E of the California Aqueduct. Mojave shall coordinate with DWR for delivery to the

	Mojave point of delivery (Mojave POD) which will be Check 22B_of the California Aqueduct or to another delivery point as determined by Mojave.
Losses	IRWD will assume all water banking losses.
Recharge Costs	IRWD will pay all costs assessed to IRWD by Rosedale for recharging water at the IRWD Water Bank. These costs may include Rosedale's administrative charge, charges assessed by the Kern County Water Agency (KCWA), Cross Valley Canal (CVC) Standby, applicable CVC pumping and O&M costs, and applicable fixed and variable O&M Water Bank costs. Costs are assessed by Rosedale consistent with that certain Water Banking and Exchange Program Agreement between Rosedale and IRWD dated January 13, 2009. These estimated costs may include Rosedale's administrative charge of about \$3 per acre-foot (AF), charges assessed by the Kern County Water Agency (KCWA) of \$5 per AF, CVC Standby, applicable CVC pumping and O&M costs of about \$12 per AF, and applicable fixed and variable O&M Water Bank costs of about \$3 per AF.
Recovery Costs	IRWD will pay actual costs to recover Return Water from the IRWD Water Bank through pumping of IRWD Water Bank wells or by exchange as assessed by Rosedale. Recovery costs associated with extraction are estimated at \$79 per AF and are comprised of average groundwater pumping costs of \$68 per AF, These costs may include Rosedale's administrative charge of about \$3 per AF, pumping costs, charges assessed by the KCWA, CVC Standby, O&M, and applicable CVC pumping costs of about \$4 per AF, and applicable fixed and variable O&M Water Bank costs of about \$4 per AF. IRWD will also pay any costs assessed by Rosedale under its Long Term Operations Plan for implementing provisions of the MOUs to prevent impacts from operations. It is expected that banking projects, such as the IRWD Water Bank, may be required to contribute \$2.00 per AF for recovered water to a fund, which may be used to meet mitigation obligations.
SWP Costs	Metropolitan will pay all DWR Variable Operation, Maintenance, Power, and Replacement (OMP&R) charges estimated at \$30 per AF associated with the delivery of Exchange Water to IRWD POD consistent with the Coordinated Operating, Water Storage, Exchange and Delivery Agreement dated April 21, 2011. For delivery of Return Water to Mojave POD, Mojave will pay all DWR Variable OMP&R charges from the pump-in location at Reach 12E to Mojave Water Agency's turnout at Reach 22B.
Agency Coordination	IRWD and Mojave would cooperate with DWR, KCWA and Metropolitan in preparing all necessary agreements to facilitate the Exchange Program. IRWD and Mojave shall each be responsible for their own costs associated with such coordination.

Environmental Compliance	Both parties shall comply with California Environmental Quality Act (CEQA) and cooperate with one another with respect to CEQA compliance that may be required by the DWR for the proposed Exchange Program. IRWD has already conducted environmental review under CEQA for the Strand and Stockdale Integrated Banking Projects that takes into consideration the delivery, storage and recovery of SWP water. Rosedale certified and IRWD and approved the CEQA documents for the Strand and Stockdale Integrated Banking Projects. Corresponding Notices of Determinations were filed by both Rosedale and IRWD. IRWD and Mojave will share equally any additional costs associated with environmental review or permitting deemed necessary for delivering Mojave water into storage (however, none are expected). Both IRWD and Mojave shall each be responsible for any other environmental review or permitting necessary to implement the Exchange Program within their own respective service areas.	
Water Rights	It is expressly agreed, understood, and acknowledged by IRWD and Mojave that any existing or future delivery of Exchange Water to the IRWD Water Bank by Mojave will not result in or be considered a sale or transfer of Mojave's contractual rights to SWP water or a sale or transfer of IRWD's ownership in the IRWD Water Bank.	
General Expenses	Each Party would be responsible for its own fees and expenses arising out of the negotiation and execution of the Exchange Program Agreement, obtaining necessary approvals, and the like.	

November 25, 2019

Prepared by: R. Bennett / K. Welch Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul A. Cook

ACTION CALENDAR

AMENDMENTS TO LANDOWNER AND PLANNING AGREEMENTS FOR COMPLIANCE WITH SUSTAINABLE GROUNDWATER MANAGEMENT ACT

SUMMARY:

In 2017, the Kern Groundwater Authority (KGA) was formed in pursuit of compliance with the requirements of the Sustainable Groundwater Management Act (SGMA). Rosedale-Rio Bravo Water Storage District is a member of KGA and has prepared a draft chapter of KGA's Groundwater Sustainability Plan (GSP) that will cover Rosedale's service area. In March 2019, the IRWD Board approved two agreements with Rosedale: 1) a Landowner Agreement that would provide SGMA coverage for IRWD's Kern County water banking properties by incorporation into Rosedale's chapter of the GSP, and 2) a Planning Agreement that would limit IRWD from selected parts of the Landowner Agreement.

Due to recent jurisdictional changes in Kern County, KGA is requesting that all undistricted landowners execute Amendment No. 1 to the Landowner Agreement that will increase the landowners' indemnity obligations and limit their ability to contest the actions of agencies with jurisdiction. IRWD's special legal counsel, Kronick, Moskovitz, Tiedemann & Girard (KMTG), has been working with other undistricted landowners and Rosedale's legal counsel to prepare Amendment No. 1 to the Landowner Agreement. In addition, KMTG has drafted the First Amended Planning Agreement to be consistent with Amendment No. 1 to the Landowner agreement. Staff recommends that the Board authorize the General Manager to execute Amendment No. 1 to the Landowner Agreement and the First Amended Planning Agreement, subject to substantive changes approved by IRWD's legal counsel and the Supply Reliability Programs Committee or subject to non-substantive changes.

BACKGROUND:

In September 2014, Governor Brown signed three bills that comprised SGMA: SB 1168, AB 1739, and SB 1319. SGMA requires local and regional agencies to develop and implement sustainable groundwater management plans through the formation of Groundwater Sustainability Agencies (GSAs). KGA, which includes Rosedale and 12 other agencies, was formed as a local GSA to comply with SGMA. KGA agencies must provide SGMA coverage within their respective agency boundaries. By default, the County of Kern has SGMA jurisdiction over undistricted (also known as "white space") areas.

SGMA Coverage for IRWD Lands:

IRWD's Strand and Stockdale West properties are located outside of Rosedale's boundary and are considered undistricted within the Kern County Sub-basin. Unless undistricted lands are extended SGMA coverage through a GSP, the lands would by default fall within the County of Kern's jurisdiction for SGMA purposes. Rosedale offered to provide SGMA coverage for

Action Calendar: Amendments to Landowner and Planning Agreements for Compliance with Sustainable Groundwater Management Act

November 25, 2019

Page 2

undistricted landowners, including IRWD's Strand and Stockdale West properties, by including these areas within its chapter of the Kern Groundwater Authority's GSP.

On March 11, 2019, the IRWD Board authorized the General Manager to execute two agreements with Rosedale. The Landowner Agreement, which is included as Exhibit "A", allows IRWD's Strand and Stockdale West properties to be included within Rosedale's chapter of the GSP. The Planning Agreement limits selected parts of the Landowner Agreement that are not appropriate for IRWD's water banking properties.

Amendment No. 1 to the Landowner Agreement:

In April 2019, the County of Kern withdrew from its responsibility over the undistricted areas. In response to this withdrawal, the Kern County Water Agency (KCWA) agreed to be the jurisdictional authority for undistricted lands within Kern County. In accepting this authority, KCWA is requiring that all members of KGA, including owners of undistricted lands that have signed the Landowner Agreement, provide additional indemnifications and a covenant not to sue or contest.

In September 2019, staff reviewed with the Supply Reliability Programs Committee and the Board a proposed replacement to the original Landowner Agreement that would accommodate KCWA's requirement. Since that time, KGA has decided to amend rather than replace the Landowner Agreement. At the request of various undistricted landowners including IRWD, KGA, and Rosedale, the proposed Amendment No. 1 to the Landowner Agreement, which is provided as Exhibit "B", includes the following provisions:

- A limit to the indemnifications and covenant not to sue;
- A revision that specifies when a landowner can withdraw from the GSP; and
- The ability to terminate the agreement in the event of adjudication.

Rosedale's Board has approved Amendment No. 1 to the Landowner Agreement.

First Amended Planning Agreement:

To provide consistency with Amendment No. 1 to the Landowner Agreement, KMTG drafted the First Amended Planning Agreement to replace the original Planning Agreement and reference both the original and amended Landowner Agreements. The First Amended Planning Agreement is provided as Exhibit "C".

Rosedale has stated that the finalization and execution of the Amendment No. 1 to the Landowner Agreement is time sensitive. Staff recommends that the Board authorize the General Manager to execute Amendment No. 1 to the Landowner Agreement and the First Amended Planning Agreement, subject to substantive changes approved by IRWD's legal counsel and the Supply Reliability Programs Committee or subject to non-substantive changes.

Action Calendar: Amendments to Landowner and Planning Agreements for Compliance with Sustainable Groundwater Management Act
November 25, 2019
Page 3

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Supply Reliability Programs Committee on November 21, 2019.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE AMENDMENT NO. 1 TO THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT MANAGEMENT AGREEMENT WITH ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT AND THE FIRST AMENDED GROUNDWATER SUSTAINABILITY PLANNING AGREEMENT BETWEEN ROSEDALE RIO BRAVO WATER STORAGE DISTRICT AND IRVINE RANCH WATER DISTRICT, SUBJECT TO SUBSTANTIVE CHANGES APPROVED BY IRWD'S LEGAL COUNSEL AND THE SUPPLY RELIABILITY PROGRAMS COMMITTEE OR SUBJECT TO NON-SUBSTANTIVE CHANGES.

LIST OF EXHIBITS:

- Exhibit "A" Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District
- Exhibit "B" –Amendment No. 1 to Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District
- Exhibit "C" –First Amended Groundwater Sustainability Planning Agreement between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District

Note: This page is intentionally left blank.

EXHIBIT "A"
Jon Lifquist, Assessor – Recorder
Kern County Official Records

Recorded at the request of **Public**

RODRIGUS 4/02/2019 8:25 AM

RECORDING REQUESTED BY AND WHEN RECORDED, MAIL TO:

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT P.O. Box 20820 Bakersfield, CA 93390-0820

Public				
DOC#:	219035748	Stat Types: 1	Pages:	;
		Fees Taxes Others PAID	0.00 0.00 0.00 \$0.00	

SPACE ABOVE THIS LINE FOR RECORDER'S USE

RECORDING FOR THE BENEFIT OF A GOVERNMENT AGENCY NO FEE PURSUANT TO CA. GOV'T CODE SECTION 6103

Kern County APN's: 160-010-02; 160-010-07; 160-010-21; 160-010-22; 160-010-60; 160-020-12; 160-020-23

MEMORANDUM OF AGREEMENT

Sustainable Groundwater Management Act Management
Agreement with
Rosedale-Rio Bravo Water Storage District

This Memorandum of Agreement - Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District ("Agreement") is made and entered into this March 28, 2019, by and among the Rosedale-Rio Bravo Water Storage District, ("District") and the landowner identified by its name and signature below ("Landowner"). District and Landowner are sometimes each individually referred to herein as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, Landowner is an owner of certain real property in Kern County, California ("Landowner Land"), which property is generally identified by its Kern Assessor's Parcel Number(s) listed above and along with the Landowner's signature on this document, and which property is located outside of the District's boundaries.

WHEREAS, Landowner desires the District's assistance with respect to compliance with the Sustainable Groundwater Management Act ("SGMA");

WHEREAS, District has entered into a Sustainable Groundwater Management Act Management Agreement (dated May 31, 2018 and recorded on September 13, 2018 in the official records of Kern County as Document No. 000218120706) with several other landowners whose land is also located outside of the District's boundaries and who also desire the District's assistance with respect to SGMA compliance;

WHEREAS, District and Landowner desire to execute this Memorandum of Agreement, which is to be recorded in the official records of Kern County, in order that third parties may have notice of the respective rights and obligations of the District and Landowner with respect to SGMA compliance and the Landowner Land.

NOW, THEREFORE, in consideration of the foregoing Recitals and all of the terms and conditions of the above-referenced *Sustainable Groundwater Management Act Management Agreement*, it is agreed by and between the Parties as follows:

I. PURPOSE OF AGREEMENT

As set forth more fully in the Sustainable Groundwater Management Act Management Agreement, the Parties enter into this Memorandum of Agreement solely for the purpose of providing the Landowner a process to attempt to comply with SGMA through the inclusion of the Landowner Lands within the District's GSP Chapter. Neither the District nor any landowners within the District's current boundaries are committing anything to the Landowner Land except for the inclusion of the Landowner Land within the District's GSP Chapter, provided that all Landowners comply with the terms of the Sustainable Groundwater Management Act Management Agreement. Said agreement is intended to form the basis of the Parties' understanding regarding the terms and conditions of including the Landowner Land within the District's GSP Chapter, and their individual rights and responsibilities subsequent to such inclusion. Concurrently with entering into this Memorandum of Agreement, the Parties also have entered into a related Groundwater Sustainability Planning Agreement dated March 28, 3019 ("Planning Agreement") that confirms the Parties' intent for the GSP Chapter to be consistent with certain water banking project agreements and SGMA.

II. INCORPORATION OF AGREEMENT BY REFERENCE

All of the terms, conditions, provisions and covenants in the Sustainable Groundwater Management Act Management Agreement identified above are incorporated into this Memorandum of Agreement by reference as though written out at length herein. In the event of any inconsistency between the provisions of this Memorandum of Agreement and those of the Sustainable Groundwater Management Act Management Agreement, the provisions of the Sustainable Groundwater Management Act Management Agreement shall control. Copies of the Sustainable Groundwater Management Act Management Agreement are held by both Landowner and the District at their respective addresses. The Parties hereby acknowledge, agree to, and accept all of the terms, conditions, provisions and covenants in the Sustainable Groundwater Management Act Management Agreement identified above.

[SIGNATURES AND PROPERTY IDENTIFICATION ON THE FOLLOWING PAGE]

IRVINE RANCH WATER DISTRICT

APNs: 160-010-02; 160-010-07; 160-010-21; 160-010-22; 160-010-60;

160-020-12; 160-020-23

Signature

/By: Paul A. Cook, General Manager

Name and Title

15 MMCH 2019

Date

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT:

Signature

By: Eric Averett, General Manager

Name and Title

Date

ACKNOWLEDGEMENT

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

State of California)
County of Orange)

On March 5, 2019, before me, Leslie Bonkowski, a Notary Public, personally appeared Paul A. Cook, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature

COMM. # 2243633
OVERNOTARY PUBLIC - CALIFORNIA OF COMM. EXPIRES JUNE 19, 2022

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.		
State of California County of Kern		
On March 28, 2019, before me, Megan Misura (a Notary Public, personally appeared Eric Averett		
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument		
the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.		
I certify under PENALTY OF PERJURY under the laws of State of California that the foregoing paragraph is true and correct.		
MEGAN MISURACA Commission # 2124890 Notary Public - California Kern County My Comm. Expires Sep 23, 2019 WITNESS my hand and official seal.		
PLACE NOTARY SEAL ABOVE SIGNATURE Megon Wywrold PLACE NOTARY SEAL ABOVE		
Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.		
Description of attached document		
Title or type of document: Memorandum of Haveement- SGMA-IRvine Ranch.		
Document Date: March 28, 2019 Number of Pages: 43		

Signer(s) Other than Named Above: Paul Cook

GROUNDWATER SUSTAINABILITY PLANNING AGREEMENT

BETWEEN ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT AND IRVINE RANCH WATER DISTRICT

THIS GROUNDWATER SUSTAINABILITY PLANNING AGREEMENT ("Agreement") is made and entered into as of the Effective Date by and between the ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT ("Rosedale") and the IRVINE RANCH WATER DISTRICT ("IRWD"). Rosedale and IRWD are sometimes referred to individually as a "Party" and collectively as the "Parties."

RECITALS

- A. Rosedale is a public agency organized in accordance with the California Water Storage District Law (Division 14, commencing with § 39000 of the California Water Code) for the purpose of acquiring, storing, distributing, and replenishing water supplies within its boundaries in Kern County, California.
- B. IRWD is a public agency organized in accordance with the California Water District Law (Division 13, commencing with section 34000 of the California Water Code) to provide water services and certain other services. IRWD's powers and purposes include the acquisition within or without the district in the State of all necessary property, water and water rights for the production, storage, transmission and distribution of water for irrigation, domestic, industrial and municipal purposes and to provide and sell such water at wholesale and retail to customers within its boundaries in Orange County, California.
- C. IRWD has agreed to the terms of that certain agreement titled Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District ("Landowners Agreement") providing for Rosedale to include in its chapter of the Kern Groundwater Authority's ("Authority") Groundwater Sustainability Plan ("GSP") IRWD's Strand Ranch property and the Stockdale West property (collectively "IRWD Property"), which are located outside of and adjacent to Rosedale's territorial boundary, a copy of which Landowners Agreement is attached as Exhibit A to this Agreement.
- D. On January 13, 2009, Rosedale and IRWD entered into an "Agreement For A Water Banking and Exchange Program," as amended by Amendment No. I, entered into on or about February 27, 2015 (collectively, the "Strand Ranch Integrated Banking Project Agreement"). On February 4, 2016, Rosedale and IRWD entered into an "Agreement for A Water Banking, Recovery and Exchange Program," as amended by Amendment No. 1, entered into on or about January 16, 2018 (collectively, the "Stockdale Integrated Banking Project Agreement"). The Strand Ranch Integrated Banking Project Agreement and the Stockdale Integrated Banking Project Agreement are collectively referred to as the "Banking Project Agreements."
- E. Rosedale and IRWD desire for Rosedale to develop and implement the chapter of the Authority GSP encompassing Rosedale and including the Strand Ranch Integrated Banking Project and the Stockdale Integrated Banking Project (collectively "IRWD Projects") all to ensure that Rosedale will continue operating the IRWD Projects in an efficient and coordinated manner that complies with the requirements of SGMA and that preserves and meets the Parties' mutual rights and obligations under the respective Banking Project Agreements.

NOW, THEREFORE, the Parties agree as follows:

AGREEMENT

1. Effective Date and Term.

Irvine Ranch Water District

This Agreement shall be effective upon the date when both Parties have signed this Agreement (the "Effective Date"). This Agreement shall remain in effect so long as the IRWD Property is subject to Rosedale's chapter of the Authority's GSP.

- 2. Rosedale's Incorporation of the Strand Ranch Integrated Banking Project and the Stockdale Integrated Banking Project. Rosedale shall include the IRWD Property within Rosedale's chapter of the Authority's GSP. A map showing the locations of the Strand Ranch property and the Stockdale West property adjacent to Rosedale's southern boundary is attached and incorporated herein as Exhibit B to this Agreement.
- 3. <u>Preserving Rights and Obligations under the Banking Project Agreements</u>. Rosedale's chapter of the Authority's GSP shall be consistent with and shall preserve all the Parties' respective rights and obligations under the Banking Project Agreements; provided, however, that such rights and obligations must be exercised in a manner that is consistent with the requirements of SGMA, including the avoidance of undesirable results.
- **4.** <u>Fees and Charges for Mitigation</u>. Rosedale shall not initiate or impose on IRWD's Strand Ranch property or Stockdale West property or on the IRWD Projects on these properties any fee, charge or assessment that pays for mitigation of groundwater production and use effects to which the IRWD Projects do not contribute.
- **Termination**. Consistent with section 1, this Agreement shall remain in effect so long as the IRWD Projects and IRWD Property are subject to Rosedale's chapter of the Authority's GSP.

Rosedale-Rio Bravo Water Storage District

Each Party has executed this Agreement on the date set forth below its signature.

By: Sonoup Markon By: Cenum Manager

Date: 15 MARCH 2019 Date: 3/28/19

Exhibit A

Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District

This Sustainable Groundwater Management Act ManagementAgreement with Rosedale-Rio Bravo Water Storage District ("Agreement") is made and entered into this 31st day of May, 2018, by and among the Rosedale-Rio Bravo Water Storage District, ("District") and the landowners identified in Exhibit A (collectively, "Landowners"). District and Landowners are sometimes each individually referred to herein as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, Landowners are individuals, or authorized agents of entities, owning real property in Kern County, California ("Landowner Land"), which is generally identified by its respective Kern Assessor's Parcel Number on Exhibit A hereto, and which is located outside of the District's boundaries, which are generally shown on Exhibit B, attached hereto and incorporated by reference.

WHEREAS, District is a Water Storage District comprised of approximately 44,500 acres situated in Kern County.

WHEREAS, the Sustainable Groundwater Management Act ("SGMA") provides that all basins designated as critically overdrafted high-priority basins shall be managed under a Groundwater Sustainability Plan ("GSP") or a coordinated GSP by January 31, 2020.

WHEREAS, the Landowner Land is overlying the Kern County Sub-basin (Basin Number 5-022.14, DWR Bulletin 118) within the San Joaquin Valley Groundwater Basin ("Basin"), a DWR designated high-priority and critically overdrafted basin and, therefore, the Basin, and all portions thereof, must be managed by a local agency under a GSP by January 31, 2020.

WHEREAS, SGMA allows local agencies to become a groundwater sustainability agency ("GSA") to engage in the sustainable management of groundwater pursuant to the provisions of SGMA. Private landowners, either individually or collectively, are not local agencies under SGMA, and therefore cannot be members of a GSA.

WHEREAS, District is a member of the Kern Groundwater Authority Groundwater Sustainability Agency ("Kern GSA"), under which the District will work collaboratively with with other interested local agencies to develop and implement a Groundwater Sustainability Plan ("GSP") to manage a portion of the Basin for which the Kern GSA has elected to be the GSA pursuant to SGMA.

WHEREAS, with respect to SGMA jurisdictional consideraitons, the Landowner Land is within the jurisdictional boundaries of the County of Kern, which is also a member of the Kern GSA.

WHEREAS, the Kern GSA is planning to organize its GSP in chapters that prescribe the management actions to be taken to comport with the requirements of SGMA. Each chapter will be developed by one or more local agencies that are members of the Kern GSA. Kern GSA has encouraged its members developing chapters of the GSP to provide GSP coverage for lands located in close proximity to their jurisdictional boundaries, but which are, for SGMA jurisdictional consideraitons, located in the areas covered by the County of Kern.

WHEREAS, Landowners desire to be included in the chapter to be developed by the District (the "District's GSP Chapter") to afford GSP coverage to the Landowner Land. In this respect, Landowners are willing to provide local information and assistance to the development of the GSP that is ultimately adopted by the Kern GSA that will regulate the Landowner Land under SGMA. Thus, the Landowners enter into this Agreement for the purpose of Landowners attempting to attain GSP coverage for their land through the District's GSP Chapter.

WHEREAS, the Landowners contemplate an arrangement whereby Landowners independently form a group from among owners of the Landowner Land to serve as an advisory panel to the District with respect to matters covered by this Agreement. The Landowners will provide information for their respective real property and funding for the process for the District to include the Landowner Land within the the District's GSP Chapter. The approval of any GSP coverning the Landowner Land will ultimately lie with the Kern GSA and the State of California, which will consider the completeness and effectiveness the GSP to be developed under SGMA. Due to the mandated deadlines of SGMA and its associated regulations, the District will initiate proceedigns to amend the area to be covered by District's GSP Chapter to include Landowner Land, but must also concurrently begin preparation of the the District's GSP Chapter, and thus, the Landowners consent to and authorize the District to hire the necessary consultants on behalf of the Landowners, and any such associated fees or costs of such consultants (i.e. engineers, attorneys, accountants, etc.) shall be borne solely by the Landowners and paid promptly upon being invoiced by either the District or by such consultants directly. The GSP, after being approved and agreed to by the Kern GSA and ultimately the State of California, shall be managed by the Kern GSA, with input and coordination with the District as a member of the Kern GSA.

WHEREAS, the Landowners desire that the Landowner Land be included within the District's GSP Chapter, so as to provide a process for the Landowners to be subject to a GSP and allow the Landowners to be represented by consultants and other necessary individuals to assist in the completion of the Kern GSA's GSP. The Landowners shall be independently responsible to provide information and funding at the request of the District to maintain and support the efforts to include the Landowner Land within the District's

GSP Chapter so as to comport with SGMA and any future statutory laws and regulations that may be adopted to amend SGMA, supplement SGMA, replace SGMA or other laws or regulations adopted to engage in the sustainable management of groundwater in relation to the Landowner Land.

WHEREAS, the Parties do not intend that the inclusion of the Landowner Land within the District's GSP Chapter, or that this Agreement in any way provides Landowners with a right to any portion of the water supplies of the District to which the owners of the land located within the District have a right.

NOW, THEREFORE, in consideration of the foregoing Recitals and the following terms and conditions, it is agreed by and between the Parties as follows:

I. PURPOSE OF AGREEMENT

The Parties enter into this Agreement solely for the purpose of providing the Landowners a process to attempt to comply with SGMA through the inclusion of the Landowner Lands within the District's GSP Chapter. Neither the District nor any landowners within the District's current boundaries are committing anything to the Landowner Land except for the inclusion of the Landowner Land within the District's GSP Chapter, provided that all Landowners comply with the terms of this Agreement. This Agreement is intended to form the basis of the Parties' understanding regarding the terms and conditions of including the Landowner Land within the District's GSP Chapter, and their individual rights and responsibilities subsequent to such inclusion.

II. TERMS AND CONDITIONS OF INCLUDING LANDOWNER LAND WITHIN THE DISTRICT'S GSP CHAPTER

- 1. <u>Commitment to Include Landowner Land in District's GSP Chapter.</u> The District hereby agrees to make reasonable efforts to include the Landowner Land within the District's GSP Chapter, and the Landowners hereby agree for the Landowner Land to be included within the District's GSP Chapter, provided that such inclusion is approved by all necessary governmental bodies and the Parties have complied with all provisions of this Agreement.
- 2. Regulation Contingent on Funding. The District and Landowners acknowledge that funding for the District's efforts hereunder shall be provided on a long-term basis, if possible, through the development and subsequent payment by the Landowners of a land-based assessment or water charge as authorized by SGMA or other legally authorized fee or funding mechanism. Prior to the establishment of said land-based assessment or water charge for the Landowner Land, the Landowners acknowledge and agree that the District's inclusion of the Landowner Land within the District's GSP Chapter, and District's efforts to include the Landowner Lands with the District's GSP Chapter pursuant to this Agreement, are contingent upon Landowners' regular and timely payment of (1) the general administrative expenses of the District that are attributable to the District's efforts hereunder, (2) the Landowners' pro-rata share of costs for consutants retained by the District for the purposes of developing or implimenting the District's GSP

Chapter, and (3) any administrative or other costs the District incurs in implementing SGMA and coordinating with KGA for SGMA purposes concerning the Landowner Land.

Upon final execution of this Agreement, District shall bill and Landowners shall pay the District \$10.00 per acre of Landowner Land as an initial payment to fund the District's (and necessary consultants') efforts made pursuant to this Agreement, any proposition 218 or other land-based fee/funding proceedings, and any other activities related to the GSP processes.

- 3. Determination of Funding Obligation; Landowner Advisory Committee. The amount of any additional payments required for services rendered by the District or others for the purposes of fulfilling the obligations set forth herein, or the formula for the calculation of such payments, and the method of such payments, shall be determined by the District, in consultation with Landowners, as soon as reasonably practicable. District shall create a Landowner Advisory Committee, comprised of not less than three (3) and not more than five (5) Landowners to provide the District input and guidance on Landowner issues relating to the development and implementation of the District's GSP Chapter.
- 4. Failure to Satisfy Funding Obligation & GSP Requirements. Landowners acknowledge and agree that if, for any reason, any Landowner refuses or otherwise fails to remit any payment required hereunder, in the amount and using the method determined and requested by the District, or fails to comply with the requirements of the GSP and its management and regulation, ("Defaulted Landowner") the District:
- (a) shall be relieved of any and all obligation to proceed with including the Defaulted Landowner's Land within the District's GSP Chapter;
- (b) shall be relieved of any and all obligation to provide the services and obligations enumerated in this Agreement to a Defaulted Landowner; and
- (c) may, in its sole and absolute discretion, seek to remove the Defaulted Landowner's Land from the District's GSP Chapter, at Defaulted Landowner's expense, and in such event the Defaulted Landowner agrees to obtain regulation under SGMA by some other method separate and apart from the District pursuant to the terms for a withdrawing Landonwer set forth in Paragraph 8 of this Agreement.
- 5. No Protest in Case of Removal of Defaulted Landowner Land; Duty to Cooperate. Landowners hereby agree that, if any Landowner breaches the terms of this Agreement, including but not limited to the refusal or failure to remit any payment required herein, following reasonable notice of alleged breach and opportunity to cure, the District, may in its sole and absolute discretion, seek to remove the Defaulted Landowner's Land from the District's GSP Chapter, and if the District does so, the Landowners shall not lodge any protest, participate in any protest hearing, or act in any way to influence the outcome of the District's decision. Landowners further agree to work in good faith with the District to provide the District any non-privileged materials or information in Landowners' possession or control that may, in the District's sole determination, be necessary or

appropriate to effectuate the District's decision to remove the Defaulted Landowner Land from the District's GSP Chapter, including, but not limited to, providing timely responses to requests for non-privileged information and meeting with District representatives to establish terms of removal.

- 6. Disclaim Water Rights. Landowners expressly disclaim any right to any District water supplies other than through any negotiated purchase, transfer, or exchange any Landowner has obtained or may obtain wholly outside of this Agreement and not related to this Agreement. Landowners understand and agree that as a result of the foregoing disclaimer, among other things, inclusion of the Landowner Lands within the District's GSP Chapter will not entitle them to receive any portion of the District's water supply. Landowners further understand and agree the sole purpose of this Agreement is to provide the Landowners a process for them obtain coverage by the Kern GSA's GSP, and thus, SGMA compliance for the Landowners' by affording Landowners the benefit of inclusion within the District's GSP Chapter. Any GSP must ultimately be approved and agreed to by the District and thereafter by the Kern GSA's GSP and such GSP shall be solely managed and regulated by the Kern GSA in coordination with the District, supported in part by information and funds provided by Landowners. Landowners further understand and agree that any other benefits accruing to the Landowner Land and/or to Landowners as a result of this Agreement are purely incidental and shall not give rise to any expectation, entitlement, or right to District water supplies of any kind, including, but not limited to, Kern River water, Stater Water Project water, Central Valley Project water, carryover supplies, supplies from any lake, river, stream, manmade conveyance, or aquifer that the District purchases, acquires, transfers, exchanges, takes receipt of or otherwise controls, including groundwater supplies or any return flows that may enter the underground aquifer as a result of delivery within District of any of the foregoing water supplies, or any other designation or classification of District water whatsoever, whether in existence at the time of this Agreement is executed or created at some future time. Other than the reservations noted above, nothing in this Agreement is intended to limit current or future groundwater rights of the Landowners beyond that imposed by operation of law.
- 7. No Voluntary Consent. Once the Landowner Land is included within the District's GSP Chapter and the GSP is adopted by the Kern GSA and approved by DWR, Landowners hereby agree not to consent to the inclusion of the Landowner Lands within another chapter of the Kern GSA's GSP developed by any entity other than the District without the District's express prior written consent.
- 8. Withdrawal of Landowner. Until the GSP is adopted by the Kern GSA and approved by DWR, any Landowner may elect to withdraw from this Agreement and be excluded from the District's GSP Chapter, and instead be included within another chapter of the Kern GSA's GSP developed by another member of the Kern GSA or otherwise seek alternative lawful SGMA compliance, by providing written notice to the District and all other Landowners. Any Landowner which elects to withdraw shall be responsible for all costs and obligations associated with the withdrawal, including but not limited to any amendments or revisions of the District's GSP Chapter or the Kern GSA's GSP required to maintain compliance with SGMA in the event of their withdrawal. The District may

impose additional requirements upon any withdrawing Landowner, to ensure compliance with SGMA, the GSP Chapter or the Kern GSA's GSP, and any financial obligations resulting from the withdrawal of such Landowner. Upon any withdrawal, the withdrawing Landowner shall arrange for the withdrawn lands to be covered by another chapter of the Kern GSA's GSP developed by another member of the Kern GSA or otherwise seek alternative lawful SGMA compliance, so that such lands of the withdrawing Landowner would continue to be compliant with SGMA. Any withdrawal from the District's GSP Chapter shall not be effective unless and until the withdrawing landowner has made such arrangements and the alternative means of SGMA compliance is effective for the such lands of the withdrawing Landowner.

- 9. <u>Notice of Agreement</u>. Landowners agree to provide a copy of this Agreement to each and every person who receives any interest in any portion of the Landowner Lands.
- Runs with the Land. The benefits and burdens of this Agreement are 10. intended to attach to and run with the land generally identified in Exhibit A to this Agreement, are related to the direct benefit, use, maintenance and improvement of the Landowner Land, and shall be binding on and inure to the benefit of the Parties and their respective legal representatives, successors, heirs and assigns. It is the intent of the Landowners from the date of this Agreement, that the equitable servitudes, covenants, conditions, restrictions, assessments and other duties and obligations herein or in the District's GSP Chapter (so long as such lands have not been withdrawn pursuant to Section 8 hereof) run with the land and shall be binding on any successors or assigns. All persons or entities claiming under the Parties, or who accept deeds, leases, easements or other grants of conveyances to any portion of the Landowner Land agree that they shall be personally bound by all of the provisions of this Agreement, and shall conform to and observe the provisions of this Agreement and the District's GSP Chapter and the Kern GSA's GSP. The Parties agree that a covenant evidencing this Agreement and its nature as attaching to and running with the land shall be executed by each Landowner and recorded with the Clerk/Recorder of the County of Kern as a condition to the the inclusion of the Landowner Lands within the District's GSP Chapter and the Kern GSA's GSP.
- 11. Entire Agreement; Amendments or Modifications. The Parties agree that this Agreement contains the entire Agreement and understanding concerning the subject matter among the Parties and supersedes and replaces all prior negotiations of proposed agreements, written or oral, if any. This Agreement shall not be amended or modified except in writing, executed and agreed to by all of the Parties to this Agreement.
- 12. <u>Effective Illegality</u>. If any paragraph, sentence, clause, or phrase becomes illegal, null, or void for any reason or is held by any court of competent jurisdiction to be illegal, null, void, or against public policy, the remaining paragraphs, sentences, clauses, or phrases are not affected, and the Parties must negotiate an equitable adjustment of the affected provision with a view toward effecting the purpose of this Agreement.

- Onstruction. Headings are used for convenience only and have no force or effect in the construction or interpretation of this Agreement. As used in this Agreement, the singular includes the plural and the masculine includes the feminine and neuter. This Agreement is a joint product of all Parties and is to be interpreted as such. This Agreement: (1) shall not be construed against the Party preparing it; (2) shall be construed as if the Parties had jointly prepared this Agreement; and (3) shall be deemed their joint work product. Each and every provision of this Agreement shall be construed as through the Parties participated equally in the drafting hereof, and, therefore, any uncertainty or ambiguity shall not be interpreted against any one Party. As a result of the foregoing, any rule of construction that a document is to be construed against the drafter shall not be applicable.
- 14. <u>No Third-Party Rights</u>. Nothing in this Agreement, whether expressed or implied, either is intended, or is to be construed, or otherwise interpreted as, conferring any rights or remedies on any third parties. Also, nothing in this Agreement gives any third parties any rights of subrogation against any Party.
- 15. <u>Governing Law and Venue</u>. This Agreement is entered into and performed in the State of California and is to be interpreted pursuant to the internal substantive law, and not the law of conflicts, of the State of California. Venue in any action brought under this Agreement shall be in the Superior Court of the County of Kern, State of California.
- Indemnification. Landowners ("Indemnifying Party") shall protect, defend, indemnify and hold harmless the District and its directors, officials, officers, managers, employees, contractors and agents ("Indemnified Party") from and against all liabilities, obligations, claims, damages, penalties, causes of action, costs and expenses (including, without limitation, attorneys' fees and expenses) imposed upon, incurred by, or asserted against an Indemnified Party arising out of, resulting from, or in connection with any action taken or omitted to be taken by the Indemnifying Party under this Agreement, including but not limited to the following: (i) the actions or omissions by Landowners or Landowners' affiliates, members, managers, employees, contractors and agents related to this Agreement and the GSP; (ii) Landowners or Landowners' affiliates, members, managers, employees, contractors and agents' violation of any applicable laws or regulations; or (iii) the failure on the part of Landowners or Landowners' affiliates to perform or comply with any of the terms of this Agreement, provided, however, that such indemnity shall not extend to any such suit, claim, or damage to the extent caused solely by the negligent or wrongful acts or omissions of any Indemnified Party. indemnification provisions in this section shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by the District or its directors, officials, officers, managers, employees, contractors and agents.
- 17. <u>Effective Date And Term Of Agreement</u>. The effective date of this Agreement shall be the date last signed below. This Agreement shall remain in effect with respect to each particular Landowner unless and until such Landowner fails to perform according to the terms of this Agreement or such Landowner withdrawals from the Agreement pursuant to Section 8 hereof. This Agreement shall have no force or effect upon

a determination that the performance of any provision of this Agreement will result or has resulted in the violation of state or federal law.

"District"

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

Fire L. Alexoft

Title: General Manager

Date: Sept. 13, 1818

[landowner signatures and property APN's on following pages]

Landowner	Landowner
AFFENTRANGER & SONS DAIRY	
Any Officer	
Signature	Signature
Franz Affentrauses/Fartner	DONE
Printed Name/Title	Printed Name/Title
Signature Fray 2 A Ken Lauyer / Partner Printed Name/Title 463-030-15-00-8 APN(s)	APN(s)
APN(s)	AFIN(S)
463-030-12-00-9, 463-030-13-00-2	
5-31-2018	
Date	Date
Date	Daty
Landowner	Landowner
HEIN, MARTIN & KATHRYN FAMILY TRUST	HEIN, MARTIN H
Signature	Signature
Printed Name/Title	Printed Name/Title
104-012-12-5 & 408-210-14-4	104-011-15-0 & 104-012-24-0
APN(s)	APN(s)
Date	Date

Landowner	Landowner
AFFENTRANGER & SONS DAIRY	
Signature	Signature
Printed Name/Title	Printed Name/Title
463-030-15-00-8 APN(s)	APN(s)
463-030-12-00-9, 463-030-13-00-2	
Date	Date
Landowner	Landowner
HEIN, MARTIN & KATHRYN FAMILY TRUST	HEIN, MARTIN H
Mati Dein	All Jan
Signature MARTIN HEIN TRUSTEE Printed Name/Title	Signature John Zimmerer PARINGO Printed Name/Fittle
_104-012-12-5 & 408-210-14-4 APN(s)	104-012-24-0 APN(s)
5-31-2018	5-31-2018
Date	Date

Landowner	Landowner
HOPKINS FAMILY L P	
Signature Signature	21
Signature MICHAEL D. Hopkins CF-0	Signature
Printed Name/Title	Printed Name/Title
104-030-01-01-8	E DATE A
APN(s)	APN(s)
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5-22 -18	
Date	Date
Landowner	Landowner
Landowner LEE, ROBERT & STEPHANIE 2006 FAMILY TR	
LEE, ROBERT & STEPHANIE 2006 FAMILY TH	RUST
LEE, ROBERT & STEPHANIE 2006 FAMILY THE Signature	RUST Signature
LEE, ROBERT & STEPHANIE 2006 FAMILY THE Signature Printed Name/Title 159-010-07-00-1	Signature Printed Name/Title
LEE, ROBERT & STEPHANIE 2006 FAMILY THE Signature Printed Name/Title 159-010-07-00-1	Signature Printed Name/Title
LEE, ROBERT & STEPHANIE 2006 FAMILY THE Signature Printed Name/Title 159-010-07-00-1	Signature Printed Name/Title

Landowner	Landowner
HOPKINS FAMILY L P	LEE, ROBERT & STEPHANIE 2006 FAMILY TRUST
Signature	Signature
Printed Name/Title	Printed Name/Trile
104-030-01-01-8	159-010-07-00-1
APN(s)	APN(s)
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Date	Date 4
Landowner	Landowner
LAYSHOT FAMILY TRUST	LAYSHOT FAMILY TRUST
DA DA	
Signature Alav D CARSHY Trustae	Signature H. Layshot Invotes Printed New Title
Alpu D cashet Truster	Irma H. Lauchath
Printed Name/Title	Printed Name/Title
159-010-06-00-8	159-010-06-00-8
APN(s)	APN(s)
	
5-31-2018	5-31-2018
Date	Date

Landowner	Landowner
HOPKINS FAMILY L P	
Signature	Signature
Printed Name/Title	Printed Name/Title
104-030-01-01-8 APN(s)	APN(s)
Date	Date
Landowner	Landowner
LEE, ROBERT & STEPHANIE 2006 FAMILY TO	RUST
Robert Lee/Trustee	Signature Signature
Robert Lee/Trustee	Stephan Let Trustee Printed Name Title
<u>_159-010-07-00-1</u> APN(s)	159-010-07-00-1 APN(s)
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5115118	\$115118

Date

Landowner	Landowner
MC CARTHY, MICHAEL & LINDA FAMILY TRUST OF 2006	LOUISE F. MC CARTHY FAMILY TRUST DATED DECEMBER 6, 2000
Michael McAR+Hy/TRUSTER Printed Name/Title	Signature Louise 7 Mc Cart / TRUSTEE Printed Name/Title
_159-020-04-005 APN(s)	159-020-04-005 APN(s)
5/31/2018 Date	5/31/2018 Date
Landowner	Landowner
OCAFRAIN, MARCEL & JOSEPHINE REV TR	UST
Signature Tosephine OCAFRAIN Printed Name/Title TRUSTEE	Mural Off Signature Marcel OCAFRAIN Printed Name/Title TRUSTER
104-040-01-00-2 APN(s)	APN(s)
	,
5-31-2018 Date	5-31-2018 Date

Landowner	Landowner
MARVIN WEIDENBACH FARMS	
Loveka Britand, Parline	
Signature	Signature
Ruth A. Weidenbach, Partner Printed Name/Title	Printed Name/Title
463-020-24-8, 463-020-08-1, 463-020-10-7, APN(s)	APN(s)
463-030-15-1, & 463-020-17-2,	Andrew Control
463-020-12-3, 463-020-13-1	
May 30, 2018	
Date	Date
Landowner	Landowner
Landowner WONDERFUL NUT ORCHARDS LLC	Landowner
	Landowner
	Landowner Signature
WONDERFUL NUT ORCHARDS LLC	
WONDERFUL NUT ORCHARDS LLC Signature	Signature
WONDERFUL NUT ORCHARDS LLC Signature Printed Name/ Kitle 160-130-36	Signature Printed Name/Title
WONDERFUL NUT ORCHARDS LLC Signature Printed Name/ Kitle 160-130-36	Signature Printed Name/Title

Landowner	Landowner
WEIDENBACH FAMILY FARMS LLC	MARVIN WEIDENBACH FARMS
Signature	Signature
Printed Name/Title	Printed Name/Title
463-020-24-8 APN(s)	463-020-08-1, 463-020-10-7, APN(s)
	463-020-12-3, 463-020-13-1,
	463-030-15-1, & 463-020-17-8
Date	Date
Landowner	Landowner
WONDERFUL NUT ORCHARDS LLC	
0100	
Signature & CFG	Signature
Printed Name/Title	Printed Name/Title
_160-130-36 APN(s)	APN(s)
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5/21/18	
Date	Date

Landowner	Landowner
DIAMOND FARMING CO	
Signature 2 2 2	Signature
Jeff Huchaby President Printed Name/Title	Printed Name/Title
524-020-15, 524-020-16 & APN(s)	APN(s)
524-020-20	
Date	Date
Landowner	Landowner
BOLTHOUSE LAND CO LLC	
Signature	Signature
Printed Name/Title	Printed Name/Title
_104-012-03, 104-012-06, APN(s)	APN(s)
104-012-20, & 104-012-19	
Date	Date

Landowner	Landowner
DIAMOND FARMING CO	
Signature	Signature
Distribution (mid-	Printed Name/Title
Printed Name/Title	Finited (value) Little
_524-020-15, 524-020-16 & APN(s)	APN(s)
	.en maj
524-020-20	
* 1	
Date	Date
Landowner	Landowner
BOLTHOUSE LAND CO LLC	
Cillas	
Signature	Signature
Anthony L. Leggio, Manager Printed Name/Title	Printed Name/Title
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104-012-03, 104-012-06, APN(s)	APN(s)
104-012-20, & 104-012-19	
104-012-20, & 104-012-19	<u> </u>
1 1	
05/22/2018	
Date	Date

Note: This page is intentionally left blank.

EXHIBIT "B"

RECORDING REQUESTED BY AND WHEN RECORDED, MAIL TO:

ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT P.O. Box 20820 Bakersfield, CA 93390-0820

SPACE ABOVE THIS LINE FOR RECORDER'S USE

RECORDING FOR THE BENEFIT OF A GOVERNMENT AGENCY NO FEE PURSUANT TO CA. GOV'T CODE SECTION 6103

Kern County APN's: 160-010-02, 160-010-07, 160-010-22, 160-010-60, 160-010-21, 160-020-12 and 160-020-23

AMENDMENT NO. 1

to

Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District

This Amendment No. 1 to Memorandum of Agreement - Sustainable Groundwater Management Act Management Agreement with Rosedale-Rio Bravo Water Storage District is made and entered into, by and among the Rosedale-Rio Bravo Water Storage District, ("District") and the landowner identified by its name and signature below ("Landowner"). District and Landowner are sometimes each individually referred to herein as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, Landowner is an owner of certain real property in Kern County, California ("Landowner Land"), which property is generally identified by its Kern Assessor's Parcel Number(s) listed above and along with the Landowner's signature on this document, and which property is located outside of the District's boundaries.

WHEREAS, Landowner desires the District's assistance with respect to compliance with the Sustainable Groundwater Management Act ("SGMA");

WHEREAS, District and Landowner have agreed to the terms of a *Sustainable Groundwater Management Act Management Agreement* (dated May 31, 2018 and recorded on September 13, 2018 in the official records of Kern County as Document No. 000218120706) in order that the District may provide Landowner with assistance with respect to SGMA compliance;

WHEREAS, District and Landowner desire to amend the *Sustainable Groundwater Management Act Management Agreement* by this Amendment No. 1.

WHEREAS, this Amendment No. 1 shall be recorded in the official records of Kern County, in order that third parties may have notice of the respective rights and obligations of

the District and Landowner with respect to SGMA compliance and the Landowner Land.

NOW, THEREFORE, in consideration of the foregoing Recitals and all of the terms and conditions of the above-referenced Sustainable Groundwater Management Act Management, it is agreed by and between the Parties that said Sustainable Groundwater Management Act Management Agreement shall be amended as follows and all other terms of said agreement not amended hereby shall remain in full force and effect:

Section 8 of the Agreement is hereby amended in its entirety to read as follows:

8. Withdrawal of Landowner. At any time, whether before or after the GSP is adopted by the Kern GSA and approved by DWR, the Landowner shall have the right to withdraw from this Agreement and be excluded from the District's GSP Chapter by providing 10-days prior written notice to the District. If Landowner elects to withdraw, then the Landowner shall be responsible for advance payment of all costs and obligations associated with the withdrawal, including but not limited to, any amendments or revisions of the District's GSP Chapter or the Kern GSA's GSP required to maintain compliance with SGMA in the event of their withdrawal. The District may impose additional requirements upon the withdrawing Landowner to satisfy any financial obligations resulting from the withdrawal of such Landowner. Upon withdrawal, the Landowner shall arrange for the withdrawn lands to be covered by another chapter of the Kern GSA's GSP or otherwise seek alternative lawful SGMA compliance.

Section 16 of the Agreement is amended in its entirety to read as follows:

<u>Indemnification</u>. The Landowner shall protect, defend, indemnify and hold harmless the District, the Kern Groundwater Authority ("KGA"), the Kern GSA, and their respective members, directors, officials, officers, managers, employees, contractors and agents ("Indemnified Party") from and against all liabilities, obligations, claims, damages, penalties, causes of action, costs and expenses (including, without limitation, attorneys' fees and expenses) imposed upon, incurred by, or asserted against an Indemnified Party arising out of, resulting from, or in connection with (a) the indemnification obligation undertaken by the District with respect to the Landowner or the Landowner Land under the Provision of Jurisdiction Agreement Regarding the Sustainable Groundwater Management Act Between the Kern Groundwater Authority and Rosedale-Rio Bravo Water Storage District (in the form approved by the Kern Groundwater Authority in September, 2019, which is attached to this Amendment No. 1 as Exhibit A), or (b) any action taken or omitted to be taken by the Landowner under this Agreement, including but not limited to the following: (i) the actions or omissions by Landowner or Landowner's affiliates, members, managers, employees, contractors and agents related to this Agreement, the Kern GSA GSP, or SGMA; (ii) the Landowner or Landowner's affiliates, members, managers, employees, contractors and agents' violation of any applicable laws or regulations; (iii) the failure on the part of the Landowner or Landowner's affiliates to comply with the terms of this Agreement; or (iv)

the inclusion of the Landowner Land in the District's GSP Chapter. The foregoing provision does not include and in no way obligates the Landowner with respect to any liabilities, obligations, claims, damages, penalties, causes of action, costs and expenses, including litigation costs and attorney's fees, to the extent caused by the negligent or wrongful acts or omissions of any Indemnified Party. For purposes of clarity, the Landowner's obligations provided under this Section 16 shall be limited to its Landowner Land included under this Agreement. The indemnification provisions in this Section shall not be restricted to insurance proceeds, if any, received by any Indemnified Party and shall survive expiration or termination of this Agreement except that the Landowner's obligations under this Section shall cease five years following such expiration or termination.

Section 18 is hereby added to the Agreement as follows:

Covenant Not to Sue or Contest. In consideration of the District's inclusion of Landowner's Land into the District's GSP Chapter and Landowner's right to withdraw as provided in Section 8, the Landowner shall not sue or take any judicial or administrative action against the District, the KGA or the Kern GSA for any claims related to this Agreement. The Landowner acknowledges and agrees that initiation of a lawsuit, judicial, or administrative action or other legal challenge against the District, the KGA or the Kern GSA for claims related to the inclusion of the Landowner's Land in the District's GSP Chapter will render the Landowner initiating the action a Defaulted Landowner (as defined by Section 4 of this Agreement). Landowner's covenant under this Section is limited solely to claims arising from the Landowner's Land covered by this Agreement and does not in any way apply to any other land that Landowner owns now, or in the future. Moreover, nothing in this Section shall prevent or preclude Landowner from actively participating in the development and implementation of the District's GSP Chapter, any other Kern GSA member's GSP Chapter or the KGA's GSP, or any subsequent review by the State of California of the Kern GSA GSP or any GSP Chapter. Subject to and without limiting the foregoing covenant, Landowner otherwise retains all rights to prosecute or participate in any action or proceeding which might affect Landowner's rights to extract, use and store groundwater in the Basin, including without limitation an action to quiet title, for declaratory relief, and/or Basin groundwater adjudication. The obligations and agreements in this Section shall survive any expiration or termination of this Agreement.

Section 19 is hereby added to the Agreement as follows:

19. <u>Termination in the Event of Adjudication</u>. In the event that any person or entity commences a comprehensive groundwater adjudication concerning the Basin pursuant to California Code of Civil Procedure, sections 830 et seq., or any other action or proceeding that seeks to determine or declare Landowner's rights to extract, use or store water in the Basin, either Party may elect to terminate this Agreement by 10-days

prior written notice to the other Party. Termination pursuant to this paragraph operates as a complete and full termination of all obligations under this Agreement and neither Party will have any remaining obligation or liability to the other Party, except for those provisions which expressly survive termination of this Agreement and any payment obligations of the Landowner as described in Section 8 of this Agreement.

Section 20 is hereby added to the Agreement as follows:

20. <u>Clear Title</u>. In the event this Agreement is terminated the District shall promptly record in the Official Records of the County of Kern a document in a form acceptable to Landowner terminating the Agreement and removing the Agreement as a cloud or encumbrance on Landowner's title.

IRVINE RANCH WATER DISTRICT

APN(s): 160-010-02, 160-010-07, 160-010-22, 160-010-60, 160-010-21, 160-020-12 and 160-020-23

Signature		Signature
By:	Ву	/: <u> </u>
Printed Name	•	Printed Name
Title:	Tit	tle:
Dated:	Da	ate:
ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT:		
Signature		
By: Eric Averett, General Manager		
Dated:		

Exhibit A - Amendment No. 1 - SGMA Management Agreement

PROVISION OF JURISDICTION AGREEMENT REGARDING THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT BETWEEN THE KERN GROUNDWATER AUTHORITY AND ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT

This Sustainable Groundwater Management Act Jurisdiction Agreement
("Agreement") between the Kern Groundwater Authority ("KGA") and Rosedale-Rio Bravo
Water Storage District ("District") is made and entered into this day of
, 2019. KGA and District are sometimes each individually referred to
herein as a "Party" and collectively the "Parties."

RECITALS

WHEREAS, on August 29, 2014, the California Legislature passed comprehensive groundwater legislation contained in SB 1168, SB 1319 and AB 1739. Collectively, those bills, as subsequently amended, enacted the "Sustainable Groundwater Management Act" ("SGMA"). Governor Brown signed the legislation on September 16, 2014 and it became effective on January 1, 2015; and

WHEREAS, the KGA and the District overly portions of the Kern County subbasin (Basin Number 5-022.14, DWR Bulletin 118) within the San Joaquin Valley Groundwater Basin, a DWR designated high-priority and critically overdrafted basin; and

WHEREAS, SGMA provides that all basins designated as critically overdrafted high-priority basins must be managed under a Groundwater Sustainability Plan ("GSP") or a coordinated GSP by January 31, 2020; and

WHEREAS, SGMA requires GSPs to be developed and implemented by Groundwater Sustainability Agencies ("GSAs"); and

WHEREAS, on March 22, 2017, Kern County (the "County"), the District, and other local agencies formed the KGA, a joint powers authority ("JPA"), by executing an "AMENDED AND RESTATED JOINT POWERS AGREEMENT" pursuant to the Joint Exercise of Powers Act (Government Code Sections 6500, et seq.); and

WHEREAS, on April 27, 2017, the KGA elected to be a GSA under SGMA in order to pursue groundwater management activities within the boundaries of participating members; and

WHEREAS, the District is a member of the Kern Groundwater Authority Groundwater Sustainability Agency ("KGA GSA"); and

WHEREAS, the KGA is working collaboratively with its members to organize the KGA GSP in chapters, each of which will be developed by KGA members; and

WHEREAS, within the KGA boundaries, certain areas are known as "undistricted lands." Undistricted lands are areas of the basin not within the service area of a general KGA member; and

WHEREAS, under SGMA, groundwater management of undistricted lands is the County's responsibility and, accordingly, was to be included in the County's chapter of the KGA GSP; and

WHEREAS, on December 11, 2018, the County's Board of Supervisors voted to withdraw the County from the KGA and leave the undistricted lands without SGMA management; and

WHEREAS, in order to maximize the SGMA management of undistricted lands, the District has identified specific undistricted lands, identified in Exhibit A, it may manage in its GSP chapter; and

WHEREAS, in order to facilitate the District's management of undistricted lands, the KGA may have to provide SGMA jurisdiction over the undistricted lands; and

WHEREAS, the Parties have entered into this Agreement to set forth the terms governing the KGA's lending of SGMA jurisdiction to the District.

THEREFORE, in consideration of the mutual promises set forth below and to implement the goals described above, the Parties agree as follows:

- 1. <u>Provision of SGMA Jurisdiction to the District</u>. The KGA hereby agrees to provide SGMA jurisdiction to the District for the express purpose of enabling the District to incorporate the undistricted lands identified in Exhibit A into its chapter of the KGA GSP.
- 2. <u>District's Agreement with Undistricted Landowners</u>. For any undistricted landowner whose lands are incorporated into the District's GSP, the District agrees that it will enter into a separate agreement with the undistricted landowner whereby the landowner agrees to, at a minimum: (1) comply with the KGA GSP provisions; (2) not to sue or otherwise challenge the District, the KGA related to the jurisdiction provided herein; and (3) indemnify the District from and against all liabilities, obligations, claims, damages, penalties, causes of action, costs and expenses (including, without limitation, attorneys' fees and expenses) imposed upon, incurred by, or asserted against the District arising out of, resulting from, or in connection with any action taken or omitted to be taken by the landowner under the agreement with the District.
- 3. <u>District Indemnification of the KGA</u>. The District hereby agrees to protect, defend, indemnify and hold harmless the KGA and its directors, officials, officers, managers, employees, contractors and agents from and against all liabilities, obligations, claims, damages, penalties, causes of action, costs and expenses (including, without limitation, attorneys' fees and expenses) imposed upon, incurred by, or asserted against the KGA arising out of, resulting from, or in connection with the District's management of undistricted lands by virtue of the SGMA jurisdiction provided to the District under this Agreement. The Parties agree that the foregoing indemnification provision does not include and in no way obligates the District to defend the KGA from any claims, damages, losses, judgements, liabilities, expenses, or other costs, including litigation costs and attorney's fees directly caused by the KGA, or its officers, directors, employees or agents negligence or wrongful acts.

- 4. No Guarantee of Continued Jurisdiction. KGA SGMA jurisdiction is based on the jurisdictional service area of its existing general, associate, and cooperative members. To the extent the membership of the KGA is altered, the KGA jurisdiction may change. KGA does not guarantee and cannot guarantee the jurisdiction it provides pursuant to this Agreement will remain constant or unchanged. To the extent the jurisdiction contemplated in this Agreement is altered and such jurisdiction, authority, or legal capacity to provide jurisdiction pursuant to this Agreement is limited or no longer exists, the Agreement shall terminate. Neither KGA, nor its members, shall not be liable for any liabilities, obligations, claims, damages, penalties, causes of action, costs and expenses that occur or are related to termination pursuant to this section.
- 5. Construction. Headings are used for convenience only and have no force or effect in the construction or interpretation of this Agreement. As used in this Agreement, the singular includes the plural and the masculine includes the feminine and neuter. This Agreement is a joint product of all Parties and is to be interpreted as such. This Agreement: (1) shall not be construed against the Party preparing it; (2) shall be construed as if the Parties had jointly prepared this Agreement; and (3) shall be deemed their joint work product. Each and every provision of this Agreement shall be construed as through the Parties participated equally in the drafting hereof, and, therefore, any uncertainty or ambiguity shall not be interpreted against any one Party. As a result of the foregoing, any rule of construction that a document is to be construed against the drafter shall not be applicable.
- 6. <u>Effective Date and Term of Agreement</u>. The effective date of this Agreement shall be the date last signed below. This Agreement shall remain in effect unless terminated by the unanimous consent of the Parties.
- 7. Complete Agreement. The Parties agree that this Agreement contains the entire Agreement and understanding concerning the subject matter among the Parties and supersedes and replaces all prior negotiations of proposed agreements, written or oral, if any. This Agreement shall not be amended or modified except in writing, executed and agreed to by both Parties to this Agreement.
- 8. No Third-Party Rights. Nothing in this Agreement, whether expressed or implied, either is intended, or is to be construed, or otherwise interpreted as, conferring any rights or remedies on any third parties. Also, nothing in this Agreement gives any third parties any rights of subrogation against any Party.
- 9. Governing Law and Venue. This Agreement is entered into and performed in the State of California and is to be interpreted pursuant to the internal substantive law, and not the law of conflicts, of the State of California. Venue in any action brought under this Agreement shall be in the Superior Court of the County of Kern, State of California.

IN WITNESS WHEREOF, the Parties hereto have caused their names to be affixed by their proper and respective representatives as of the day and year first above-written.

Note: This page is intentionally left blank.

Exhibit "C"

FIRST AMENDED GROUNDWATER SUSTAINABILITY PLANNING AGREEMENT

BETWEEN ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT AND IRVINE RANCH WATER DISTRICT

THIS FIRST AMENDED GROUNDWATER SUSTAINABILITY PLANNING AGREEMENT ("First Amended Agreement") is made and entered into as of the Effective Date by and between the ROSEDALE-RIO BRAVO WATER STORAGE DISTRICT ("Rosedale") and the IRVINE RANCH WATER DISTRICT ("IRWD"). Rosedale and IRWD are sometimes referred to individually as a "Party" and collectively as the "Parties."

RECITALS

- **A.** Rosedale is a public agency organized in accordance with the California Water Storage District Law (Division 14, commencing with § 39000 of the California Water Code) for the purpose of acquiring, storing, distributing, and replenishing water supplies within its boundaries in Kern County, California.
- **B.** IRWD is a public agency organized in accordance with the California Water District Law (Division 13, commencing with section 34000 of the California Water Code) to provide water services and certain other services. IRWD's powers and purposes include the acquisition within or without the district in the State of all necessary property, water and water rights for the production, storage, transmission and distribution of water for irrigation, domestic, industrial and municipal purposes and to provide and sell such water at wholesale and retail to customers within its boundaries in Orange County, California.
- C. On January 13, 2009, Rosedale and IRWD entered into an "Agreement For A Water Banking and Exchange Program," as amended by Amendment No. 1, entered into on or about February 27, 2015 (collectively, the "Strand Ranch Integrated Banking Project Agreement"). On February 4, 2016, Rosedale and IRWD entered into an "Agreement for A Water Banking, Recovery and Exchange Program," as amended by Amendment No. 1, entered into on or about January 16, 2018 (collectively, the "Stockdale Integrated Banking Project Agreement"). The Strand Ranch Integrated Banking Project Agreement and the Stockdale Integrated Banking Project Agreement are collectively referred to as the "Banking Project Agreements."
- **D.** IRWD agreed to the terms of that certain agreement titled *Sustainable Groundwater Management Act Management Agreement* with Rosedale-Rio Bravo Water Storage District ("Landowners Agreement") providing for Rosedale to include in its chapter of the Kern Groundwater Authority's ("Authority") Groundwater Sustainability Plan ("GSP") IRWD's Strand Ranch property and the Stockdale West property (collectively "IRWD Property"), which are located outside of and adjacent to Rosedale's territorial boundary, a copy of which Landowners Agreement is attached as Exhibit A to this First Amended Agreement.
- **E.** In connection with entering into the Landowners Agreement, the Parties entered into that certain Groundwater Sustainability Planning Agreement Between Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District, dated March 28, 2019, concerning Rosedale's application of SGMA through its GSP chapter to IRWD's Banking Project Agreements with Rosedale.
- **F.** Subsequently, Rosedale proposed to amend the original Landowners Agreement, and IRWD has agreed to the terms of that certain Amendment No. 1 to Sustainable Groundwater Management

Act Management Agreement with Rosedale-Rio Bravo Water Storage District ("Amended Landowners Agreement"), a copy of which is attached as Exhibit B to this First Amended Agreement.

G. Rosedale and IRWD desire for Rosedale to develop and implement the chapter of the Authority GSP encompassing Rosedale and including the Strand Ranch Integrated Banking Project and the Stockdale Integrated Banking Project (collectively "IRWD Projects") – all to ensure that Rosedale will continue operating the IRWD Projects in an efficient and coordinated manner that complies with the requirements of SGMA and that preserves and meets the Parties' mutual rights and obligations under the respective Banking Project Agreements.

NOW, THEREFORE, the Parties agree as follows:

AGREEMENT

- **1.** Effective Date and Term. This First Amended Agreement shall be effective upon the date when both Parties have signed this First Amended Agreement (the "Effective Date"). This First Amended Agreement shall replace and supersede the original Agreement and shall remain in effect so long as the IRWD Property is subject to Rosedale's chapter of the Authority's GSP.
- **2.** Rosedale's Incorporation of the Strand Ranch Integrated Banking Project and the Stockdale Integrated Banking Project. Rosedale shall include the IRWD Property within Rosedale's chapter of the Authority's GSP. A map showing the locations of the Strand Ranch property and the Stockdale West property adjacent to Rosedale's southern boundary is attached and incorporated herein as Exhibit C to this Agreement.
- **Preserving Rights and Obligations under the Banking Project Agreements**. Rosedale's chapter of the Authority's GSP shall be consistent with and shall preserve all the Parties' respective rights and obligations under the Banking Project Agreements; provided, however, that such rights and obligations must be exercised in a manner that is consistent with the requirements of SGMA, including the avoidance of undesirable results.
- **4.** <u>Fees and Charges for Mitigation</u>. Rosedale shall not consent to, initiate or impose on IRWD's Strand Ranch property or Stockdale West property or on the IRWD Projects on these properties any fee, charge or assessment that pays for mitigation of groundwater production and use effects to which the IRWD Projects do not contribute.
- **Termination**. Consistent with section 1, this First Amended Agreement shall remain in effect so long as the IRWD Projects and IRWD Property are subject to Rosedale's chapter of the Authority's GSP.

Each Party has executed this Agreement on the date set forth below its signature.

Irvine Ranch Water District	Rosedale-Rio Bravo Water Storage District
By:	By:
Title:	Title:
Date:	Date: