

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

November 28, 2016

PLEDGE OF ALLEGIANCE

CALL TO ORDER 5:00 p.m., Board Room, District Office
15600 Sand Canyon Avenue, Irvine, California

ROLL CALL Directors LaMar, Reinhart, Swan, Withers, and President Matheis

NOTICE

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

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).

<u>CONSENT CALENDAR</u>	<u>Resolution No. 2016-25</u>	<u>Items 3-5</u>
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| <ol style="list-style-type: none">3. <u>MINUTES OF REGULAR BOARD MEETINGS</u>

Recommendation: That the minutes of the November 14, 2016 Regular Board Meeting be approved as presented.
4. <u>RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS</u>

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. | |
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CONSENT CALENDAR - Continued

Resolution No. 2016-25

Items 3-5

5. OCTOBER 2016 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report, the Monthly Interest Rate swap Summary for October 2016, and disclosure report of reimbursements to board members and staff; approve the October 2016 summary of payroll ach payments in the total amount of \$1,656,752 and approve the October 2016 accounts payable disbursement summary of warrants 371567 through 372430, workers' compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$27,302,904.

ACTION CALENDAR

6. REVIEW OF 2016 LEGISLATIVE ACTIVITIES AND 2017 LEGISLATIVE PLANNING

Recommendation: That the Board provide input on the proposed 2017 regional, state and federal legislative issues of interest to IRWD, and adopt the proposed initial 2017 legislative and regulatory resource allocation plan and the legislative /regulatory issues and activities of high concern to IRWD in 2017.

7. ENTERPRISE ASSET MANAGEMENT SOFTWARE PROCUREMENT AND IMPLEMENTATION

Recommendation: That the Board approve the procurement of software and hardware for a not-to-exceed cost of \$545,000; authorize the General Manager to execute a Professional Services Agreement with Total Resources Management for *Phase 2 Implementation - Part 1 Work & Asset Management*, for a not-to-exceed cost of \$988,330; and authorize the General Manager to execute a Professional Services Variance with Kayuga Solution for a not-to-exceed cost of \$202,020.

8. PLACING NOMINATION OF STEVEN LAMAR AS VICE PRESIDENT OF ACWA

Recommendation: That the Board support the nomination of IRWD Director Steven LaMar for vice president of ACWA for a two-year term beginning January 1, 2018 and that a resolution be adopted by title subject to non-substantive changes and in accordance with ACWA's requirements.

Reso No. 2016-

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, 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.

9. A. General Manager's Report

B. Directors' Comments

C. CLOSED SESSION Conference with Real Property Negotiator (Government Code Section 54956.8).

Property: San Juan Capistrano Water and Sewer Infrastructure

Agency Negotiator: Paul Cook, General Manager

Purpose of Negotiations: Proposed Acquisition of Property - Price and Terms.

CLOSED SESSION Conference with Real Property Negotiator (Government Code Section 54956.8).

Property Parcels: 827-030-004, 827-030-005, 827-110-005, 827-110-006, 827-110-010, 827-110-011, 827-110-014, and 827-110-016, County of Riverside

Negotiating Parties: Lourenco Farm

Agency Negotiator: Paul Cook, General Manager

Purpose of Negotiations: Price and Term of Payment,

CLOSED SESSION Conference with Real Property Negotiator (Government Code Section 54956.8).

Property Parcels: 878-151-003, 878-210-001, 878-270-001, 878-270-002, 878-260-001, 878-260-002, County of Riverside

Negotiating Parties: Barnes and Berger

Agency Negotiator: Paul Cook, General Manager

Purpose of Negotiations: Price and Term of Payment.

CLOSED SESSION Conference with Real Property Negotiator (Government Code Section 54956.8).

Property Parcels: 815-180-018, 827-120-010, 827-130-005, 827-140-001, 830-050-004, 830-050-008, 830-50-010, 827-040-005, 827-040-004, 827-072-001, 827-072-002, 827-072-003, 827-072-004, 827-072-005, 827-072-010, 827-120-002, 827-120-001, 827-040-006, 827-050-003, 827-050-007, 827-050-005, 827-050-001, 827-020-002, 827-030-003, 827-020-004, 827-020-001, 827-020-018, 827-040-003, 827-050-002, 827-020-003, 815-180-011, 815-180-006, 815-180-003, 827-120-003, 827-120-004, 827-120-005, 827-120-007, 827-120-006, 827-120-008, 827-120-009, 827-120-011, 827-130-012, 827-040-001, 830-030-004, County of Riverside

Negotiating Parties: Williams

Agency Negotiator: Paul Cook, General Manager

Purpose of Negotiations: Price and Term of Payment.

OTHER BUSINESS - Continued

9. D. OPEN SESSION

E. 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 28, 2016

Prepared and

Submitted by: L. Bonkowski *LB*

Approved by: P. Cook *P. Cook*

CONSENT CALENDAR

MINUTES OF BOARD MEETING

SUMMARY:

Provided are the minutes of the November 14, 2016 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE NOVEMBER 14, 2016 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – November 14, 2016 Minutes

EXHIBIT "A"

MINUTES OF REGULAR MEETING – NOVEMBER 14, 2016

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Matheis on November 14, 2016 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Swan, Matheis, Reinhart and Withers.

Directors Absent: LaMar.

Also Present: General Manager Cook, Executive Director of Finance Clary, Executive Director of Water Policy Weghorst, Executive Director of Engineering and Water Quality Burton, Director of Treasury and Risk Management Jacobson, Director of Water Resources Sanchez, Director of Public Affairs Beeman, Director of Human Resources Roney, Assistant Director of Recycling Zepeda, Legal Counsel Arneson (via teleconference), Secretary Bonkowski, Government Relations Officer Compton, Principle Engineer Cortez, Principle Engineer Akiyoshi, Mr. Bruce Newell, Mr. Jim Reed, Mr. Joe Lam, Mr. Andre Abajian, and other members of the public and staff.

ORAL AND WRITTEN COMMUNICATIONS: None.

CONSENT CALENDAR

On MOTION by Withers, seconded and unanimously carried, CONSENT CALENDAR ITEMS 3 THROUGH 10 WERE APPROVED AS FOLLOWS:

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

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

4. MINUTES OF REGULAR BOARD MEETINGS

Recommendation: That the minutes of the October 24, 2016 Regular Board Meeting and the October 25, 2016 Adjourned Regular Board Meeting be approved as presented.

5. CHANGES TO GENERAL MANAGER'S COMPENSATION

Recommendation: That the Board approve a 4% increase to the salary of the General Manager and a one-time performance award in the amount of \$4,200, effective October 1, 2016.

CONSENT CALENDAR (CONTINUED)

6. PLANNING AREA 1 NEIGHBORHOOD 3 CAPITAL FACILITIES

Recommendation: That the Board authorize a budget increase for Project 7012 in the amount of \$526,900, from \$162,800 to \$689,700; authorize a budget increase for Project 7013 in the amount of \$107,800, from \$367,400 to \$475,200; authorize a budget increase for Project 7017 in the amount of \$47,300, from \$203,500 to \$250,800; and authorize the General Manager to accept ICDC's construction contract with Shoffeitt Pipeline, Inc. in the amount of \$907,178.50 for the Neighborhood 3, Capital Domestic and Recycled Water Improvements.

7. PLANNING AREA 1 TOLL BROTHERS CAPITAL FACILITIES

Recommendation: That the Board authorize the General Manager to execute a Reimbursement Agreement with Toll Brothers, Inc. for the construction of IRWD's Neighborhood 1, Capital Recycled Water Improvements; and authorize the General Manager to accept Toll Brothers, Inc.'s construction contract with Paulus Engineering in the amount of \$288,647 for the Neighborhood 1, Capital Recycled Water Improvements, Project 5919.

8. 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, GP-1, GP-2 and GP-3 Streets; approve Contract Change Order No. 1 to Projects 6536 and 6538 in the amount of \$107,410.50; and approve Contract Change Orders Nos. 3 and 4 to Project 6018 in the amounts of <\$68,715.00> and \$162,739.00, respectively.

9. PETERS CANYON WASH CHANNEL WATER CAPTURE AND REUSE PIPELINE RETENTION REDUCTION

Recommendation: That the Board authorize the reduction of retention from 5% to 1% of the contract amount for the Peters Canyon Wash Channel Water Capture and Reuse Pipeline, Project 4985.

10. LAKE FOREST ZONE A RESERVOIR DEMOLITION CONSTRUCTION AWARD

Recommendation: That the Board authorize a budget increase in the amount of \$125,000, from \$160,600 to \$285,600, for project 7094; find that the irregularities in the bid submitted by SoCal Removal on October 27, 2016 did not affect the amount of the bid or afford SoCal Removal a competitive advantage and waive the irregularities; and authorize the General Manager to execute a construction contract with SoCal Removal in the amount of \$123,837.60 for the Lake Forest Zone A Reservoir Demolition, project 7094.

ACTION CALENDAR

DYER ROAD WELLFIELD WELL 18 REHABILITATION BUDGET INCREASE AND CONTRACT CHANGE ORDER

The Dyer Road Wellfield (DRWF) Well 18 Rehabilitation Project will rehabilitate the well to remove chemical and biological material from the well's wire wrapped perforations and restore its production capacity. The District's contractor, Best Drilling and Pump (Best), began rehabilitation activities in September 2016, and completed brushing, bailing and initial chemical development of the well in October 2016. After completing the brushing and bailing and the initial chemical development, a video inspection of the well identified a large hole in the wire-wrapped portion of the casing at a depth of 805 feet below ground surface. The District's consultant, Richard C. Slade and Associates (RCS), reviewed the inspection video and also noted that the mild steel wire wrapped perforations were completely sealed with biological and inorganic material with extensive corrosion. Based on recommendations from the District's RCS and Best, installation of a stainless steel liner instead of performing the remaining chemical and mechanical development work would complete the remaining rehabilitation of Well 18 and increase the physical integrity and useful life of the well.

On **MOTION** by Reinhart, seconded and unanimously carried, **THE BOARD AUTHORIZED A BUDGET INCREASE IN THE AMOUNT OF \$187,000, FROM \$770,000 TO \$957,000; AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE CONTRACT CHANGE ORDER NO. 1 WITH BEST DRILLING AND PUMP, INC. IN THE AMOUNT OF \$323,682 FOR THE DYER ROAD WELLFIELD WELL 18 REHABILITATION, PROJECT 4401.**

MEMBRANE BIOREACTOR LEAPmbr CONVERSION

General Manager Cook reported as a part of the Michelson Water Recycling Plant (MWRP) Phase II Expansion Project, a Membrane Bioreactor (MBR) system was installed and fully commissioned in 2014. General Electric (GE), the MBR system manufacturer, has developed an upgrade that enhances the energy efficiency of the system. This enhancement, known as the LEAPmbr, maintains the same treatment capacity and effluent quality while significantly reducing energy usage. The conversion to LEAPmbr requires the installation of air scouring retrofit kits and modification of the control system software. Southern California Edison (SCE) is providing a financial incentive for this project of up to \$112,000. The incentive is available only if the project is completed within 12 months of SCE's approval which was granted in September 2016.

Using a PowerPoint presentation, Assistant Director of Recycling Operations Zepeda provided an overview of the MWRP process, described the MBR air scouring fundamentals, the existing air scouring system, the air scouring improvements, the benefits of LEAPmbr, the SCE incentive process, and project schedule.

Director Reinhart reported that this item was reviewed and approved by the Engineering and Operations Committee on November 10, 2016. On **MOTION** by Reinhart, seconded and unanimously carried, **THE BOARD AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONTRACT WITH GENERAL ELECTRIC FOR THE IMPLEMENTATION OF THE LEAPmbr CONVERSION TECHNOLOGY IN THE**

AMOUNT OF \$380,999, AND AUTHORIZED THE ADDITION OF THE MWRP MBR LEAP AERATION CONVERSION CAPITAL PROJECT 30418 (4468) TO THE FY 2016/17 CAPITAL BUDGET.

ANNUAL BOARD OF DIRECTORS' FEES

Director Swan reported that the Finance and Personnel Committee reviewed the Board of Directors' compensation and recommended accepting an increase for the new calendar year. Following discussion, on MOTION by Swan, seconded and unanimously carried, THE BOARD ACCEPTED A 5% COMPENSATION INCREASE FOR CALENDAR YEAR 2017 RESULTING IN A MEETING FEE OF \$273 PER MEETING UP TO 10 MEETINGS A MONTH.

GENERAL MANAGER'S REPORT

General Manager Cook congratulated Directors Matheis and Withers on their reelection to the Board.

Mr. Cook reported that he and Mr. Weghorst attended MWDOC's Planning and Operations Committee meeting this morning to provide an overview of the District's purchase of land within the Palo Verde Irrigation District.

Mr. Cook noted a meeting with Orange County Flood District and its need to generate revenues. He said an item will be agendized for its Board on November 22, 2016.

He noted that this Wednesday he will be meeting with LAFCO staff and that he agendized a Closed Session item for the District's November 28 Board meeting.

He reminded the Board of the upcoming ACC-OC Annual Thanksgiving reception this Wednesday, and City of Irvine's recognition of outgoing Mayor Choi and Council Member Beth Krom on November 22nd.

Assistant Director Jose Zepeda introduced Mr. Joe Lam, the District's new Automation Manager.

DIRECTORS' COMMENTS

Director Withers commented on the recent election and was pleased that he and President Matheis were reelected.

Director Swan reported on his attendance at a WaterNow Alliance meeting, an OCWD Board meeting, a MWDOC meeting, NWRI's Clarke Prize awards and conference, an SWD/IRWD Ad Hoc Committee meeting, and a 40th anniversary celebration at the consulting firm of LSA Associates.

Director Reinhart reported on his attendance at a MWDOC Board meeting, a workshop on efficiency standards, a SOCWA Board meeting.

Director Matheis reported on her meeting with Senator Moorlach, that she had accepted an award on behalf of the District from the AIA California Council for the District's groundwater recovery and

recycling efforts, and a South Orange County Watershed Management area meeting. She also said she attended a recent Shadetree Partnership Board meeting, and last Saturday a monthly nursery event with approximately 100 volunteers, and complimented staff on its efficient and effectively run event.

Consultant Jim Reed reported on meetings he attended on behalf of the District.

Consultant Bruce Newell commented that the reservoirs in Santiago Canyon which was smart as a fire precautionary measure. Director Reinhart commented on the application of biosolids pellets in burn areas which he said has been proved as an effective way to protect the soil and also provide a fertilizer source.

ADJOURNMENT

President Matheis adjourned the meeting at 6:07 p.m.

APPROVED and SIGNED this 28th day of November, 2016.

President, IRVINE RANCH WATER DISTRICT

Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson, Wiles & Giannone

November 28, 2016

Prepared and

Submitted by: N. Savedra

Approved by: P. Cook



CONSENT CALENDAR

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

SUMMARY:

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

Events/Meetings

Steven LaMar

11/29-12/2/16 ACWA Fall Conference, Anaheim, CA

Mary Aileen Matheis

11/17/16 OCBC Red Carpet Awards Ceremony Event
11/18/16 Irvine Community Thanksgiving Breakfast Meeting
11/28/16 Water Education Foundation Board Meeting
11/29/16 Orange County Forum
11/29-12/2/16 ACWA Fall Conference, Anaheim, CA
12/13-16/16 CRWUA Annual Conference, Las Vegas, CA

Douglas Reinhart

11/29-12/2/16 ACWA Fall Conference, Anaheim, CA
12/14-16/16 CRWUA Annual Conference, Las Vegas, CA

Peer Swan

11/23/16 Southern California Water Dialogue Meeting
11/28/16 ACWA/JPIA Board of Directors Meeting
11/29-12/2/16 ACWA Fall Conference, Anaheim, CA
12/14-16/16 CRWUA Annual Conference, Las Vegas, CA

John Withers





11/17/16 OCBC Red Carpet Awards Ceremony Event
11/18/16 Irvine Community Thanksgiving Breakfast Meeting
11/22/16 City of Irvine Council Meeting Recognition of Mayor Steven Choi and Beth Krom
11/29-12/2/16 ACWA Fall Conference, Anaheim, CA

RECOMMENDATION:

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

LIST OF EXHIBITS:

None

November 28, 2016 
Prepared by: Jennifer Davis/Tanja Fournier 
Submitted by: Robert Jacobson/Cheryl Clary 
Approved by: Paul Cook 

CONSENT CALENDAR

OCTOBER 2016 TREASURY REPORTS

SUMMARY:

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

- A. The Investment Summary Report for October 2016. This Investment Summary Report is in conformity with the 2016 Investment Policy and provides sufficient liquidity to meet estimated expenditures during the next six months, as outlined in Exhibit "A".
- B. The Monthly Interest Rate Swap Summary as of October 31, 2016, as outlined in Exhibit "B".
- C. The Summary of Payroll ACH payments in the total amount of \$1,656,752, as outlined in Exhibit "C".
- D. The October 31, 2016 Disbursement Summary of warrants 371567 through 372430, wire transfers, Workers' Compensation distributions, payroll withholding distributions, and voided checks in the total amount of \$27,302,904 as outlined in Exhibit "D".
- E. The Disclosure Report of Reimbursements to Board Members and Staff for October 2016, detailing payments or reimbursements for individual charges of \$100.00 or more per transaction, as outlined in Exhibit "E".

FISCAL IMPACTS:

As of October 31, 2016, the book value of the investment portfolio was \$446,074,802, with an 0.86% rate of return and a market value of \$446,003,818. Based on the District's September 30, 2016 quarterly real estate investment rate of return of 12.97%, the weighted average return for the fixed income and real estate investments was 2.73%.

As of October 31, 2016, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash accrual in October from all swaps was negative \$606,815.

Payroll ACH payments totaled \$1,656,752, and wire transfers, all other ACH payments, and checks issued for debt service, accounts payable, payroll, and water purchases for October totaled \$27,302,904.

ENVIRONMENTAL COMPLIANCE:

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

COMMITTEE STATUS:

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

RECOMMENDATION:

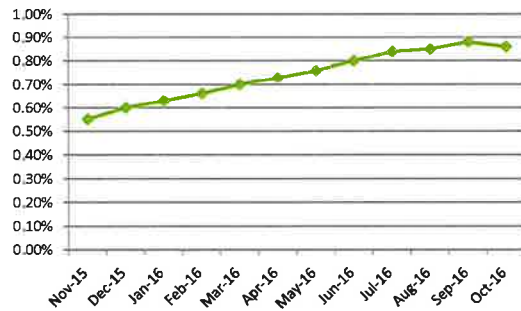
THAT THE BOARD RECEIVE AND FILE THE TREASURER'S INVESTMENT SUMMARY REPORT, THE MONTHLY INTEREST RATE SWAP SUMMARY FOR OCTOBER 2016, AND DISCLOSURE REPORT OF REIMBURSEMENTS TO BOARD MEMBERS AND STAFF; APPROVE THE OCTOBER 2016 SUMMARY OF PAYROLL ACH PAYMENTS IN THE TOTAL AMOUNT OF \$1,656,752 AND APPROVE THE OCTOBER 2016 ACCOUNTS PAYABLE DISBURSEMENT SUMMARY OF WARRANTS 371567 THROUGH 372430, WORKERS' COMPENSATION DISTRIBUTIONS, WIRE TRANSFERS, PAYROLL WITHHOLDING DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$27,302,904.

LIST OF EXHIBITS:

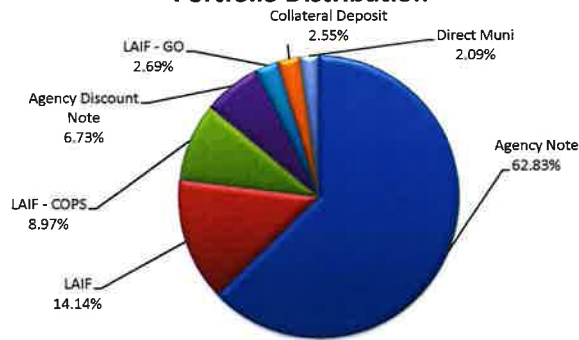
- Exhibit "A" – Investment Summary Report
- Exhibit "B" – Monthly Interest Rate Swap Summary
- Exhibit "C" – Monthly Payroll ACH Summary
- Exhibit "D" – Monthly Summary of District Disbursements
- Exhibit "E" – Disclosure of Reimbursements to Board Members and Staff

Exhibit "A"
Irvine Ranch Water District
Investment Portfolio Summary
October 2016

Monthly Fixed Income Yield



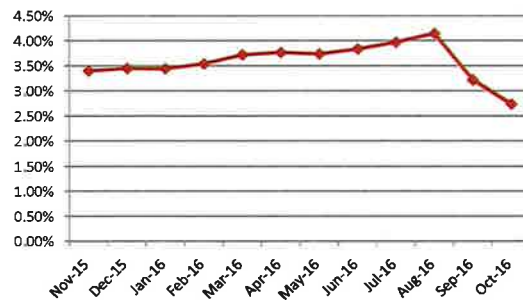
Portfolio Distribution



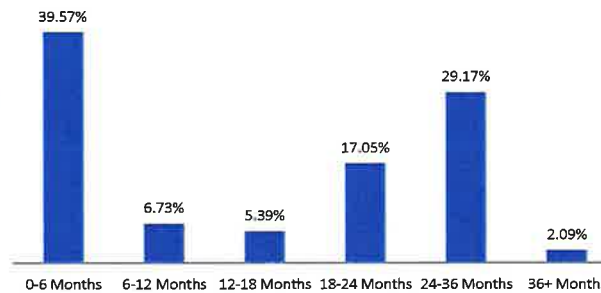
Investment Summary

Type	PAR	Book Value	Market Value
Agency Note	280,000,000	280,432,071	280,319,510
LAIF	63,000,000	63,000,000	63,019,280
LAIF - COPS	40,000,000	40,000,000	40,012,241
Agency Discount Note	30,000,000	29,965,867	29,972,250
LAIF - GO	12,000,000	12,000,000	12,003,672
Collateral Deposit	11,353,457	11,353,457	11,353,457
Direct Muni	9,323,408	9,323,408	9,323,408
Grand Total	445,676,865	446,074,802	446,003,818

Weighted Average Return Including Real Estate Portfolio



Maturity Distribution



Top Issuers

Issuer	PAR	% Portfolio
Fed Home Loan Bank	126,000,000	28.27%
State of California Treasury - LAIF	115,000,000	25.80%
Fed Home Loan Mortgage Corp	79,000,000	17.73%
Fed Natl Mortgage Assoc	60,000,000	13.46%
Fed Farm Credit Bank	45,000,000	10.10%
ETWD	9,323,408	2.09%
Citi-Group Collateral	7,623,457	1.71%
Merrill Lynch Collateral	3,730,000	0.84%
Grand Total	445,676,865	100.00%

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

10/31/16

SETTLMT *	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 10/31/2016	UNREALIZED ⁽²⁾ GAIN/(LOSS)
08/19/16			11/01/16		LAIF	State of California Tsy.	\$63,000,000		0.640%	\$63,000,000.00	\$63,000,000.00	63,019,280.02	19,280.02
09/01/16			11/01/16		LAIF - COPS	State of California Tsy.	40,000,000		0.640%	\$40,000,000.00	\$40,000,000.00	40,012,241.28	12,241.28
10/12/16			11/01/16		LAIF - GO	State of California Tsy.	12,000,000		0.640%	\$12,000,000.00	\$12,000,000.00	12,003,672.38	3,672.38
10/13/16	N/A	N/A	11/28/16	NR	FHLB - Discount Note	Fed Home Loan Bank	10,000,000	0.270%	0.275%	9,996,550.00	9,997,975.00	9,998,500.00	525.00
09/21/15	N/A	N/A	12/09/16	Aaa/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	0.532%	5,066,150.00	5,005,648.76	5,006,800.00	1,151.24
10/12/16	N/A	N/A	12/22/16	NR	FHLB - Discount Note	Fed Home Loan Bank	10,000,000	0.305%	0.310%	9,993,984.72	9,995,679.17	9,997,000.00	1,320.83
10/08/15	N/A	N/A	01/30/17	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.250%	0.492%	5,049,445.00	5,009,270.94	5,010,250.00	979.06
09/21/15	N/A	N/A	02/22/17	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.875%	0.570%	5,021,500.00	5,004,672.12	5,007,000.00	2,327.88
06/15/15	N/A	N/A	03/30/17	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.625%	0.727%	4,990,950.00	4,997,938.15	5,002,950.00	5,011.85
06/16/16	N/A	N/A	04/21/17	NR	FNMA - Discount Note	Fed Natl Mortgage Assoc	5,000,000	0.530%	0.539%	4,977,254.15	4,987,412.49	4,989,300.00	1,887.51
06/16/16	N/A	N/A	04/27/17	Aaa/AA+/NR	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	0.607%	5,022,271.95	5,012,514.71	5,014,650.00	2,135.29
06/16/16	N/A	N/A	05/12/17	NR	FNMA - Discount Note	Fed Natl Mortgage Assoc	5,000,000	0.570%	0.580%	4,973,875.00	4,984,800.00	4,987,450.00	2,650.00
08/27/15	N/A	N/A	05/30/17	NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.625%	0.642%	4,998,500.00	4,999,509.35	5,002,350.00	2,840.65
06/16/16	N/A	N/A	06/30/17	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	0.800%	0.614%	5,009,614.00	5,006,113.39	5,006,700.00	586.61
11/05/15	N/A	N/A	08/28/17	FHLB - Note	Fed Home Loan Bank	5,000,000	0.750%	0.800%	4,995,500.00	4,997,960.73	5,005,050.00	7,089.27	
09/16/15	N/A	N/A	09/15/17	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.900%	0.915%	4,998,500.00	4,999,346.58	5,007,850.00	8,503.42
09/29/15	Continuous after	03/28/16	09/28/17	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.810%	0.815%	4,999,500.00	4,999,773.29	4,999,450.00	(323.29)
12/18/15	Continuous after	12/13/13	12/12/17	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.820%	1.132%	4,969,500.00	4,982,920.00	4,991,100.00	8,180.00
04/22/16	N/A	N/A	01/29/18	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	4,000,000	0.850%	0.856%	3,999,600.00	3,999,719.32	4,000,800.00	1,080.68
03/01/16	Quarterly	05/26/16	02/26/18	NR/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.050%	5,000,000.00	5,000,000.00	5,000,100.00	100.00
03/23/16	N/A	N/A	03/23/18	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.100%	0.908%	5,019,000.00	5,013,195.89	5,012,600.00	(595.89)
04/07/16	N/A	N/A	04/09/18	NA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.750%	0.790%	4,996,000.00	4,997,136.61	4,994,150.00	(2,986.61)
05/16/16	N/A	N/A	05/16/18	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.750%	0.801%	4,995,000.00	4,996,157.53	4,990,050.00	(6,107.53)
05/13/16	N/A	N/A	05/21/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.875%	0.768%	5,010,700.00	5,008,206.23	5,001,400.00	(6,806.23)
05/24/16	N/A	N/A	06/08/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	11,000,000	1.250%	0.995%	11,056,540.00	11,044,321.29	11,061,710.00	17,388.71
06/29/16	One Time	12/29/16	06/29/18	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	1.000%	0.679%	10,016,000.00	10,013,260.27	9,999,800.00	(13,460.27)
09/01/16	One Time	07/27/17	07/27/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.750%	0.928%	4,983,250.00	4,984,722.26	4,983,950.00	(772.26)
09/01/16	One Time	02/28/17	08/28/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.000%	1.000%	5,000,000.00	5,000,000.00	4,988,500.00	(11,500.00)
09/01/16	N/A	NA	09/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.125%	0.916%	5,021,000.00	5,019,275.91	5,017,950.00	(1,325.91)
10/12/16	N/A	N/A	09/27/18	Aaa/AA+/NR	FHLB -Note	Fed Home Loan Bank	10,000,000	0.900%	0.952%	9,990,000.00	9,990,279.72	9,993,800.00	3,520.28
10/12/16	N/A	N/A	09/28/18	Aaa/AA+/AAA	FFCB - Note	Fed Farm Credit Bank	5,000,000	0.880%	0.942%	4,994,000.00	4,994,167.60	4,999,200.00	5,032.40
09/01/16	NA	NA	10/01/18	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	5,000,000	1.030%	0.925%	5,010,750.00	5,009,887.17	5,007,350.00	(2,537.17)
10/12/16	One Time	04/12/17	10/12/18	Aaa/NR/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.000%	1.041%	9,992,000.00	9,992,219.18	9,984,600.00	(7,619.18)
10/12/16	N/A	N/A	11/27/18	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	10,000,000	1.625%	0.956%	10,140,360.00	10,136,742.47	10,135,400.00	(1,342.47)
09/01/16	NA	NA	12/14/18	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.750%	0.941%	5,091,300.00	5,084,622.18	5,080,650.00	(3,972.18)
09/01/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.009%	4,993,000.00	4,993,484.68	4,988,400.00	(5,084.68)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.035%	4,990,500.00	4,990,569.01	4,988,400.00	(2,169.01)
10/26/16	One Time	07/30/18	01/30/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.950%	1.040%	4,990,000.00	4,990,072.64	4,988,400.00	(1,672.64)
10/12/16	Continuous after	02/12/18	02/12/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.050%	1.093%	9,990,000.00	9,990,234.47	9,990,600.00	365.53
09/01/16	NA	NA	03/08/19	Aaa/AA+/AAA	FHLB - Note	Fed Home Loan Bank	5,000,000	1.500%	0.964%	5,066,500.00	5,062,081.15	5,057,900.00	(4,181.15)
10/12/16	One Time	03/29/17	03/29/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	1.050%	1.050%	4,999,950.00	4,999,951.11	4,994,850.00	(5,101.11)
10/12/16	N/A	N/A	04/15/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	10,000,000	1.125%	0.992%	10,032,800.00	10,032,083.06	10,027,500.00	(4,583.06)
10/31/16	One Time	04/26/17	04/26/19	Aaa/AA+/AAA	FHLMC - Note	Fed Farm Credit Bank	5,000,000	1.050%	1.060%	4,998,750.00	4,998,751.38	4,997,800.00	(951.38)
09/01/16	One Time	08/28/17	05/28/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.030%	1.048%	4,997,550.00	4,997,699.60	4,976,650.00	(21,049.60)

IRVINE RANCH WATER DISTRICT
INVESTMENT SUMMARY REPORT

10/31/16

SETTLMT *	Call Schedule	Initial Call	Maturity Date	Rating	INVESTMENT TYPE	INSTITUTION / ISSUER	PAR Amount	COUPON DISCOUNT	YIELD	ORIGINAL COST	CARRY VALUE	MARKET VALUE ⁽¹⁾ 10/31/2016	UNREALIZED ⁽²⁾ GAIN/(LOSS)
09/01/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	0.987%	5,087,400.00	5,082,152.56	5,075,100.00	(7,052.56)
10/12/16	NA	NA	06/14/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.625%	1.103%	5,068,515.88	5,067,110.43	5,075,100.00	7,989.57
10/12/16	NA	NA	07/19/19	Aaa/AA+/AAA	FHLMC - Note	Fed Home Loan Mortgage Corp	5,000,000	0.875%	1.098%	4,969,652.90	4,970,253.83	4,990,650.00	20,396.17
09/01/16	One Time	01/26/17	07/26/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.180%	4,995,700.00	4,995,947.92	4,983,050.00	(12,897.92)
09/01/16	One Time	08/28/17	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.150%	1.160%	4,998,500.00	4,998,583.87	4,977,600.00	(20,983.87)
09/01/16	One Time	02/28/17	08/28/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.132%	4,999,000.00	4,999,055.91	4,975,450.00	(23,605.91)
09/28/16	Quarterly	03/09/17	09/09/19	Aaa/AA+/AAA	FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.125%	1.142%	4,997,500.00	4,997,578.78	4,972,200.00	(25,378.78)
09/28/16	Continuous after	12/27/16	09/27/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	5,000,000	1.250%	1.189%	5,001,500.00	5,001,453.38	4,988,000.00	(13,453.38)
10/12/16	Continuous after	10/03/17	10/03/19	Aaa/AA+/NR	FHLB - Note	Fed Home Loan Bank	10,000,000	1.125%	1.160%	9,989,780.00	9,989,968.21	9,985,800.00	(4,168.21)
10/12/16	Continuous after	10/11/17	10/11/19	Aaa/AA+/NR	FFCB - Note	Fed Farm Credit Bank	10,000,000	1.120%	1.205%	9,975,000.00	9,975,457.04	9,979,900.00	4,442.96
05/30/15	N/A	N/A	04/30/36	NR	Direct Muni	ETWD	9,323,408	4.570%	4.570%	9,323,407.59	9,323,407.59	9,323,407.59	
SUB-TOTAL							<u>\$434,323,408</u>			<u>\$434,843,601.19</u>	<u>\$434,721,344.92</u>	<u>\$434,650,361.27</u>	<u>(\$70,983.65)</u>
RESTRICTED CASH (Swap Collateral Deposits)⁽⁵⁾													
03/01/16					Collateral Deposit	Citi-Group	\$7,623,457		0.410%	\$7,623,457.03	\$7,623,457.03	7,623,457.03	
02/28/16					Collateral Deposit	Merrill Lynch	\$3,730,000		0.410%	\$3,730,000.00	\$3,730,000.00	3,730,000.00	
SUB-TOTAL							<u>\$11,353,457</u>			<u>\$11,353,457.03</u>	<u>\$11,353,457.03</u>	<u>\$11,353,457.03</u>	
TOTAL INVESTMENTS							<u>\$445,676,865</u>			<u>\$446,197,058.22</u>	<u>\$446,074,801.95</u>	<u>\$446,003,818.30</u>	
			September		Petty Cash Ck Balance	Bank of America				3,400.00			
										<u>1,248,886.86</u>			
										<u>\$447,449,345.08</u>			

⁽¹⁾ LAIF 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.

⁽²⁾ Gain (loss) calculated against carry value using the trading value provided by Bank of New York/or Brokers

⁽³⁾ Real estate rate of return is based on most recent quarter end return

⁽⁴⁾ Calculation excludes Direct Muni - ETWD

⁽⁵⁾ Swap Collateral Deposits assumes 6 month maturity, dependent on interest rate changes

This Investment Summary Report is in conformity with the 2016 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.

*S - Step up

Outstanding Variable Rate Debt	\$307,100,000
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)	\$177,100,000
Investment Balance:	\$447,449,345
Investment to Variable Rate Debt Ratio:	253%
Portfolio - Average Number of Days To Maturity ⁽⁴⁾	446

	Investment Portfolio	Real Estate ⁽³⁾ Portfolio	Weighted Avg. Return
October	0.86%	12.97%	2.73%
September	0.88%	12.97%	3.21%
Change	-0.02%		-0.48%

IRVINE RANCH WATER DISTRICT
SUMMARY OF MATURITIES

10/31/16

DATE	TOTAL	%	LAIF	Agency Notes	Agency Discount Notes	Collateral Deposit	Direct Muni
10/16	\$115,000,000	25.80%	\$115,000,000				
11/16	10,000,000	2.24%			10,000,000		
12/16	15,000,000	3.37%		5,000,000	10,000,000		
01/17	5,000,000	1.12%		5,000,000			
02/17	16,353,457	3.67%		5,000,000		\$11,353,457	
03/17	5,000,000	1.12%		5,000,000			
04/17	10,000,000	2.24%		5,000,000	5,000,000		
05/17	10,000,000	2.24%		5,000,000	5,000,000		
06/17	5,000,000	1.12%		5,000,000			
07/17							
08/17	5,000,000	1.12%		5,000,000			
09/17	10,000,000	2.24%		10,000,000			
SUB-TOTAL	\$206,353,457	46.30%	\$115,000,000	\$50,000,000	\$30,000,000	\$11,353,457	
13 Months - 3 YEARS							
10/01/17-12/31/17	5,000,000	1.12%		5,000,000			
1/01/18 - 3/31/2018	14,000,000	3.14%		14,000,000			
04/01/18 - 6/30/2018	36,000,000	8.08%		36,000,000			
07/01/18-9/30/2018	30,000,000	6.73%		30,000,000			
10/01/2018-12/31/18	30,000,000	6.73%		30,000,000			
1/01/19 - 3/31/2019	35,000,000	7.85%		35,000,000			
04/01/2019 - 06/30/2019	30,000,000	6.73%		30,000,000			
07/01/2019 - 09/30/2019	30,000,000	6.73%		30,000,000			
10/01/2019 - 12/31/2019	20,000,000	4.49%		20,000,000			
04/30/2036	9,323,408	2.09%					9,323,408
TOTALS	\$445,676,865	100.00%	\$115,000,000	\$280,000,000	\$30,000,000	\$11,353,457	\$9,323,408

% OF PORTFOLIO

25.80%

62.83%

6.73%

2.55%

2.09%

Irvine Ranch Water District
 Summary of Real Estate
 9/30/2016

	<u>ACQUISITION DATE</u>	<u>PROPERTY TYPE</u>	<u>OWNERSHIP INTEREST</u>	<u>ORIGINAL COST</u>	<u>ESTIMATED MARKET VALUE 30-Jun-16</u>	<u>RATE OF RETURN QUARTER ENDED 30-Sep-16</u>
Sycamore Canyon	Dec-92	Apartments	Fee Simple	\$ 43,550,810	\$ 143,910,000	17.95%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	\$ 27,296,298	8.56%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	\$ 5,739,845	\$ 9,384,000	-2.42%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	\$ 8,630,577	\$ 7,650,000	5.66%
Sand Canyon Professional Center	Jul-12	Medical Office	Fee Simple	\$ 8,648,594	\$ 10,608,000	8.45%
				<u>\$ 72,569,826</u>	<u>\$ 198,848,298</u>	<u>12.97%</u>

IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT
INVESTMENT ACTIVITY
Sep-16

MATURITIES/SALES/CALLS

PURCHASES

DATE	SECURITY TYPE	PAR	YIELD	Settlement Date	Maturity Date	SECURITY TYPE	PAR	YIELD TO MATURITY
10/13/2016	FAMCA - Note	\$5,000,000	0.58%	10/12/2016	10/13/2016	FHLB - Discount Note	\$20,000,000	0.23%
10/13/2016	FHLB - Discount Note	\$20,000,000	0.23%	10/12/2016	12/22/2016	FHLB - Discount Note	\$10,000,000	0.31%
10/13/2016	FHLB - Discount Note	\$10,000,000	0.25%	10/12/2016	9/27/2018	FHLB - Note	\$10,000,000	0.95%
				10/12/2016	9/28/2018	FFCB - Note	\$5,000,000	0.94%
				10/12/2016	10/12/2018	FFCB - Note	\$10,000,000	1.04%
				10/12/2016	11/27/2018	FNMA - Note	\$10,000,000	0.96%
				10/12/2016	2/12/2019	FHLB - Note	\$10,000,000	1.09%
				10/12/2016	3/29/2019	FHLMC - Note	\$5,000,000	1.05%
				10/12/2016	4/15/2019	FHLMC - Note	\$10,000,000	0.99%
				10/12/2016	6/14/2019	FHLB - Note	\$5,000,000	1.10%
				10/12/2016	7/19/2019	FHLMC - Note	\$5,000,000	1.10%
				10/12/2016	10/3/2019	FHLB - Note	\$10,000,000	1.16%
				10/12/2016	10/11/2019	FFCB - Note	\$10,000,000	1.21%
				10/13/2016	10/31/2016	FHLB - Discount Note	\$10,000,000	0.25%
				10/13/2016	11/28/2016	FHLB - Discount Note	\$10,000,000	0.27%
				10/26/2016	1/30/2019	FHLMC - Note	\$5,000,000	1.03%
				10/26/2016	1/30/2019	FHLMC - Note	\$5,000,000	1.04%
				10/31/2016	4/26/2019	FHLMC - Note	\$5,000,000	1.05%

IRVINE RANCH WATER DISTRICT
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL
October 31, 2016

LIBOR Avg %	Prior Mo.	Current Mo.	12-Mo Avg
	0.53%	0.53%	0.43%

Current Fiscal Year Active Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	(Since 6/06)	Current Mark to Market	Notional Difference
											Cumulative Cash Flow		
Fixed Payer Swaps - By Effective Date													
6/4/2006	6/4/2019	2.6	ML	\$ 20,000,000	FXP	LIBOR	6.200%	(91,238)	(97,649)	\$ (382,552)	\$ (10,209,728)	\$ 17,303,446	\$ (2,696,554)
6/4/2006	6/4/2019	2.6	CG	20,000,000	FXP	LIBOR	6.200%	(91,238)	(97,649)	(382,552)	(10,209,728)	17,303,228	(2,696,772)
6/17/2006	6/17/2019	2.6	CG	30,000,000	FXP	LIBOR	6.140%	(135,472)	(144,859)	(567,715)	(15,146,166)	25,948,683	(4,051,317)
3/10/2007	3/10/2029	12.4	ML	30,000,000	FXP	LIBOR	5.687%	(124,981)	(133,329)	(522,030)	(13,637,059)	16,448,857	(13,551,143)
3/10/2007	3/10/2029	12.4	CG	30,000,000	FXP	LIBOR	5.687%	(124,981)	(133,329)	(522,030)	(13,637,059)	16,450,556	(13,549,444)
Totals/Weighted Avgs				7.1	\$ 130,000,000		5.949%	\$ (567,910)	\$ (606,815)	\$ (2,376,879)	\$ (62,839,741)	\$ 93,454,770	\$ (36,545,230)
Total Current Year Active Swaps					\$ 130,000,000			\$ (567,910)	\$ (606,815)	\$ (2,376,879)	\$ (62,839,741)	\$ 93,454,770	\$ (36,545,230)

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

Current Fiscal Year - Total Swaps								Cash Flow				Mark to Market	
Effective Date	Maturity Date	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Prior Month	Current Month	Fiscal YTD	Cumulative Cash Flow	Current Mark to Market	Notional Difference	
													Total Current Year Active & Terminated Swaps
				\$ 130,000,000			\$ (567,910)	\$ (606,815)	\$ (2,376,879)	\$ (62,839,741)	\$ 93,454,770	\$ (36,545,230)	

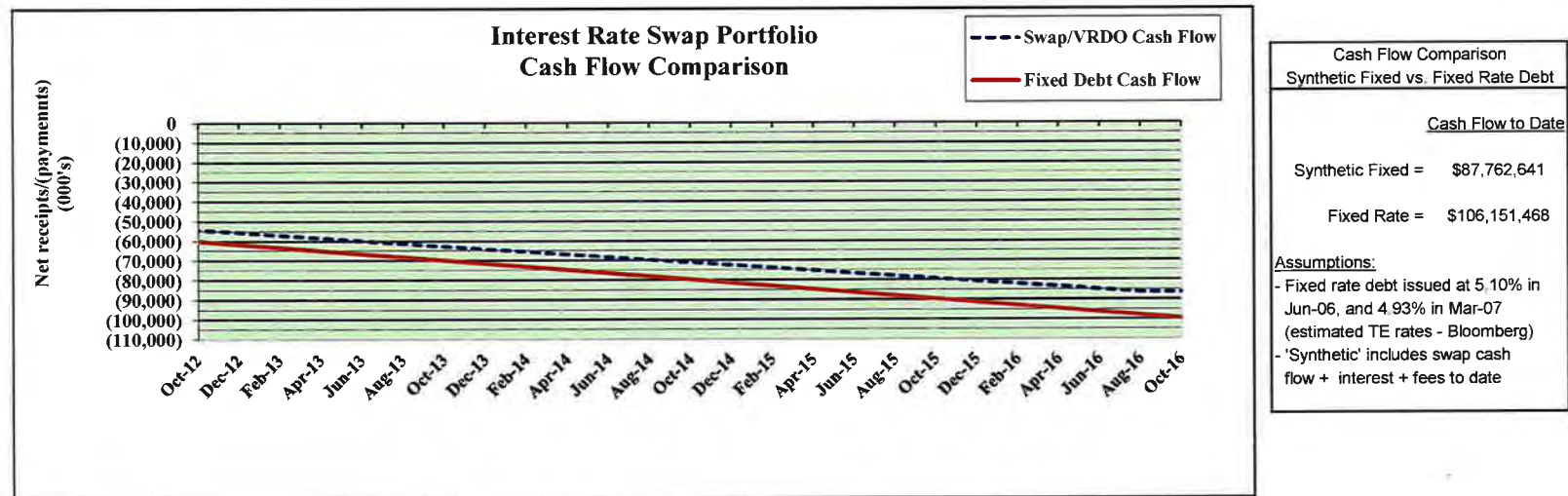


Exhibit "C"

MONTHLY SUMMARY OF PAYROLL ACH PAYMENTS

**October
2016**

	AMOUNT	VENDOR	PURPOSE
10/14/2016	826,105.89	BANK OF AMERICA	ACH Payments for Payroll
10/28/2018	830,646.14	BANK OF AMERICA	ACH Payments for Payroll
	<u>\$1,656,752.03</u>		

Exhibit "D"

>

IRWD Ledger

Void Payment Register

Report Date: 01-NOV-2016 14:15

Include Zero Amount Payments: Yes
Display Payee Address: No

Period From: 01-OCT-16

Page: 1
To: 31-OCT-16
Date: Void Date

Bank: Bank of America N.A.

Branch: Los Angeles

Account: Checking AP and PR

Bank Account Currency: USD

Payment Currency: USD (US Dollar)

Payment Number	Date	Payee Name	Site	Address	Payment Amount	Void Date
Payment Document: IRWD CHECK						
369204	21-JUL-16	CHO, GINA	PAY		62.69	25-OCT-16
369351	28-JUL-16	BONDILI, KALYAN	PAY		23.70	25-OCT-16
369389	28-JUL-16	GOH, WAN TING	PAY		4.96	25-OCT-16
369494	28-JUL-16	WOOD, LUKE	PAY		138.27	25-OCT-16
370333	01-SEP-16	ALHAZNI, ANWAR	PAY		25.40	28-OCT-16
370590	08-SEP-16	ARDEN REALTY INC	PAY		29.47	28-OCT-16
370648	08-SEP-16	ESCOBEDO, MARIO	PAY		24.50	20-OCT-16
370825	15-SEP-16	BARTOLOME, ALVIN	PAY		11.21	20-OCT-16
370843	15-SEP-16	BRAUN, KAREN	PAY		12.34	20-OCT-16
370844	15-SEP-16	BRENNAN, PHILIP	PAY		27.74	20-OCT-16
370908	15-SEP-16	KAKEHASHI, GRANT	PAY		18.61	28-OCT-16
370978	15-SEP-16	RONQUILLO, BEA	PAY		12.45	20-OCT-16
371043	15-SEP-16	YU, YUEFENG	PAY		22.45	20-OCT-16
371126	22-SEP-16	CORTES, RICARDO	PAY		20.32	20-OCT-16
371186	22-SEP-16	GARCIA, RALPH	PAY		11.13	20-OCT-16
371321	22-SEP-16	VAN DYKE SPREADERS, INC.	BLYTHE		299.00	05-OCT-16
371568	03-OCT-16	NOVA, AMANA	PAY		14.20	04-OCT-16
372087	20-OCT-16	AT&T	CAROL STREAM 2		1,328.01	20-OCT-16
Payment Document Subtotal					2,086.45	

Payment Number	Date	Payee Name	Site	Address	Payment Amount	Void Date
Payment Document: IRWD Wire						

11742	10-OCT-16	BANK OF NEW YORK MELLON TRU NEWARK			14,786.48	28-OCT-16
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Payment Document Subtotal 14,786.48

Bank Account Subtotal 16,872.93

Report Count: 19

Report Total 16,872.93

Total Void

IRWD Ledger

Void Payment Register

Report Date: 01-NOV-2016 14:15

Include Zero Amount Payments: Yes
Display Payee Address: No

Period From: 01-OCT-16

Page: 2
To: 31-OCT-16
Date: Void Date

*** End of Report ***

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IRWD Ledger Payment Register For 01-OCT-16 To 31-OCT-16 Report Date: 01-NOV-2016 14:14
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 1
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371567		03-OCT-16	NOVA, AMANA	PAY	14.20	27-OCT-16	14.20	Reconciled
371568		03-OCT-16	NOVA, AMANA	PAY	14.20			Voided
371569		04-OCT-16	CITY OF IRVINE	IRVINE 1	14,107.23	11-OCT-16	14,107.23	Reconciled
371570		04-OCT-16	CITY OF IRVINE	IRVINE 1	2,169.78	11-OCT-16	2,169.78	Reconciled
371571		06-OCT-16	Compton, Christine A		112.86	07-OCT-16	112.86	Reconciled
371572		06-OCT-16	Chaney, David (Dave)		260.00	11-OCT-16	260.00	Reconciled
371573		06-OCT-16	Olivolo, Eric J (Eric)		185.28	12-OCT-16	185.28	Reconciled
371574		06-OCT-16	Solis, Henry (Henry)		93.00			Negotiable
371575		06-OCT-16	Davis, Jennifer R (Jennifer)		182.76	07-OCT-16	182.76	Reconciled
371576		06-OCT-16	Nash, Joel		147.42	11-OCT-16	147.42	Reconciled
371577		06-OCT-16	Oldewage, Lars D (Lars)		362.65	11-OCT-16	362.65	Reconciled
371578		06-OCT-16	Stuvick, Lindsey R		479.78	06-OCT-16	479.78	Reconciled
371579		06-OCT-16	Cortez, Malcolm A (Malcolm)		64.80			Negotiable
371580		06-OCT-16	O'Neill, Owen H		270.00			Negotiable
371581		06-OCT-16	Reynoso, Pio (Pio)		93.00	11-OCT-16	93.00	Reconciled
371582		06-OCT-16	Bennett, Ray R (Ray)		305.96	06-OCT-16	305.96	Reconciled
371583		06-OCT-16	Toland, Scott Andrew		39.92	14-OCT-16	39.92	Reconciled
371584		06-OCT-16	Sidlin, Wayne		255.00	07-OCT-16	255.00	Reconciled
371585		06-OCT-16	WESTAMERICA COMMUNICATIONS, INC.	LAKE FOREST	9,100.84	07-OCT-16	9,100.84	Reconciled
371586		06-OCT-16	ENVIRONMENTAL EXPRESS INC	ATLANTA	2,061.51	11-OCT-16	2,061.51	Reconciled
371587		06-OCT-16	HARDY & HARPER INCPAY		10,396.40	11-OCT-16	10,396.40	Reconciled
371588		06-OCT-16	ORANGE COUNTY AUTOPAY PARTS CO		288.93	11-OCT-16	288.93	Reconciled
371589		06-OCT-16	PRAXAIR DISTRIBUTION INC	PAY	1,411.28	17-OCT-16	1,411.28	Reconciled
371590		06-OCT-16	ADS LLC		1,936.50	12-OCT-16	1,936.50	Reconciled
371591		06-OCT-16	AFLAC		7,140.33	12-OCT-16	7,140.33	Reconciled
371592		06-OCT-16	AFLAC		385.67	11-OCT-16	385.67	Reconciled
371593		06-OCT-16	AIRGAS, INC.		538.80	12-OCT-16	538.80	Reconciled
371594		06-OCT-16	ALLIANT INSURANCE SERVICES, INC		3,173.40	12-OCT-16	3,173.40	Reconciled
371595		06-OCT-16	ALPHA TRAFFIC SERVICES, INC.		1,140.00	18-OCT-16	1,140.00	Reconciled
371596		06-OCT-16	ALSTON & BIRD LLP		42,902.16	14-OCT-16	42,902.16	Reconciled

IRWD Ledger Payment Register For 01-OCT-16 To 31-OCT-16 Report Date: 01-NOV-2016 14:14
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 2
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371597		06-OCT-16	AMERICAN TECHNOLOGIES, INC		2,260.00	12-OCT-16	2,260.00	Reconciled
371598		06-OCT-16	APPLIED TECHNOLOGY GROUP INC		12,281.80	13-OCT-16	12,281.80	Reconciled
371599		06-OCT-16	ARMATIS, DANIEL		37.16			Negotiable
371600		06-OCT-16	ASSOCIATION OF CALIFORNIA WATER AGENCIES/JPIA		32,973.77	14-OCT-16	32,973.77	Reconciled
371601		06-OCT-16	AT&T		51.31	11-OCT-16	51.31	Reconciled
371602		06-OCT-16	AT&T		3,984.47	12-OCT-16	3,984.47	Reconciled
371603		06-OCT-16	AUTOZONE PARTS, INC.		601.37	11-OCT-16	601.37	Reconciled
371604		06-OCT-16	BATTERIES PLUS AND BATTERIES PLUS BULBS		381.01	11-OCT-16	381.01	Reconciled
371605		06-OCT-16	BIGDELI, FARIBA		306.24	27-OCT-16	306.24	Reconciled
371606		06-OCT-16	BIOMAGIC INC		14,408.05	11-OCT-16	14,408.05	Reconciled
371607		06-OCT-16	BIOQUIP PRODUCTS INC		192.11	12-OCT-16	192.11	Reconciled
371608		06-OCT-16	BLOOMBERG FINANCE LP		12,465.00	12-OCT-16	12,465.00	Reconciled
371609		06-OCT-16	BOYD & ASSOCIATES		1,434.00	12-OCT-16	1,434.00	Reconciled
371610		06-OCT-16	BRITHINEE ELECTRIC		18,468.95	11-OCT-16	18,468.95	Reconciled
371611		06-OCT-16	BURLINGTON SAFETY LABORATORY OF		947.54	11-OCT-16	947.54	Reconciled

371612	06-OCT-16	CALIFORNIA INC CALIFORNIA BANK & TRUST	22,487.92	12-OCT-16	22,487.92	Reconciled
371613	06-OCT-16	CALIFORNIA BARRICADE RENTAL, INC.	12,587.50	12-OCT-16	12,587.50	Reconciled
371614	06-OCT-16	CAPTIVE AUDIENCE MARKETING INC.	85.32	18-OCT-16	85.32	Reconciled
371615	06-OCT-16	CARSMETICS	131.36	13-OCT-16	131.36	Reconciled
371616	06-OCT-16	CHANG, JULIE	367.44			Negotiable
371617	06-OCT-16	CHIU, TOOMY	125.84			Negotiable
371618	06-OCT-16	CHO DESIGN ASSOCIATES, INC	4,400.00	11-OCT-16	4,400.00	Reconciled
371619	06-OCT-16	CHOI, YIJIN	172.50			Negotiable
371620	06-OCT-16	CHOICE, CLAIRE S	14.92	24-OCT-16	14.92	Reconciled
371621	06-OCT-16	CITY OF IRVINE	918.50	17-OCT-16	918.50	Reconciled
371622	06-OCT-16	CITY OF LAKE FOREST	30,000.00	17-OCT-16	30,000.00	Reconciled
371623	06-OCT-16	CITY OF TUSTIN	225.70	11-OCT-16	225.70	Reconciled
371624	06-OCT-16	CIVILSOURCE, INC.	3,510.00	11-OCT-16	3,510.00	Reconciled
371625	06-OCT-16	CLEAN ENERGY	2,254.73	12-OCT-16	2,254.73	Reconciled

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 3
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371626		06-OCT-16	COASTLINE EQUIPMENT COMPANY		1,259.86	11-OCT-16	1,259.86	Reconciled
371627		06-OCT-16	COMET ELECTRIC, INC.		670.19	11-OCT-16	670.19	Reconciled
371628		06-OCT-16	CONTROLLED MOTION SOLUTIONS, INC		328.83	11-OCT-16	328.83	Reconciled
371629		06-OCT-16	COSTELLO, DANIEL		58.96	11-OCT-16	58.96	Reconciled
371630		06-OCT-16	CREDENTIAL CHECK CORPORATION		216.36	11-OCT-16	216.36	Reconciled
371631		06-OCT-16	D & H WATER SYSTEMS INC.		1,167.70	17-OCT-16	1,167.70	Reconciled
371632		06-OCT-16	DAMAVANDI, EMIL		208.87			Negotiable
371633		06-OCT-16	DATAZEO, INC.		3,604.00	11-OCT-16	3,604.00	Reconciled
371634		06-OCT-16	DELL MARKETING LP		1,049.66	12-OCT-16	1,049.66	Reconciled
371635		06-OCT-16	DETECTION INSTRUMENTS CORP		1,607.31	12-OCT-16	1,607.31	Reconciled
371636		06-OCT-16	DMS FACILITY SERVICES, INC.		16,516.93	12-OCT-16	16,516.93	Reconciled
371637		06-OCT-16	DOOLEY, ADAM		75.61	11-OCT-16	75.61	Reconciled
371638		06-OCT-16	EAST ORANGE COUNTY WATER DISTRICT		15,956.52			Negotiable
371639		06-OCT-16	EHS INTERNATIONAL, INC		1,620.00	12-OCT-16	1,620.00	Reconciled
371640		06-OCT-16	ENVIRONMENTAL ENGINEERING AND CONTRACTING, INC.		11,510.00	12-OCT-16	11,510.00	Reconciled
371641		06-OCT-16	ENVIRONMENTAL EQUIPMENT SUPPLY, INC		135.00	12-OCT-16	135.00	Reconciled
371642		06-OCT-16	ENVIRONMENTAL RESOURCE ASSOCIATES		438.41	13-OCT-16	438.41	Reconciled
371643		06-OCT-16	ESTANCIA APTS		3,729.60	13-OCT-16	3,729.60	Reconciled
371644		06-OCT-16	EVISTA INDUSTRIES, INC.		432.50	12-OCT-16	432.50	Reconciled
371645		06-OCT-16	FEDEX NATIONAL LTL, INC		473.96	14-OCT-16	473.96	Reconciled
371646		06-OCT-16	FIDELITY SECURITY LIFE INSURANCE COMPANY		6,486.86	13-OCT-16	6,486.86	Reconciled
371647		06-OCT-16	FISHER SCIENTIFIC COMPANY LLC		8,931.78	11-OCT-16	8,931.78	Reconciled
371648		06-OCT-16	FRANK LA PLACA EXTERMINATING, INC.		175.00	20-OCT-16	175.00	Reconciled
371649		06-OCT-16	GANAHL LUMBER CO.		1,502.53	13-OCT-16	1,502.53	Reconciled

IRWD Ledger
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 4
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371650		06-OCT-16	GHD INC.		13,764.09	18-OCT-16	13,764.09	Reconciled
371651		06-OCT-16	GRAHAM, SUZANNE		49.75	11-OCT-16	49.75	Reconciled
371652		06-OCT-16	GRAINGER		574.44	11-OCT-16	574.44	Reconciled
371653		06-OCT-16	GRAYBAR ELECTRIC COMPANY		306.11	11-OCT-16	306.11	Reconciled
371654		06-OCT-16	GRIFFITH COMPANY		634.63	12-OCT-16	634.63	Reconciled

371655	06-OCT-16	HAAKER EQUIPMENT COMPANY	1,465.85	12-OCT-16	1,465.85	Reconciled
371656	06-OCT-16	HADRONEX, INC	624.60	12-OCT-16	624.60	Reconciled
371657	06-OCT-16	HAMADA, JAMES	213.05	17-OCT-16	213.05	Reconciled
371658	06-OCT-16	HASLER INC.	1,276.00	13-OCT-16	1,276.00	Reconciled
371659	06-OCT-16	HDR ENGINEERING INC	67,273.50	13-OCT-16	67,273.50	Reconciled
371660	06-OCT-16	HEALTH SCIENCE ASSOCIATES, INC.	5,559.25	19-OCT-16	5,559.25	Reconciled
371661	06-OCT-16	HELP/SYSTEMS, LLC	9,850.00	11-OCT-16	9,850.00	Reconciled
371662	06-OCT-16	HELPMATES STAFFING SERVICES	17,773.26	11-OCT-16	17,773.26	Reconciled
371663	06-OCT-16	HENRY PRATT COMPANY	1,500.00	11-OCT-16	1,500.00	Reconciled
371664	06-OCT-16	HERCKT, MONICA	117.14	17-OCT-16	117.14	Reconciled
371665	06-OCT-16	HILL BROTHERS CHEMICAL COMPANY	4,497.50	13-OCT-16	4,497.50	Reconciled
371666	06-OCT-16	HOME DEPOT USA INC	3,091.59	20-OCT-16	3,091.59	Reconciled
371667	06-OCT-16	IDEXX DISTRIBUTION, INC	2,633.60	11-OCT-16	2,633.60	Reconciled
371668	06-OCT-16	INDEPENDENT SPECIAL DISTRICT OF ORANGE COUNTY	37.00	14-OCT-16	37.00	Reconciled
371669	06-OCT-16	IRVINE COMPANY	40,035.60	17-OCT-16	40,035.60	Reconciled
371670	06-OCT-16	IRVINE PIPE & SUPPLY INC	8,170.85	11-OCT-16	8,170.85	Reconciled
371671	06-OCT-16	JACOBSON, JULIAN	76.24	11-OCT-16	76.24	Reconciled
371672	06-OCT-16	JACOME, ALBERT	132.38	11-OCT-16	132.38	Reconciled
371673	06-OCT-16	JERKINS, JAMES	112.54			Negotiable
371674	06-OCT-16	JIG CONSULTANTS	7,160.00	12-OCT-16	7,160.00	Reconciled
371675	06-OCT-16	JOHN ROBINSON CONSULTING, INC.	25,773.75	17-OCT-16	25,773.75	Reconciled
371676	06-OCT-16	KENT & AMY DAHLBERG	9,982.00	13-OCT-16	9,982.00	Reconciled
371677	06-OCT-16	KILL-N-BUGS TERMITES AND PEST CONTROL SERVICES	5,595.00	12-OCT-16	5,595.00	Reconciled
371678	06-OCT-16	KIM, ANDREW	9.24	11-OCT-16	9.24	Reconciled
371679	06-OCT-16	KIMBALL MIDWEST	1,513.70	11-OCT-16	1,513.70	Reconciled

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

Payment Register For 01-OCT-16 To 31-OCT-16 Report Date: 01-NOV-2016 14:14
 Account: Checking AP and PR Page: 5
 Payment Currency: USD (US Dollar)
 Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371680		06-OCT-16	KIRKENDALL, CORINNE		861.42	11-OCT-16	861.42	Reconciled
371681		06-OCT-16	KOELLER NEBEKER CARLSON & HALUCK, LLP		3,633.77	11-OCT-16	3,633.77	Reconciled
371682		06-OCT-16	KS DIRECT LLC		1,987.20	11-OCT-16	1,987.20	Reconciled
371683		06-OCT-16	L & S CONSTRUCTION INC		255.48	12-OCT-16	255.48	Reconciled
371684		06-OCT-16	L. G. SUPPLY COMPANY		7,037.28	18-OCT-16	7,037.28	Reconciled
371685		06-OCT-16	LANDCARE HOLDINGS, INC.		5,900.00	11-OCT-16	5,900.00	Reconciled
371686		06-OCT-16	LARK LABEL LLC		1,245.40	17-OCT-16	1,245.40	Reconciled
371687		06-OCT-16	LBA REALTY BPCC, LLC		32.03	17-OCT-16	32.03	Reconciled
371688		06-OCT-16	LEHMAN CONSTRUCTION INC		522.95	18-OCT-16	522.95	Reconciled
371689		06-OCT-16	LENNAR HOMES		33.91	11-OCT-16	33.91	Reconciled
371690		06-OCT-16	LIMA, ANA		5.82	31-OCT-16	5.82	Reconciled
371691		06-OCT-16	LUO, YANNI		19.94			Negotiable
371692		06-OCT-16	MACHADO, MARK ALAN		26.05	11-OCT-16	26.05	Reconciled
371693		06-OCT-16	MALLOY, KIRSTY		13.13	11-OCT-16	13.13	Reconciled
371694		06-OCT-16	MARCH, RAYAN		17.53	11-OCT-16	17.53	Reconciled
371695		06-OCT-16	MARTIAN, ADRIENNE		383.23	11-OCT-16	383.23	Reconciled
371696		06-OCT-16	MARTINEZ, CHRISTIAN		34.22	12-OCT-16	34.22	Reconciled
371697		06-OCT-16	MAZZOLA, CHRISTINE		27.80			Negotiable
371698		06-OCT-16	MBF CONSULTING, INC.		10,079.42	12-OCT-16	10,079.42	Reconciled
371699		06-OCT-16	MC CLELLAND, GREG D		21.71	11-OCT-16	21.71	Reconciled
371700		06-OCT-16	MC FADDEN-DALE INDUSTRIAL		20.82	12-OCT-16	20.82	Reconciled
371701		06-OCT-16	MC MASTER CARR SUPPLY CO		2,735.89	11-OCT-16	2,735.89	Reconciled
371702		06-OCT-16	MCKENZIE, DAN		54.94	17-OCT-16	54.94	Reconciled
371703		06-OCT-16	MCMACKIN, RON		3,078.33	13-OCT-16	3,078.33	Reconciled
371704		06-OCT-16	MEDORA CORPORATION		23,107.20	14-OCT-16	23,107.20	Reconciled
371705		06-OCT-16	MEROW, ALAN		35.24			Negotiable
371706		06-OCT-16	MICHAEL BAKER INTERNATIONAL, INC.		175.29	11-OCT-16	175.29	Reconciled
371707		06-OCT-16	MILLER, DAVE		38.86	17-OCT-16	38.86	Reconciled
371708		06-OCT-16	MONTOYA, CARMEN		46.99			Negotiable
371709		06-OCT-16	MORALES, ERANDI		13.83	17-OCT-16	13.83	Reconciled

371710 06-OCT-16 MORRIS, COLIN 12.48 Negotiable
 IRWD Ledger Payment Register For 01-OCT-16 To 31-OCT-16 Report Date: 01-NOV-2016 14:14
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 6
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371711		06-OCT-16	MORSE, ANGELINA		23.49			Negotiable
371712		06-OCT-16	MR CRANE INC		2,369.10	11-OCT-16	2,369.10	Reconciled
371713		06-OCT-16	MSDSOONLINE, INC.		3,749.00	12-OCT-16	3,749.00	Reconciled
371714		06-OCT-16	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		12,330.00	12-OCT-16	12,330.00	Reconciled
371715		06-OCT-16	MUTUAL PROPANE		72.37	12-OCT-16	72.37	Reconciled
371716		06-OCT-16	NAGHSHINEH, SATAR		13.76	31-OCT-16	13.76	Reconciled
371717		06-OCT-16	NATIONAL READY MIXED CONCRETE CO.		1,550.20	11-OCT-16	1,550.20	Reconciled
371718		06-OCT-16	NATURES IMAGE INC		198.00	12-OCT-16	198.00	Reconciled
371719		06-OCT-16	NCH CORPORATION		620.98	12-OCT-16	620.98	Reconciled
371720		06-OCT-16	NGUY, LAURA		23.02			Negotiable
371721		06-OCT-16	NMG GEOTECHNICAL INC		10,304.50			Negotiable
371722		06-OCT-16	NOBUI, HIROKO		16.13			Negotiable
371723		06-OCT-16	NOURSE, MICHAEL A		28.29	13-OCT-16	28.29	Reconciled
371724		06-OCT-16	O'TOOLE TRUST, DANIEL		13.40			Negotiable
371725		06-OCT-16	OCTA		963.00	12-OCT-16	963.00	Reconciled
371726		06-OCT-16	OLIN CORPORATION		19,830.32	12-OCT-16	19,830.32	Reconciled
371727		06-OCT-16	OMEGA ENVIRONMENTAL SERVICES, INC.		7,825.00	12-OCT-16	7,825.00	Reconciled
371728		06-OCT-16	ORANGE COUNTY BUSINESS COUNCIL		1,500.00	20-OCT-16	1,500.00	Reconciled
371729		06-OCT-16	ORANGE COUNTY HOSE		163.48	11-OCT-16	163.48	Reconciled
371730		06-OCT-16	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT		239.41	21-OCT-16	239.41	Reconciled
371731		06-OCT-16	ORANGE, SAMUEL		25.66	12-OCT-16	25.66	Reconciled
371732		06-OCT-16	OTSUJI, SANFORD		19.85	19-OCT-16	19.85	Reconciled
371733		06-OCT-16	PACIFIC EH&S SERVICES, INC.		2,368.00	18-OCT-16	2,368.00	Reconciled
371734		06-OCT-16	PACIFIC RETAIL TRUST		24.13			Negotiable
371735		06-OCT-16	PACIFIC SALES		5,117.04	14-OCT-16	5,117.04	Reconciled
371736		06-OCT-16	PACIFIC SPECTRUM LLC		30.74	25-OCT-16	30.74	Reconciled
371737		06-OCT-16	PAM, BRIAN		13.21	12-OCT-16	13.21	Reconciled
371738		06-OCT-16	PANJABI, AMRIT		11.97			Negotiable
371739		06-OCT-16	PARK, ESTELLE		22.87			Negotiable
371740		06-OCT-16	PARKWAY LAWNMOWER SHOP		397.40	12-OCT-16	397.40	Reconciled
371741		06-OCT-16	PATEL, MR. & MRS.		23.71			Negotiable

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371742		06-OCT-16	PAULUS ENGINEERING INC		3,229.60	11-OCT-16	3,229.60	Reconciled
371743		06-OCT-16	PELLETIER & ASSOCIATES, INC.		1,020.00	11-OCT-16	1,020.00	Reconciled
371744		06-OCT-16	PENHALL COMPANY		1,107.50	11-OCT-16	1,107.50	Reconciled
371745		06-OCT-16	PEREZ, FRANK		15.13	24-OCT-16	15.13	Reconciled
371746		06-OCT-16	PHILLIPS PLYWOOD CO, INC.		1,285.80	11-OCT-16	1,285.80	Reconciled
371747		06-OCT-16	PINNACLE CUSTOM HOMES, INC		618.84	14-OCT-16	618.84	Reconciled
371748		06-OCT-16	PIRATA, LIDA		16.69			Negotiable
371749		06-OCT-16	PITTS, JUNETTE		5.18			Negotiable
371750		06-OCT-16	PLANKS USA		22.24	11-OCT-16	22.24	Reconciled
371751		06-OCT-16	PRASAD, KRISHNA		22.57	11-OCT-16	22.57	Reconciled
371752		06-OCT-16	PROCTOR, REX T		71.58	12-OCT-16	71.58	Reconciled
371753		06-OCT-16	PROLOGIS		52.80			Negotiable
371754		06-OCT-16	CALIFORNIA I LLC PUBLIC FINANCIAL MANAGEMENT, INC.		3,528.25	12-OCT-16	3,528.25	Reconciled
371755		06-OCT-16	PURE EFFECT INC		5,955.00	11-OCT-16	5,955.00	Reconciled
371756		06-OCT-16	QAMAR, ANEELA		16.03	25-OCT-16	16.03	Reconciled
371757		06-OCT-16	QASYMPHONY, INC.		25,877.40	18-OCT-16	25,877.40	Reconciled
371758		06-OCT-16	QUAIL MEADOW APARTMENTS		7.74	21-OCT-16	7.74	Reconciled
371759		06-OCT-16	QUINN RENTAL SERVICES		386.04	11-OCT-16	386.04	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
371760		06-OCT-16	R & R INDUSTRIAL SERVICES, INC.		1,241.13	19-OCT-16	1,241.13	Reconciled
371761		06-OCT-16	RAM AIR ENGINEERING INC		895.87	11-OCT-16	895.87	Reconciled
371762		06-OCT-16	RAMIREZ, DIANA		19.17			Negotiable
371763		06-OCT-16	RASH, NICK		16.76			Negotiable
371764		06-OCT-16	RAY, ERIC		16.46			Negotiable
371765		06-OCT-16	REAL WATER CONSULTANTS INC.		23,700.00	19-OCT-16	23,700.00	Reconciled
371766		06-OCT-16	REESE, RYAN		44.71			Negotiable
371767		06-OCT-16	RELIANCE SAFETY CONSULTANTS, INC.		9,179.01	17-OCT-16	9,179.01	Reconciled
371768		06-OCT-16	REN, CHARLIE		24.29	11-OCT-16	24.29	Reconciled
371769		06-OCT-16	REN, QUISHI		29.45	11-OCT-16	29.45	Reconciled
371770		06-OCT-16	RESHAMWALLA, UMERA		14.64	17-OCT-16	14.64	Reconciled
371771		06-OCT-16	RESOLUTE CONTACTORS, INC		71.47	17-OCT-16	71.47	Reconciled
371772		06-OCT-16	RHEE, BONNY		141.23	17-OCT-16	141.23	Reconciled
371773		06-OCT-16	RHEE, GINA		242.69	11-OCT-16	242.69	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 8
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371774		06-OCT-16	RICK MATYAS AND RICHARD W MATYAS		11.21	24-OCT-16	11.21	Reconciled
371775		06-OCT-16	RICO, THOMAS M		15.36			Negotiable
371776		06-OCT-16	RIGGS, LESLIE		21.16			Negotiable
371777		06-OCT-16	RINCON TRUCK CENTER INC.		695.19	11-OCT-16	695.19	Reconciled
371778		06-OCT-16	RING, CHRISTY		23.72	11-OCT-16	23.72	Reconciled
371779		06-OCT-16	RITEWAY AUTO PAINT & BODYWORKS		10,546.19	11-OCT-16	10,546.19	Reconciled
371780		06-OCT-16	RIVERA, EDNA		31.68			Negotiable
371781		06-OCT-16	RODRIGUEZ, MARIA G		26.77	14-OCT-16	26.77	Reconciled
371782		06-OCT-16	ROGERS, TYANDRA		16.25	17-OCT-16	16.25	Reconciled
371783		06-OCT-16	ROMERO, FERNANDO		14.14			Negotiable
371784		06-OCT-16	ROSS, WILLIAM		22.73			Negotiable
371785		06-OCT-16	ROTHMAN, KENNETH		26.68			Negotiable
371786		06-OCT-16	RS HUGHES COMPANY, INC.		1,258.21	13-OCT-16	1,258.21	Reconciled
371787		06-OCT-16	RUBIN, BRIAN		34.89	31-OCT-16	34.89	Reconciled
371788		06-OCT-16	RUDD, ASHLEY		13.73			Negotiable
371789		06-OCT-16	RUIZ, JACK		19.59	27-OCT-16	19.59	Reconciled
371790		06-OCT-16	RVP REALTY		32.53	11-OCT-16	32.53	Reconciled
371791		06-OCT-16	SANTA ANA BLUE PRINT		465.07	12-OCT-16	465.07	Reconciled
371792		06-OCT-16	SANTIAGO AQUEDUCT COMMISSION		207,364.35	11-OCT-16	207,364.35	Reconciled
371793		06-OCT-16	SAVANT CONSTRUCTION INC		30.41	24-OCT-16	30.41	Reconciled
371794		06-OCT-16	SECURTEC DISTRICT PATROL, INC.		10,700.00	17-OCT-16	10,700.00	Reconciled
371795		06-OCT-16	SHAMROCK SUPPLY CO INC		997.35	11-OCT-16	997.35	Reconciled
371796		06-OCT-16	SHEA/BAKER RANCH ASSOCIATES, LLC		249.13			Negotiable
371797		06-OCT-16	SHEA/BAKER RANCH ASSOCIATES, LLC		634.25	25-OCT-16	634.25	Reconciled
371798		06-OCT-16	SIJMAY SOLUTIONS INC.		60.98			Negotiable
371799		06-OCT-16	SILVERIA, KAREN		18.10	17-OCT-16	18.10	Reconciled
371800		06-OCT-16	SINGH, KULDIP		92.48			Negotiable
371801		06-OCT-16	SMALL, BENJAMIN		12.62			Negotiable
371802		06-OCT-16	SNYDER LANGSTON		53.71	12-OCT-16	53.71	Reconciled
371803		06-OCT-16	SOFTWAREONE INC		1,615.70	13-OCT-16	1,615.70	Reconciled
371804		06-OCT-16	SOHAIL, SIMJEE		20.95	12-OCT-16	20.95	Reconciled
371805		06-OCT-16	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		479.21	14-OCT-16	479.21	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 9
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371806		06-OCT-16	SOUTH COAST ANSWERING SERVICE		632.28	11-OCT-16	632.28	Reconciled
371807		06-OCT-16	SOUTHERN CALIFORNIA EDISON COMPANY		557,951.14	11-OCT-16	557,951.14	Reconciled
371808		06-OCT-16	SPICER, EVAN		21.47	12-OCT-16	21.47	Reconciled
371809		06-OCT-16	STANTEC CONSULTING SERVICES INC.		7,241.50	11-OCT-16	7,241.50	Reconciled

371810	06-OCT-16	STERIS CORPORATION	4,152.00	11-OCT-16	4,152.00	Reconciled
371811	06-OCT-16	STEVE DAVIDSON CONSTRUCTION, INC.	14.81	19-OCT-16	14.81	Reconciled
371812	06-OCT-16	STOWERS, LAKEYA	13.63	17-OCT-16	13.63	Reconciled
371813	06-OCT-16	STRIETBECK, SHAWN	21.74	21-OCT-16	21.74	Reconciled
371814	06-OCT-16	SU, CELIA	17.57			Negotiable
371815	06-OCT-16	SULLY MILLER CONTRACTING CO	33.59	13-OCT-16	33.59	Reconciled
371816	06-OCT-16	SUMMERTIME, INC	15.74	13-OCT-16	15.74	Reconciled
371817	06-OCT-16	SUN, ROBERT N	13.45	25-OCT-16	13.45	Reconciled
371818	06-OCT-16	SUNSHINE SUPPLY COMPANY, INC.	2,741.04	12-OCT-16	2,741.04	Reconciled
371819	06-OCT-16	SUNSTATE EQUIPMENT CO	1,806.96	11-OCT-16	1,806.96	Reconciled
371820	06-OCT-16	SUSAN A. SIROTA	4,295.00	11-OCT-16	4,295.00	Reconciled
371821	06-OCT-16	SWANSON, ADAM	16.48	17-OCT-16	16.48	Reconciled
371822	06-OCT-16	TESTAMERICA LABORATORIES, INC	295.15	11-OCT-16	295.15	Reconciled
371823	06-OCT-16	THE NEW HOME COMPANY	1,992.26	27-OCT-16	1,992.26	Reconciled
371824	06-OCT-16	THE PARK @ SPECTRUM APARTMENTS	14,737.14	21-OCT-16	14,737.14	Reconciled
371825	06-OCT-16	THYSSENKRUPP ELEVATOR CORPORATION	359.28	11-OCT-16	359.28	Reconciled
371826	06-OCT-16	TRI COUNTY PUMP COMPANY	35,176.00	13-OCT-16	35,176.00	Reconciled
371827	06-OCT-16	TROPICAL PLAZA NURSERY INC	67,840.24	12-OCT-16	67,840.24	Reconciled
371828	06-OCT-16	TRUCPARCO	3,071.46	17-OCT-16	3,071.46	Reconciled
371829	06-OCT-16	UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA	1,027.50	18-OCT-16	1,027.50	Reconciled
371830	06-OCT-16	UNITED STATES POST OFFICE	25,000.00	14-OCT-16	25,000.00	Reconciled
371831	06-OCT-16	URS CORPORATION	83,287.22	13-OCT-16	83,287.22	Reconciled

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 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 10
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371832		06-OCT-16	UTILITY SYSTEMS SCIENCE & SOFTWARE INC.		3,825.00	12-OCT-16	3,825.00	Reconciled
371833		06-OCT-16	VERIZON WIRELESS SERVICES LLC		9,603.33	13-OCT-16	9,603.33	Reconciled
371834		06-OCT-16	VRIDE INC		8,693.00	11-OCT-16	8,693.00	Reconciled
371835		06-OCT-16	VWR INTERNATIONAL, LLC		1,016.64	12-OCT-16	1,016.64	Reconciled
371836		06-OCT-16	WALTERS WHOLESALE ELECTRIC		929.36	11-OCT-16	929.36	Reconciled
371837		06-OCT-16	WASANO, ANTHONY		90.89	17-OCT-16	90.89	Reconciled
371838		06-OCT-16	WASTE MANAGEMENT OF ORANGE COUNTY		2,361.32	11-OCT-16	2,361.32	Reconciled
371839		06-OCT-16	WATERWISE CONSULTING, INC.		703.00	11-OCT-16	703.00	Reconciled
371840		06-OCT-16	WAXIE'S ENTERPRISES, INC		1,189.77	13-OCT-16	1,189.77	Reconciled
371841		06-OCT-16	WECK LABORATORIES INC		115.00	13-OCT-16	115.00	Reconciled
371842		06-OCT-16	WELLS TAPPING SERVICE INC		350.00	17-OCT-16	350.00	Reconciled
371843		06-OCT-16	WEST COAST SAND & GRAVEL INC.		555.50	12-OCT-16	555.50	Reconciled
371844		06-OCT-16	WESTAMERICA COMMUNICATIONS, INC.		3,631.26	11-OCT-16	3,631.26	Reconciled
371845		06-OCT-16	WESTERN AV		2,341.98	11-OCT-16	2,341.98	Reconciled
371846		06-OCT-16	WESTERN NATIONAL CONTRACTORS		242.99			Negotiable
371847		06-OCT-16	WESTERN SAFETY PRODUCTS INC		8,019.87	12-OCT-16	8,019.87	Reconciled
371848		06-OCT-16	WIRELESS WATCHDOGS, LLC		516.00	13-OCT-16	516.00	Reconciled
371849		06-OCT-16	WOLTERS KLUWER LAW & BUSINESS		324.32	12-OCT-16	324.32	Reconciled
371850		06-OCT-16	WOODRUFF, SPRADLIN & SMART APC		349.50	12-OCT-16	349.50	Reconciled
371851		13-OCT-16	Clary, Cheryl L		7.02			Negotiable
371852		13-OCT-16	Garcia, Dorys Elizabeth		2,627.09			Negotiable
371853		13-OCT-16	Fike, Ethan O (Ethan)		208.86	17-OCT-16	208.86	Reconciled
371854		13-OCT-16	Pan, Jenny W (Jenny)		232.25	17-OCT-16	232.25	Reconciled
371855		13-OCT-16	Arce, Jesus		621.60	20-OCT-16	621.60	Reconciled

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371856		13-OCT-16	Oldewage, Lars D (Lars)		125.00	17-OCT-16	125.00	Reconciled
371857		13-OCT-16	Vazquez, Rafael		150.32	19-OCT-16	150.32	Reconciled
371858		13-OCT-16	A AND Y COMPANY INC		23,777.00	20-OCT-16	23,777.00	Reconciled
371859		13-OCT-16	A.J. KLEIN, INC. T. DENATALE, B. GOLDNER		140.00	17-OCT-16	140.00	Reconciled
371860		13-OCT-16	AIMTD LLC		1,344.00	21-OCT-16	1,344.00	Reconciled
371861		13-OCT-16	ALDAJARI, ALI		17.82	14-OCT-16	17.82	Reconciled
371862		13-OCT-16	ALEXANDER'S CONTRACT SERVICES, INC.		112,184.54	19-OCT-16	112,184.54	Reconciled
371863		13-OCT-16	AMERICAN INTEGRATED SERVICES		798.77	18-OCT-16	798.77	Reconciled
371864		13-OCT-16	APCO GRAPHICS INC		241.50	17-OCT-16	241.50	Reconciled
371865		13-OCT-16	AQUA BEN CORPORATION		33,248.88	19-OCT-16	33,248.88	Reconciled
371866		13-OCT-16	AQUA-METRIC SALES COMPANY		9,447.14	18-OCT-16	9,447.14	Reconciled
371867		13-OCT-16	ARCADIS U.S., INC.		65,274.97	21-OCT-16	65,274.97	Reconciled
371868		13-OCT-16	ARIZONA INSTRUMENT LLC		907.00	18-OCT-16	907.00	Reconciled
371869		13-OCT-16	ARIZONA PIPELINE COMPANY		806.46	27-OCT-16	806.46	Reconciled
371870		13-OCT-16	AT&T		5,353.37	18-OCT-16	5,353.37	Reconciled
371871		13-OCT-16	AT&T		539.99	17-OCT-16	539.99	Reconciled
371872		13-OCT-16	AUTOZONE PARTS, INC.		215.98	18-OCT-16	215.98	Reconciled
371873		13-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA		1,360.00	20-OCT-16	1,360.00	Reconciled
371874		13-OCT-16	BASSETT BUILDING INC		844.77	17-OCT-16	844.77	Reconciled
371875		13-OCT-16	BEE EMERGENCY RESPONSE TEAM		175.00	18-OCT-16	175.00	Reconciled
371876		13-OCT-16	BEJOTTE, THERESE		457.75	27-OCT-16	457.75	Reconciled
371877		13-OCT-16	BELL TOWER FLORIST & GIFTS		99.35			Negotiable
371878		13-OCT-16	BERNELL HYDRAULICS, INC.		5,048.95	17-OCT-16	5,048.95	Reconciled
371879		13-OCT-16	BHALLA, GUNINDER		68.25	24-OCT-16	68.25	Reconciled
371880		13-OCT-16	BIGWIG MONSTER, LLC		1,800.00	14-OCT-16	1,800.00	Reconciled

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371881		13-OCT-16	BOWIE, ARNESON, WILES & GIANNONE		23,240.83	27-OCT-16	23,240.83	Reconciled
371882		13-OCT-16	BOYD & ASSOCIATES		396.00	18-OCT-16	396.00	Reconciled
371883		13-OCT-16	BSI SERVICES AND SOLUTIONS (WEST), INC.		25,037.13	19-OCT-16	25,037.13	Reconciled
371884		13-OCT-16	C WELLS PIPELINE MATERIALS INC		106,142.40	25-OCT-16	106,142.40	Reconciled
371885		13-OCT-16	CALIFORNIA BARRICADE RENTAL, INC.		910.00	17-OCT-16	910.00	Reconciled
371886		13-OCT-16	CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION		9,717.00	25-OCT-16	9,717.00	Reconciled
371887		13-OCT-16	CANON FINANCIAL SERVICES, INC		402.84	17-OCT-16	402.84	Reconciled
371888		13-OCT-16	CHAE, EUN JIN		16.33	18-OCT-16	16.33	Reconciled
371889		13-OCT-16	CHARLES P CROWLEY COMPANY INC		3,761.52	18-OCT-16	3,761.52	Reconciled
371890		13-OCT-16	CITY OF IRVINE		8,212.20	20-OCT-16	8,212.20	Reconciled
371891		13-OCT-16	CLA-VAL COMPANY		1,998.99	14-OCT-16	1,998.99	Reconciled
371892		13-OCT-16	CLEANTECH OC		2,000.00	14-OCT-16	2,000.00	Reconciled
371893		13-OCT-16	CLEANTECH SERVICES, LLC		952.06	17-OCT-16	952.06	Reconciled
371894		13-OCT-16	CLEARINGHOUSE		477.67	17-OCT-16	477.67	Reconciled
371895		13-OCT-16	COASTLINE EQUIPMENT COMPANY		265.65	20-OCT-16	265.65	Reconciled
371896		13-OCT-16	CONTROL		14,784.88	20-OCT-16	14,784.88	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
371897	13-OCT-16	TECHNOLOGIES			495.00	17-OCT-16	495.00	Reconciled
371898	13-OCT-16	CORELOGIC INC			133.39	17-OCT-16	133.39	Reconciled
		CR & R						
		INCORPORATED						
371899	13-OCT-16	CROWDER, JUSTIN			31.52	18-OCT-16	31.52	Reconciled
371900	13-OCT-16	CURT PRINGLE AND ASSOCIATES			6,000.00	19-OCT-16	6,000.00	Reconciled
371901	13-OCT-16	D & G SIGNS			3,122.44	18-OCT-16	3,122.44	Reconciled
371902	13-OCT-16	DELL MARKETING LP			8,493.57	17-OCT-16	8,493.57	Reconciled
371903	13-OCT-16	DEX MEDIA INC.			77.25	20-OCT-16	77.25	Reconciled
371904	13-OCT-16	DIEP, TITI			266.14	25-OCT-16	266.14	Reconciled
371905	13-OCT-16	DRAEGER, INC.			525.82	17-OCT-16	525.82	Reconciled
371906	13-OCT-16	E.J. MEYER COMPANY, INC.			64,782.92	20-OCT-16	64,782.92	Reconciled
371907	13-OCT-16	E.J. MEYER COMPANY, INC.			3,409.62	18-OCT-16	3,409.62	Reconciled

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371908	13-OCT-16	EAGLE PRINT DYNAMICS			2,310.33	17-OCT-16	2,310.33	Reconciled
371909	13-OCT-16	EI&C ENGINEERING INC			62,373.67	20-OCT-16	62,373.67	Reconciled
371910	13-OCT-16	EMPLOYEE BENEFIT SPECIALIST, INC			1,100.00	17-OCT-16	1,100.00	Reconciled
371911	13-OCT-16	ENDRESS AND HAUSER INC			6,085.00	19-OCT-16	6,085.00	Reconciled
371912	13-OCT-16	EQUISTAR IRVINE CO			20.64	21-OCT-16	20.64	Reconciled
371913	13-OCT-16	ESTES, CHERYL			1,075.70	17-OCT-16	1,075.70	Reconciled
371914	13-OCT-16	EXECUTIVE LIGHTING & ELECTRIC			1,799.10	18-OCT-16	1,799.10	Reconciled
371915	13-OCT-16	FEDEX			171.24	19-OCT-16	171.24	Reconciled
371916	13-OCT-16	FERGUSON ENTERPRISES, INC.			10,130.40	19-OCT-16	10,130.40	Reconciled
371917	13-OCT-16	FITCH RATINGS, INC.			75,000.00	24-OCT-16	75,000.00	Reconciled
371918	13-OCT-16	FLEET SOLUTIONS LLC			4,570.70	18-OCT-16	4,570.70	Reconciled
371919	13-OCT-16	FONG, BRYANT			72.85			Negotiable
371920	13-OCT-16	FORREST CARTER GIBBS OSBORNE			400.00	18-OCT-16	400.00	Reconciled
371921	13-OCT-16	FRONTIER CALIFORNIA INC.			51.43	17-OCT-16	51.43	Reconciled
371922	13-OCT-16	GLADWELL GOVERNMENTAL SERVICES, INC.			250.00	18-OCT-16	250.00	Reconciled
371923	13-OCT-16	GRAINGER			3,072.71	17-OCT-16	3,072.71	Reconciled
371924	13-OCT-16	GREAT PACIFIC EQUIPMENT INC			4,250.00	17-OCT-16	4,250.00	Reconciled
371925	13-OCT-16	HARRISON, SHAY LYNN			53.58	20-OCT-16	53.58	Reconciled
371926	13-OCT-16	HELPMATES STAFFING SERVICES			2,519.22	14-OCT-16	2,519.22	Reconciled
371927	13-OCT-16	HILL BROTHERS CHEMICAL COMPANY			8,039.15	19-OCT-16	8,039.15	Reconciled
371928	13-OCT-16	HOME DEPOT USA INC			411.72	21-OCT-16	411.72	Reconciled
371929	13-OCT-16	HSG INC			1,551.00	17-OCT-16	1,551.00	Reconciled
371930	13-OCT-16	IBM CORPORATION			254.00	17-OCT-16	254.00	Reconciled
371931	13-OCT-16	INDUSTRIAL ELECTRIC MACHINERY LLC			543.28	18-OCT-16	543.28	Reconciled
371932	13-OCT-16	INDUSTRIAL METAL SUPPLY CO			204.03	19-OCT-16	204.03	Reconciled

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371933	13-OCT-16	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC			2,309.80	21-OCT-16	2,309.80	Reconciled
371934	13-OCT-16	IRVINE PIPE & SUPPLY INC			4,537.43	14-OCT-16	4,537.43	Reconciled
371935	13-OCT-16	IRVINE UNIFIED SCHOOL DISTRICT			1,260.05	20-OCT-16	1,260.05	Reconciled
371936	13-OCT-16	IRWD EMPLOYEE ASSOCIATION			760.00	14-OCT-16	760.00	Reconciled
371937	13-OCT-16	IRWD-PETTY CASH CUSTODIAN			1,344.36	14-OCT-16	1,344.36	Reconciled
371938	13-OCT-16	J.M.P. ELECTRONICS			7.75	17-OCT-16	7.75	Reconciled
371939	13-OCT-16	JCI JONES			2,380.22	17-OCT-16	2,380.22	Reconciled

371940	13-OCT-16	CHEMICALS INC JOHNSON MACHINERY CO.	357.73	17-OCT-16	357.73	Reconciled
371941	13-OCT-16	KAESER COMPRESSORS, INC.	9,381.29	17-OCT-16	9,381.29	Reconciled
371942	13-OCT-16	KAZARIANS & ASSOCIATES, INC.	1,921.29	19-OCT-16	1,921.29	Reconciled
371943	13-OCT-16	KELLEY BLUE BOOK, INC.	75.60	17-OCT-16	75.60	Reconciled
371944	13-OCT-16	KENT & AMY DAHLBERG	897.60	20-OCT-16	897.60	Reconciled
371945	13-OCT-16	KERN COUNTY TREASURER TAX COLLECTOR	35,055.44	20-OCT-16	35,055.44	Reconciled
371946	13-OCT-16	KILLINGSWORTH, VICKI A	15.65			Negotiable
371947	13-OCT-16	KIM, BYUNG	38.38	28-OCT-16	38.38	Reconciled
371948	13-OCT-16	KLEINFELDER, INC.	19,284.82	21-OCT-16	19,284.82	Reconciled
371949	13-OCT-16	KOTA, SAROJINI	42.64			Negotiable
371950	13-OCT-16	LANDCARE HOLDINGS, INC.	69,420.00	20-OCT-16	69,420.00	Reconciled
371951	13-OCT-16	LEE & RO, INC.	55,371.35			Negotiable
371952	13-OCT-16	LEWIS BRISBOIS BISGAARD AND SMITH, LLP	1,640.00	19-OCT-16	1,640.00	Reconciled
371953	13-OCT-16	LIN, RICHARD	28.64	14-OCT-16	28.64	Reconciled
371954	13-OCT-16	LIU, YVONNE	12.17	17-OCT-16	12.17	Reconciled
371955	13-OCT-16	MARGOLIES, JEFF	28.55	19-OCT-16	28.55	Reconciled
371956	13-OCT-16	MARINA LANDSCAPE MAINTENANCE, INC.	6,152.82	17-OCT-16	6,152.82	Reconciled
371957	13-OCT-16	MC MASTER CARR SUPPLY CO	2,941.38	17-OCT-16	2,941.38	Reconciled
371958	13-OCT-16	MCBRIDE, CHARON	35.01	18-OCT-16	35.01	Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
371959		13-OCT-16	MICHAEL BAKER INTERNATIONAL, INC.		240.00	17-OCT-16	240.00	Reconciled
371960		13-OCT-16	NALCO CAL WATER, LLC		240.00	17-OCT-16	240.00	Reconciled
371961		13-OCT-16	NATIONAL READY MIXED CONCRETE CO.		540.00	17-OCT-16	540.00	Reconciled
371962		13-OCT-16	NATURALWELL, LLC		1,347.50	17-OCT-16	1,347.50	Reconciled
371963		13-OCT-16	NEAR-CAL CORP.		827.08	25-OCT-16	827.08	Reconciled
371964		13-OCT-16	NEWPORT WINDOW MAINTENANCE INC		255.00	25-OCT-16	255.00	Reconciled
371965		13-OCT-16	NORMAN A. OLSSON CONSTRUCTION, INC.		181,805.30	20-OCT-16	181,805.30	Reconciled
371966		13-OCT-16	NOSSAMAN LLP		14,472.00	19-OCT-16	14,472.00	Reconciled
371967		13-OCT-16	NOVACOAST INC		900.00	17-OCT-16	900.00	Reconciled
371968		13-OCT-16	OLIN CORPORATION		2,848.56	17-OCT-16	2,848.56	Reconciled
371969		13-OCT-16	ON ASSIGNMENT LAB SUPPORT		1,190.00	17-OCT-16	1,190.00	Reconciled
371970		13-OCT-16	ORANGE COUNTY AUTO PARTS CO		320.61	14-OCT-16	320.61	Reconciled
371971		13-OCT-16	ORANGE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT		1,514.81	21-OCT-16	1,514.81	Reconciled
371972		13-OCT-16	ORANGE COUNTY SHERIFF'S OFFICE		62.50	27-OCT-16	62.50	Reconciled
371973		13-OCT-16	OSTS, INC		4,800.00	18-OCT-16	4,800.00	Reconciled
371974		13-OCT-16	PACIFIC COAST BOLT CORP		118.78	18-OCT-16	118.78	Reconciled
371975		13-OCT-16	PACIFIC EH&S SERVICES, INC.		510.00	18-OCT-16	510.00	Reconciled
371976		13-OCT-16	PAPER DEPOT DOCUMENT DESTRUCTION LLC		720.00	21-OCT-16	720.00	Reconciled
371977		13-OCT-16	PARKHOUSE TIRE INC		4,034.57	18-OCT-16	4,034.57	Reconciled
371978		13-OCT-16	PAULUS ENGINEERING INC		23,674.76	19-OCT-16	23,674.76	Reconciled
371979		13-OCT-16	PERS LONG TERM CARE		900.58			Negotiable
371980		13-OCT-16	PRAXAIR DISTRIBUTION INC		4,378.97	20-OCT-16	4,378.97	Reconciled
371981		13-OCT-16	PRO MOBILE AUTO DETAILLING		400.00	18-OCT-16	400.00	Reconciled
371982		13-OCT-16	PUBLIC FINANCIAL MANAGEMENT, INC.		1,800.00	17-OCT-16	1,800.00	Reconciled
371983		13-OCT-16	PYUN, JOHN		701.88			Negotiable

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status	
Payment Document : IRWD CHECK									
371984		13-OCT-16	RAINBOW DISPOSAL CO INC		357.36	19-OCT-16	357.36	Reconciled	
371985		13-OCT-16	RAM AIR ENGINEERING INC		3,172.19	18-OCT-16	3,172.19	Reconciled	
371986		13-OCT-16	RANCHO ALISAL APTS		1.47	19-OCT-16	1.47	Reconciled	
371987		13-OCT-16	RANCHO MADERAS APTS		6.68	27-OCT-16	6.68	Reconciled	
371988		13-OCT-16	RECYCLE DESIGN INC		730.00	17-OCT-16	730.00	Reconciled	
371989		13-OCT-16	REED, JAMES D		1,917.00	21-OCT-16	1,917.00	Reconciled	
371990		13-OCT-16	REFRIGERATION SUPPLIES DISTRIBUTOR		3,013.87	14-OCT-16	3,013.87	Reconciled	
371991		13-OCT-16	RESTEK CORPORATION		1,050.25	17-OCT-16	1,050.25	Reconciled	
371992		13-OCT-16	RIGOT, DAVID		55.37			Negotiable	
371993		13-OCT-16	RINCON TRUCK CENTER INC.		1,185.73	14-OCT-16	1,185.73	Reconciled	
371994		13-OCT-16	RINGCLEAR LLC		89.40	18-OCT-16	89.40	Reconciled	
371995		13-OCT-16	ROSEMOUNT INC.		8,570.24	17-OCT-16	8,570.24	Reconciled	
371996		13-OCT-16	RYAN HERCO PRODUCTS CORP		1,016.25	17-OCT-16	1,016.25	Reconciled	
371997		13-OCT-16	S & J SUPPLY CO INC		12,130.56	19-OCT-16	12,130.56	Reconciled	
371998		13-OCT-16	SAFECHECKS		1,527.02	18-OCT-16	1,527.02	Reconciled	
371999		13-OCT-16	SANDERS PAVING INC		19,223.00	20-OCT-16	19,223.00	Reconciled	
372000		13-OCT-16	SANTA ANA BLUE PRINT		1,394.81	18-OCT-16	1,394.81	Reconciled	
372001		13-OCT-16	SCHAFER, JIM		31.49			Negotiable	
372002		13-OCT-16	SHAMROCK SUPPLY CO INC		288.88	17-OCT-16	288.88	Reconciled	
372003		13-OCT-16	SHEA/BAKER RANCH ASSOCIATES, LLC		17.71			Negotiable	
372004		13-OCT-16	SILVERWOOD LANDSCAPE		253.63	17-OCT-16	253.63	Reconciled	
372005		13-OCT-16	SIMI VALLEY LANDFILL AND RECYCLING CENTER		562.46	17-OCT-16	562.46	Reconciled	
372006		13-OCT-16	SITEONE LANDSCAPE SUPPLY, LLC		494.29	18-OCT-16	494.29	Reconciled	
372007		13-OCT-16	SITMATIC		2,333.36	17-OCT-16	2,333.36	Reconciled	
372008		13-OCT-16	SOUTH COAST WATER CO.		40.00	17-OCT-16	40.00	Reconciled	
372009		13-OCT-16	SOUTH COAST WATER DISTRICT		2,456.00	17-OCT-16	2,456.00	Reconciled	
372010		13-OCT-16	SOUTHERN CALIFORNIA EDISON COMPANY		14,809.48	14-OCT-16	14,809.48	Reconciled	
IRWD Ledger									
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372011		13-OCT-16	SPARLING INSTRUMENTS LLC		713.51	17-OCT-16	713.51	Reconciled
372012		13-OCT-16	SPX CORP		1,920.31	17-OCT-16	1,920.31	Reconciled
372013		13-OCT-16	STANDARD PACIFIC CORP		383.26			Negotiable
372014		13-OCT-16	STERIS CORPORATION		1,899.19	17-OCT-16	1,899.19	Reconciled
372015		13-OCT-16	SUEZ TREATMENT SOLUTIONS INC.		29,522.58	21-OCT-16	29,522.58	Reconciled
372016		13-OCT-16	SUNSET INDUSTRIAL PARTS		2,016.51	17-OCT-16	2,016.51	Reconciled
372017		13-OCT-16	TAKAHASHI, SHIN		19.19			Negotiable
372018		13-OCT-16	TANG, TRACY		19.19			Negotiable
372019		13-OCT-16	TESTAMERICA LABORATORIES, INC		52.50	17-OCT-16	52.50	Reconciled
372020		13-OCT-16	THE F. GASPORRA LIVING TRUST		39.76			Negotiable
372021		13-OCT-16	THE FURMAN GROUP, INC.		12,550.00	20-OCT-16	12,550.00	Reconciled
372022		13-OCT-16	THE GAS COMPANY		552.06	17-OCT-16	552.06	Reconciled
372023		13-OCT-16	THE NEW HOME COMPANY		2,807.86	27-OCT-16	2,807.86	Reconciled
372024		13-OCT-16	THOMAS HARDER & CO		4,910.10	18-OCT-16	4,910.10	Reconciled
372025		13-OCT-16	THOMAS, DEBBIE		77.75	18-OCT-16	77.75	Reconciled
372026		13-OCT-16	THUMMALAPALLY, KAPIL		23.30	20-OCT-16	23.30	Reconciled
372027		13-OCT-16	TIDWELL, WILLIAM LYNDSEY		579.94	19-OCT-16	579.94	Reconciled
372028		13-OCT-16	TO, TONY		32.37	17-OCT-16	32.37	Reconciled
372029		13-OCT-16	TRAUTMAN, TYLER		42.90	18-OCT-16	42.90	Reconciled
372030		13-OCT-16	TROPICAL PLAZA NURSERY INC		2,107.77	17-OCT-16	2,107.77	Reconciled
372031		13-OCT-16	TSAY, ROBERT		17.35			Negotiable

372032	13-OCT-16	UNDERWOOD, SHELLY		27.84				Negotiable
372033	13-OCT-16	UNITED PARCEL SERVICE INC		64.47	17-OCT-16	64.47		Reconciled
372034	13-OCT-16	VALLEY CREST LANDSCAPE COMPANIES		172.50	31-OCT-16	172.50		Reconciled
372035	13-OCT-16	VALLEY CREST LANDSCAPE COMPANIES		546.30	27-OCT-16	546.30		Reconciled
372036	13-OCT-16	VERGARA, BELGICA		25.63	24-OCT-16	25.63		Reconciled
372037	13-OCT-16	VIRONEX TECHNICAL SERVICES, LLC		798.77				Negotiable
372038	13-OCT-16	VULCAN MATERIALS COMPANY		1,677.04	17-OCT-16	1,677.04		Reconciled

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372039		13-OCT-16	VWR INTERNATIONAL, LLC		2,032.32	17-OCT-16	2,032.32	Reconciled
372040		13-OCT-16	W.M. LYLES CO		24,488.54	19-OCT-16	24,488.54	Reconciled
372041		13-OCT-16	W.M. LYLES CO		465,282.21	19-OCT-16	465,282.21	Reconciled
372042		13-OCT-16	WALTERS WHOLESALE ELECTRIC		2,591.51	19-OCT-16	2,591.51	Reconciled
372043		13-OCT-16	WALTON MOTORS & CONTROLS INC		12,426.02	19-OCT-16	12,426.02	Reconciled
372044		13-OCT-16	WANG, RON		12.01			Negotiable
372045		13-OCT-16	WASTE MANAGEMENT OF ORANGE COUNTY		1,691.91	17-OCT-16	1,691.91	Reconciled
372046		13-OCT-16	WATANABE, KIYOHICO		26.05			Negotiable
372047		13-OCT-16	WATERLINE TECHNOLOGIES INC		2,840.00	14-OCT-16	2,840.00	Reconciled
372048		13-OCT-16	WATERSMART SOFTWARE, INC		17,975.00	19-OCT-16	17,975.00	Reconciled
372049		13-OCT-16	WEST COAST SAND & GRAVEL INC.		1,008.90	17-OCT-16	1,008.90	Reconciled
372050		13-OCT-16	WESTAMERICA COMMUNICATIONS, INC.		5,632.75	14-OCT-16	5,632.75	Reconciled
372051		13-OCT-16	WESTERN SAFETY PRODUCTS INC		5,353.57	18-OCT-16	5,353.57	Reconciled
372052		13-OCT-16	WESTON, TINA		25.92			Negotiable
372053		13-OCT-16	WET SEAL, LLC		32.35			Negotiable
372054		13-OCT-16	WILCOX, JEAN		39.72	19-OCT-16	39.72	Reconciled
372055		13-OCT-16	WILLIAM LYON HOMES, INC.		32.51	31-OCT-16	32.51	Reconciled
372056		13-OCT-16	WILSON, RON		44.41			Negotiable
372057		13-OCT-16	WORKMAN, NANCY		6.39			Negotiable
372058		13-OCT-16	WU, NICOLE		29.19	24-OCT-16	29.19	Reconciled
372059		13-OCT-16	WYATT, KAY		23.15	20-OCT-16	23.15	Reconciled
372060		13-OCT-16	YEE, RICHARD		16.98			Negotiable
372061		13-OCT-16	YEPFIZ, LILIANE		20.92			Negotiable
372062		13-OCT-16	YUAN, WEN		37.70	24-OCT-16	37.70	Reconciled
372063		13-OCT-16	YURADA, GRANT		16.40	19-OCT-16	16.40	Reconciled
372064		13-OCT-16	ZAMENI, HEIDI		22.10	24-OCT-16	22.10	Reconciled
372065		13-OCT-16	ZARBOCK, CHRISTINE		17.80	17-OCT-16	17.80	Reconciled
372066		13-OCT-16	ZEE MEDICAL SERVICE CO		854.93	14-OCT-16	854.93	Reconciled
372067		13-OCT-16	ZHANG, CHANGHAI		15.22	14-OCT-16	15.22	Reconciled
372068		20-OCT-16	Shinbashi, Allen		37.72	31-OCT-16	37.72	Reconciled
372069		20-OCT-16	Ordonez, Bernardino A (Berny)		3,000.00			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372070		20-OCT-16	Steinbeck, Brandon C		107.56	21-OCT-16	107.56	Reconciled
372071		20-OCT-16	McBride, Damien J		172.00	24-OCT-16	172.00	Reconciled
372072		20-OCT-16	McElroy, Dorien		155.00	24-OCT-16	155.00	Reconciled
372073		20-OCT-16	Moeder, Jacob J (Jacob)		637.96	24-OCT-16	637.96	Reconciled
372074		20-OCT-16	Norman, Tammy		20.01	20-OCT-16	20.01	Reconciled
372075		20-OCT-16	CANON SOLUTIONS AMERICA, INC.	CHICAGO	7,080.86	24-OCT-16	7,080.86	Reconciled
372076		20-OCT-16	3M COMPANY		1,122.84	24-OCT-16	1,122.84	Reconciled
372077		20-OCT-16	ACCURATE MEASUREMENT SYSTEMS INC		3,613.48	28-OCT-16	3,613.48	Reconciled
372078		20-OCT-16	ADVANTAGE		998.92	24-OCT-16	998.92	Reconciled

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
			UNLIMITED PAVING INC					
372079		20-OCT-16	AIRGAS, INC.		451.80	24-OCT-16	451.80	Reconciled
372080		20-OCT-16	ALL STAR GLASS		331.09	24-OCT-16	331.09	Reconciled
372081		20-OCT-16	ALSTON & BIRD LLP		19,628.81	28-OCT-16	19,628.81	Reconciled
372082		20-OCT-16	ANTHEM BLUE CROSS		544.70	27-OCT-16	544.70	Reconciled
372083		20-OCT-16	ANTHEM BLUE CROSS		207.81	27-OCT-16	207.81	Reconciled
372084		20-OCT-16	APPLIED INDUSTRIAL TECHNOLOGIES - CA LLC		540.75	24-OCT-16	540.75	Reconciled
372085		20-OCT-16	APTEAN, INC.		15,128.56	31-OCT-16	15,128.56	Reconciled
372086		20-OCT-16	AT&T		3,823.98	25-OCT-16	3,823.98	Reconciled
372087		20-OCT-16	AT&T		1,328.01			Voided
372088		20-OCT-16	AT&T		48.42	24-OCT-16	48.42	Reconciled
372089		20-OCT-16	AUTOZONE PARTS, INC.		468.82	25-OCT-16	468.82	Reconciled
372090		20-OCT-16	AVILA, CHANTEL		115.45	31-OCT-16	115.45	Reconciled
372091		20-OCT-16	AVISTA TECHNOLOGIES, INC		8,763.21	24-OCT-16	8,763.21	Reconciled
372092		20-OCT-16	BATTERIES PLUS AND BATTERIES PLUS BULBS		731.67	24-OCT-16	731.67	Reconciled
372093		20-OCT-16	BC WIRE ROPE & RIGGING		1,437.22	21-OCT-16	1,437.22	Reconciled
372094		20-OCT-16	BDC SPECIAL WASTE		207.20	24-OCT-16	207.20	Reconciled
372095		20-OCT-16	BELL TOWER FLORIST & GIFTS		97.19			Negotiable
372096		20-OCT-16	BIOMAGIC INC		13,827.46	28-OCT-16	13,827.46	Reconciled
372097		20-OCT-16	BORCHARD SURVEYING & MAPPING, INC.		1,965.00	27-OCT-16	1,965.00	Reconciled
372098		20-OCT-16	BURKE, WILLIAMS & SORENSEN, LLP		9,131.00	25-OCT-16	9,131.00	Reconciled

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372099		20-OCT-16	C WELLS PIPELINE MATERIALS INC		30,415.50	28-OCT-16	30,415.50	Reconciled
372100		20-OCT-16	CALIFORNIA BARRICADE RENTAL, INC.		7,627.50	25-OCT-16	7,627.50	Reconciled
372101		20-OCT-16	CALIFORNIA COUNCIL FOR ENVIRONMENTAL AND ECONOMIC BALANCE		10,000.00	27-OCT-16	10,000.00	Reconciled
372102		20-OCT-16	CANON FINANCIAL SERVICES, INC		8,710.42	24-OCT-16	8,710.42	Reconciled
372103		20-OCT-16	CANON SOLUTIONS AMERICA, INC.		8,674.43	24-OCT-16	8,674.43	Reconciled
372104		20-OCT-16	CAROLLO ENGINEERS, INC		67,838.80			Negotiable
372105		20-OCT-16	CASTANEDA, NATALIE		1,542.76	24-OCT-16	1,542.76	Reconciled
372106		20-OCT-16	CHI EPSILON		250.00			Negotiable
372107		20-OCT-16	CHIMOURES, ANDREA		60.67			Negotiable
372108		20-OCT-16	CHO DESIGN ASSOCIATES, INC		2,200.00	24-OCT-16	2,200.00	Reconciled
372109		20-OCT-16	CITY OF SANTA ANA		152.42	24-OCT-16	152.42	Reconciled
372110		20-OCT-16	CITY OF SANTA ANA		195,000.00			Negotiable
372111		20-OCT-16	CITY OF TUSTIN		650.77	21-OCT-16	650.77	Reconciled
372112		20-OCT-16	CLA-VAL COMPANY		583.59	21-OCT-16	583.59	Reconciled
372113		20-OCT-16	CONTROLLED MOTION SOLUTIONS, INC		46.82	21-OCT-16	46.82	Reconciled
372114		20-OCT-16	COX COMMUNICATIONS, INC.		109.00	24-OCT-16	109.00	Reconciled
372115		20-OCT-16	COXCO LLC		9,530.75	25-OCT-16	9,530.75	Reconciled
372116		20-OCT-16	CREW, INC.		382.10	27-OCT-16	382.10	Reconciled
372117		20-OCT-16	DATAGEAR, INC.		326.68	31-OCT-16	326.68	Reconciled
372118		20-OCT-16	DATASITE INC		12,305.00			Negotiable
372119		20-OCT-16	DB INDUSTRIAL SUPPLY CO		429.85	21-OCT-16	429.85	Reconciled
372120		20-OCT-16	DEE JASPAR & ASSOCIATES, INC.		71,366.58	31-OCT-16	71,366.58	Reconciled
372121		20-OCT-16	DELL MARKETING LP		390.03	24-OCT-16	390.03	Reconciled
372122		20-OCT-16	DIRECTV INC		115.98			Negotiable
372123		20-OCT-16	DISCOUNT COURIER SERVICE		155.80	21-OCT-16	155.80	Reconciled
372124		20-OCT-16	EHS INTERNATIONAL, INC		3,105.00	24-OCT-16	3,105.00	Reconciled
372125		20-OCT-16	EMD MILLIPORE CORPORATION		2,264.29			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372126		20-OCT-16	ENVIRONMENTAL EXPRESS INC		2,324.11	24-OCT-16	2,324.11	Reconciled
372127		20-OCT-16	EVANS-HYDRO INC		33,741.72			Negotiable
372128		20-OCT-16	EXECUTIVE LIGHTING & ELECTRIC		535.14	21-OCT-16	535.14	Reconciled
372129		20-OCT-16	EXTTI , INCORPORATED		2,650.00	28-OCT-16	2,650.00	Reconciled
372130		20-OCT-16	FEDEX		215.54	27-OCT-16	215.54	Reconciled
372131		20-OCT-16	FIRE EXTINGUISHING SAFETY & SERVICE		571.07	25-OCT-16	571.07	Reconciled
372132		20-OCT-16	FIRST CHOICE SERVICES		767.77	25-OCT-16	767.77	Reconciled
372133		20-OCT-16	FISERV		16,656.62			Negotiable
372134		20-OCT-16	FISHER SCIENTIFIC COMPANY LLC		3,874.97	24-OCT-16	3,874.97	Reconciled
372135		20-OCT-16	FORTRESS RESOURCES, LLC		236.74	24-OCT-16	236.74	Reconciled
372136		20-OCT-16	FRONTIER CALIFORNIA INC.		479.56			Negotiable
372137		20-OCT-16	GANAHL LUMBER CO.		203.94	25-OCT-16	203.94	Reconciled
372138		20-OCT-16	GEICO		228.33	27-OCT-16	228.33	Reconciled
372139		20-OCT-16	GEMS SENSORS, INC.		1,584.06	24-OCT-16	1,584.06	Reconciled
372140		20-OCT-16	GENERAL MONITORS INC.		5,692.63	24-OCT-16	5,692.63	Reconciled
372141		20-OCT-16	GEORGE HILLS COMPANY, INC.		442.00	27-OCT-16	442.00	Reconciled
372142		20-OCT-16	GEORGE YARDLEY CO., INC.		650.00	21-OCT-16	650.00	Reconciled
372143		20-OCT-16	GIMALADA, MARGARET		77.01	31-OCT-16	77.01	Reconciled
372144		20-OCT-16	GRAINGER		122.28	24-OCT-16	122.28	Reconciled
372145		20-OCT-16	GRAYBAR ELECTRIC COMPANY		19.80	24-OCT-16	19.80	Reconciled
372146		20-OCT-16	H2O INNOVATION USA INC		4,619.58	24-OCT-16	4,619.58	Reconciled
372147		20-OCT-16	HAAKER EQUIPMENT COMPANY		2,634.25	24-OCT-16	2,634.25	Reconciled
372148		20-OCT-16	HACH COMPANY		7,416.53	24-OCT-16	7,416.53	Reconciled
372149		20-OCT-16	HDR ENGINEERING INC		26,890.10	28-OCT-16	26,890.10	Reconciled
372150		20-OCT-16	HELPMATES STAFFING SERVICES		13,181.73	27-OCT-16	13,181.73	Reconciled
372151		20-OCT-16	HILL BROTHERS CHEMICAL COMPANY		4,139.00	24-OCT-16	4,139.00	Reconciled
372152		20-OCT-16	HOME DEPOT USA INC		2,105.81	31-OCT-16	2,105.81	Reconciled
372153		20-OCT-16	HSIEN, KAITING		211.55	24-OCT-16	211.55	Reconciled
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372154		20-OCT-16	HUNSAKER & ASSOCIATES IRVINE		2,352.00	24-OCT-16	2,352.00	Reconciled
372155		20-OCT-16	INDUSTRIAL METAL SUPPLY CO		1,381.02	24-OCT-16	1,381.02	Reconciled
372156		20-OCT-16	IRON MOUNTAIN INFORMATION MANAGEMENT INC		1,355.53	24-OCT-16	1,355.53	Reconciled
372157		20-OCT-16	IRVINE COMMUNITY DEVELOPMENT COMPANY LLC		129,102.16			Negotiable
372158		20-OCT-16	IRVINE PIPE & SUPPLY INC		610.84	21-OCT-16	610.84	Reconciled
372159		20-OCT-16	IRWD-PETTY CASH CUSTODIAN		822.92	25-OCT-16	822.92	Reconciled
372160		20-OCT-16	JOHN ROBINSON CONSULTING, INC.		20,362.25	31-OCT-16	20,362.25	Reconciled
372161		20-OCT-16	JONES, ELLEN		33.04	25-OCT-16	33.04	Reconciled
372162		20-OCT-16	JPI DEVELOPMENT GROUP INC.		702.53			Negotiable
372163		20-OCT-16	KAESER COMPRESSORS, INC.		20,955.58	28-OCT-16	20,955.58	Reconciled
372164		20-OCT-16	KAYUGA SOLUTION INC		20,625.00	28-OCT-16	20,625.00	Reconciled
372165		20-OCT-16	KAZEMPOOR, MOHAMMAD		20.69			Negotiable
372166		20-OCT-16	KIM, SOON TAE		2,550.00	24-OCT-16	2,550.00	Reconciled
372167		20-OCT-16	KLEINFELDER, INC.		1,550.00	24-OCT-16	1,550.00	Reconciled
372168		20-OCT-16	KUO, PETER		498.68	24-OCT-16	498.68	Reconciled
372169		20-OCT-16	LA HABRA FENCE COMPANY INC		3,537.00	25-OCT-16	3,537.00	Reconciled
372170		20-OCT-16	LAGUNA BEACH COUNTY WATER DISTRICT		3,707.47	25-OCT-16	3,707.47	Reconciled
372171		20-OCT-16	LCS TECHNOLOGIES, INC.		3,105.00	24-OCT-16	3,105.00	Reconciled

372172	20-OCT-16	LEIGHTY, MEGAN		22.36			Negotiable
372173	20-OCT-16	LU'S LIGHTHOUSE, INC.		469.99	25-OCT-16	469.99	Reconciled
372174	20-OCT-16	MAILFINANCE INC		729.28			Negotiable
372175	20-OCT-16	MC FADDEN-DALE INDUSTRIAL		196.12	25-OCT-16	196.12	Reconciled
372176	20-OCT-16	MC MASTER CARR SUPPLY CO		192.76	24-OCT-16	192.76	Reconciled
372177	20-OCT-16	MEADOWS CONDO ASSOC. # 735		501.45			Negotiable

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Payment Document : IRWD CHECK								
372178		20-OCT-16	MICHAEL BAKER INTERNATIONAL, INC.		494.00	24-OCT-16	494.00	Reconciled
372179		20-OCT-16	MILLER, BLAKE		29.06			Negotiable
372180		20-OCT-16	MOBILE MODULAR MANAGEMENT CORPORATION		1,020.60	24-OCT-16	1,020.60	Reconciled
372181		20-OCT-16	MORGAN COMPANY		492.67	24-OCT-16	492.67	Reconciled
372182		20-OCT-16	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		51,099.34	27-OCT-16	51,099.34	Reconciled
372183		20-OCT-16	NATIONAL READY MIXED CONCRETE CO.		1,871.20	24-OCT-16	1,871.20	Reconciled
372184		20-OCT-16	NAVKAR, PRIYA		831.83			Negotiable
372185		20-OCT-16	NOREX, INC.		3,720.00	24-OCT-16	3,720.00	Reconciled
372186		20-OCT-16	OLIN CORPORATION		20,336.35	27-OCT-16	20,336.35	Reconciled
372187		20-OCT-16	ON ASSIGNMENT LAB SUPPORT		1,190.00	24-OCT-16	1,190.00	Reconciled
372188		20-OCT-16	ORANGE COUNTY AUTO PARTS CO		514.57	21-OCT-16	514.57	Reconciled
372189		20-OCT-16	ORANGE COUNTY TREASURER		142.84	24-OCT-16	142.84	Reconciled
372190		20-OCT-16	OSTS, INC		5,150.00	25-OCT-16	5,150.00	Reconciled
372191		20-OCT-16	OUTSOURCE		59,105.00	27-OCT-16	59,105.00	Reconciled
372192		20-OCT-16	TECHNICAL LLC					
372192		20-OCT-16	PACIFIC RESOURCE RECOVERY		2,375.65	25-OCT-16	2,375.65	Reconciled
372193		20-OCT-16	PARKHOUSE TIRE INC		526.09	25-OCT-16	526.09	Reconciled
372194		20-OCT-16	PAULUS ENGINEERING INC		5,800.00	21-OCT-16	5,800.00	Reconciled
372195		20-OCT-16	PAYNE & FEARS LLP		10,730.50	27-OCT-16	10,730.50	Reconciled
372196		20-OCT-16	PELLETIER & ASSOCIATES, INC.		350.00	21-OCT-16	350.00	Reconciled
372197		20-OCT-16	PETERSEN, GARY		14.92	24-OCT-16	14.92	Reconciled
372198		20-OCT-16	PINNACLE CUSTOM HOMES, INC.		1,042.48			Negotiable
372199		20-OCT-16	PINNACLE TOWERS LLC		666.04	24-OCT-16	666.04	Reconciled
372200		20-OCT-16	POLLARDWATER.COM		1,501.82	24-OCT-16	1,501.82	Reconciled
372201		20-OCT-16	PUBLIC FINANCIAL MANAGEMENT, INC.		22,500.00	27-OCT-16	22,500.00	Reconciled
372202		20-OCT-16	PYLES, STEVEN		82.52	31-OCT-16	82.52	Reconciled
372203		20-OCT-16	QUINTERO, GLORIA		24.21			Negotiable
372204		20-OCT-16	RAM AIR ENGINEERING INC		1,396.80	25-OCT-16	1,396.80	Reconciled

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Payment Document : IRWD CHECK								
372205		20-OCT-16	REAL WATER CONSULTANTS INC.		19,177.75	28-OCT-16	19,177.75	Reconciled
372206		20-OCT-16	RELIANCE STANDARD LIFE INSURANCE COMPANY		19,435.99			Negotiable
372207		20-OCT-16	RESILIENT COMMUNICATIONS INC.		2,800.00			Negotiable
372208		20-OCT-16	RMC WATER AND ENVIRONMENT		8,847.50	25-OCT-16	8,847.50	Reconciled
372209		20-OCT-16	RODRIGUEZ, LIZZETTE		18.58			Negotiable
372210		20-OCT-16	ROWLEY, C		139.77			Negotiable
372211		20-OCT-16	SANDERS PAVING INC		9,838.50	27-OCT-16	9,838.50	Reconciled
372212		20-OCT-16	SANTA ANA BLUE PRINT		5,470.34			Negotiable
372213		20-OCT-16	SANTA MARGARITA FORD		147.00	25-OCT-16	147.00	Reconciled

372214	20-OCT-16	SANTA MARGARITA FORD	97.29	24-OCT-16	97.29	Reconciled
372215	20-OCT-16	SCHULER CONSTRUCTORS, INC.	105,927.58	27-OCT-16	105,927.58	Reconciled
372216	20-OCT-16	SCHULER CONSTRUCTORS, INC.	5,575.14	28-OCT-16	5,575.14	Reconciled
372217	20-OCT-16	SEAL ANALYTICAL INC	268.48	24-OCT-16	268.48	Reconciled
372218	20-OCT-16	SEALS WEST PACKING CO.	821.40			Negotiable
372219	20-OCT-16	SEPARATION PROCESSES INC	1,828.75	24-OCT-16	1,828.75	Reconciled
372220	20-OCT-16	SHAMROCK SUPPLY CO INC	1,213.31	21-OCT-16	1,213.31	Reconciled
372221	20-OCT-16	SHERWIN WILLIAMS COMPANY	1,359.37	24-OCT-16	1,359.37	Reconciled
372222	20-OCT-16	SOSA, PATRICIA	21.44			Negotiable
372223	20-OCT-16	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	1,437.63			Negotiable
372224	20-OCT-16	SOUTH COAST WATER CO.	40.00	25-OCT-16	40.00	Reconciled
372225	20-OCT-16	SOUTHERN CALIFORNIA EDISON COMPANY	360,170.67	25-OCT-16	360,170.67	Reconciled

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Payment Document : IRWD CHECK								
372226		20-OCT-16	SOUTHERN CALIFORNIA SECURITY CENTERS, INC.		643.39			Negotiable
372227		20-OCT-16	SOUTHWEST VALVE & EQUIPMENT		2,571.88	31-OCT-16	2,571.88	Reconciled
372228		20-OCT-16	STANDARD & POOR'S FINANCIAL SERVICES LLC		35,750.00	27-OCT-16	35,750.00	Reconciled
372229		20-OCT-16	STANDARD PACIFIC HOMES		157.65			Negotiable
372230		20-OCT-16	STANDARD REGISTER, INC.		1,098.58	24-OCT-16	1,098.58	Reconciled
372231		20-OCT-16	STANTEC CONSULTING SERVICES INC.		2,612.00	24-OCT-16	2,612.00	Reconciled
372232		20-OCT-16	STATE BOARD OF EQUALIZATION		1,913.00	25-OCT-16	1,913.00	Reconciled
372233		20-OCT-16	STATE WATER RESOURCES CONTROL BOARD		340.00			Negotiable
372234		20-OCT-16	STATE WATER RESOURCES CONTROL BOARD		9,003.00	31-OCT-16	9,003.00	Reconciled
372235		20-OCT-16	STETSON ENGINEERS INC.		15,758.50	28-OCT-16	15,758.50	Reconciled
372236		20-OCT-16	TAI, SUETLAI		128.55			Negotiable
372237		20-OCT-16	TEREX SERVICES		1,002.92	24-OCT-16	1,002.92	Reconciled
372238		20-OCT-16	THE GAS COMPANY		4,066.34	25-OCT-16	4,066.34	Reconciled
372239		20-OCT-16	THODETL, SUMAN KUMAR REDDY		15.13			Negotiable
372240		20-OCT-16	THOMPSON INDUSTRIAL SUPPLY		1,746.93	24-OCT-16	1,746.93	Reconciled
372241		20-OCT-16	THROWDOWN INDUSTRIES HOLDINGS		24.45	27-OCT-16	24.45	Reconciled
372242		20-OCT-16	TOLL BROS., INC		48.28	27-OCT-16	48.28	Reconciled
372243		20-OCT-16	TOXGUARD FLUID TECHNOLOGIES		116.50	27-OCT-16	116.50	Reconciled
372244		20-OCT-16	TRI COUNTY PUMP COMPANY		19,190.60	28-OCT-16	19,190.60	Reconciled
372245		20-OCT-16	TRIPOINTE HOMES		112.56			Negotiable
372246		28-OCT-16	TROPICAL PLAZA NURSERY INC		10,404.00	27-OCT-16	10,404.00	Reconciled
372247		20-OCT-16	TRUCPARCO		798.78	24-OCT-16	798.78	Reconciled
372248		20-OCT-16	TTS ENGINEERING, INC		112.53	28-OCT-16	112.53	Reconciled

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Payment Document : IRWD CHECK								
372249		20-OCT-16	TU, MORAN		24.75	28-OCT-16	24.75	Reconciled
372250		20-OCT-16	TU, YUAN		19.94	25-OCT-16	19.94	Reconciled

372251	20-OCT-16	TYCO INTEGRATED SECURITY, LLC	2,793.41	27-OCT-16	2,793.41	Reconciled
372252	20-OCT-16	ULTRA SCIENTIFIC	139.30	25-OCT-16	139.30	Reconciled
372253	20-OCT-16	UNLIMITED ENGINEERING, INC.	1,289.15	24-OCT-16	1,289.15	Reconciled
372254	20-OCT-16	WALDMAN, ROBERT	93.85			Negotiable
372255	20-OCT-16	WALTERS WHOLESAL ELECTRIC	5,116.83			Negotiable
372256	20-OCT-16	WANG, LINGTONG	55.13	21-OCT-16	55.13	Reconciled
372257	20-OCT-16	WANG, YUAN	25.13			Negotiable
372258	20-OCT-16	WANG, ZIXUN	27.15			Negotiable
372259	20-OCT-16	WATERWISE CONSULTING, INC.	1,360.00	24-OCT-16	1,360.00	Reconciled
372260	20-OCT-16	WAXIE'S ENTERPRISES, INC	414.32	24-OCT-16	414.32	Reconciled
372261	20-OCT-16	WECK LABORATORIES INC	2,671.00			Negotiable
372262	20-OCT-16	WEST COAST SAFETY SUPPLY INC	2,050.21			Negotiable
372263	20-OCT-16	WESTERN NATIONAL CONTRACTORS	630.34			Negotiable
372264	20-OCT-16	WOOD, JOAN	24.03			Negotiable
372265	20-OCT-16	WU, BIN	29.46			Negotiable
372266	20-OCT-16	YOON, YOUNGHOON	10.07	24-OCT-16	10.07	Reconciled
372267	20-OCT-16	YP LLC	123.50	24-OCT-16	123.50	Reconciled
372268	20-OCT-16	YSL, INC	1,850.23	24-OCT-16	1,850.23	Reconciled
372269	20-OCT-16	YUN, TAEYUNG	193.83			Negotiable
372270	20-OCT-16	ZHANG, YI	25.99			Negotiable
372271	20-OCT-16	ZIA, MONA	30.80	24-OCT-16	30.80	Reconciled
372272	20-OCT-16	JCI JONES CHEMICALS INC	5,505.50	24-OCT-16	5,505.50	Reconciled
372273	20-OCT-16	Burton, Kevin L (Kevin)	29.00	24-OCT-16	29.00	Reconciled
372274	20-OCT-16	Soto, Franklin E (Frank)	80.00			Negotiable
372275	27-OCT-16	Collazo, Carlos C (Carlos)	1,712.83	31-OCT-16	1,712.83	Reconciled
372276	27-OCT-16	Perez, Cesar (Cesar)	77.76			Negotiable
372277	27-OCT-16	Bonkowski, Leslie A (Leslie)	149.60	31-OCT-16	149.60	Reconciled
372278	27-OCT-16	Swan, Peer	228.78			Negotiable
372279	27-OCT-16	Torres, Richard P (Richard)	185.00			Negotiable

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372280		27-OCT-16	Sandoval, Rosa M (Rosa)		325.00			Negotiable
372281		27-OCT-16	LaMar, Steven E		251.94	31-OCT-16	251.94	Reconciled
372282		27-OCT-16	Malloy, Steven L (Steven)		30.00	31-OCT-16	30.00	Reconciled
372283		27-OCT-16	Pisal, Sudhir		23.76			Negotiable
372284		27-OCT-16	Bonkowski, Thomas J (Thomas)		27.11	31-OCT-16	27.11	Reconciled
372285		27-OCT-16	Lynch, Toni Marie		172.80	27-OCT-16	172.80	Reconciled
372286		27-OCT-16	ADT SECURITY SERVICES INC		412.47			Negotiable
372287		27-OCT-16	AFLAC		7,201.14			Negotiable
372288		27-OCT-16	AFLAC		277.76			Negotiable
372289		27-OCT-16	AIRGAS, INC.		585.01	31-OCT-16	585.01	Reconciled
372290		27-OCT-16	ALPHA TRAFFIC SERVICES, INC.		570.00			Negotiable
372291		27-OCT-16	AMERICAN TECHNOLOGIES, INC		4,305.07			Negotiable
372292		27-OCT-16	ANCHOR SCIENTIFIC INC		2,864.80	31-OCT-16	2,864.80	Reconciled
372293		27-OCT-16	AQUA-METRIC SALES COMPANY		15,776.53			Negotiable
372294		27-OCT-16	AT&T		7,400.96			Negotiable
372295		27-OCT-16	ATHENS SERVICES		16,114.90	31-OCT-16	16,114.90	Reconciled
372296		27-OCT-16	BANK OF AMERICA		23,208.09			Negotiable
372297		27-OCT-16	BARNES, BEAU		58.66			Negotiable
372298		27-OCT-16	BOYD & ASSOCIATES		120.00	31-OCT-16	120.00	Reconciled
372299		27-OCT-16	BROWN AND CALDWELL		1,462.80	31-OCT-16	1,462.80	Reconciled
372300		27-OCT-16	BTF PRECISE MICROBIOLOGY INC.		525.20			Negotiable
372301		27-OCT-16	C.H. BULL CO.		6,608.96	31-OCT-16	6,608.96	Reconciled
372302		27-OCT-16	CALIFORNIA BARRICADE RENTAL, INC.		3,805.00			Negotiable
372303		27-OCT-16	CANON FINANCIAL SERVICES, INC		1,820.15	31-OCT-16	1,820.15	Reconciled
372304		27-OCT-16	CANON SOLUTIONS AMERICA, INC.		677.25	31-OCT-16	677.25	Reconciled
372305		27-OCT-16	CAROLLO ENGINEERS, INC		1,305.50			Negotiable

372306	27-OCT-16	CDW GOVERNMENT LLC	1,050.04	31-OCT-16	1,050.04	Reconciled
372307	27-OCT-16	CERTIFIED TRANSPORTATION	1,365.93	31-OCT-16	1,365.93	Reconciled
372308	27-OCT-16	CHARLES P CROWLEY COMPANY INC	7,059.58			Negotiable

IRWD Ledger
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372309		27-OCT-16	CITY OF NEWPORT BEACH		1,116.84			Negotiable
372310		27-OCT-16	CIVILSOURCE, INC.		47,369.00			Negotiable
372311		27-OCT-16	CLEANTECH SERVICES, LLC		1,420.92	31-OCT-16	1,420.92	Reconciled
372312		27-OCT-16	CLEARINGHOUSE		477.67			Negotiable
372313		27-OCT-16	COAST PLUMBING HEATING AND AIR, INC		45.00	31-OCT-16	45.00	Reconciled
372314		27-OCT-16	COLONIAL LIFE & ACCIDENT INSURANCE CO.		1,053.48			Negotiable
372315		27-OCT-16	COMMERCE ENERGY INC		36.48	31-OCT-16	36.48	Reconciled
372316		27-OCT-16	COUNTY OF RIVERSIDE		50.00			Negotiable
372317		27-OCT-16	CREDENTIAL CHECK CORPORATION		92.72	31-OCT-16	92.72	Reconciled
372318		27-OCT-16	DANGELO CO		2,740.71	31-OCT-16	2,740.71	Reconciled
372319		27-OCT-16	DATA CLEAN CORPORATION		542.00			Negotiable
372320		27-OCT-16	DATAGEAR, INC.		388.72	31-OCT-16	388.72	Reconciled
372321		27-OCT-16	DATASITE INC		18,876.00			Negotiable
372322		27-OCT-16	DAVIS FARR LLP		36,000.00			Negotiable
372323		27-OCT-16	DELL MARKETING LP		9,584.84	31-OCT-16	9,584.84	Reconciled
372324		27-OCT-16	DIRECTV INC		113.55			Negotiable
372325		27-OCT-16	DUDLEY RIDGE WATER DISTRICT		75,508.48			Negotiable
372326		27-OCT-16	DWYER INSTRUMENTS INC		807.04	31-OCT-16	807.04	Reconciled
372327		27-OCT-16	ENVIRONMENTAL SCIENCE ASSOCIATES		642.50			Negotiable
372328		27-OCT-16	FEDEX		178.09			Negotiable
372329		27-OCT-16	FIRST CHOICE SERVICES		336.64			Negotiable
372330		27-OCT-16	FISHER SCIENTIFIC COMPANY LLC		2,055.37	31-OCT-16	2,055.37	Reconciled
372331		27-OCT-16	FLW, INC.		1,811.68			Negotiable
372332		27-OCT-16	FRANCHISE TAX BOARD		20.00			Negotiable
372333		27-OCT-16	FRONTIER CALIFORNIA INC.		100.13			Negotiable
372334		27-OCT-16	FUSCOE ENGINEERING, INC.		21,419.50			Negotiable
372335		27-OCT-16	GRAINGER		3,836.23	31-OCT-16	3,836.23	Reconciled

IRWD Ledger
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372336		27-OCT-16	GRAYBAR ELECTRIC COMPANY		7,389.29	31-OCT-16	7,389.29	Reconciled
372337		27-OCT-16	GREAT PACIFIC EQUIPMENT INC		1,700.00			Negotiable
372338		27-OCT-16	HACH COMPANY		4,014.38	31-OCT-16	4,014.38	Reconciled
372339		27-OCT-16	HARRINGTON INDUSTRIAL PLASTICS LLC		850.66	31-OCT-16	850.66	Reconciled
372340		27-OCT-16	HARTFORD LIFE AND ACCIDENT INSURANCE COMPANY		112.48	31-OCT-16	112.48	Reconciled
372341		27-OCT-16	HARTFORD LIFE INSURANCE COMPANY		26,771.93			Negotiable
372342		27-OCT-16	HDR ENGINEERING INC		30,301.75			Negotiable
372343		27-OCT-16	HELPMATES STAFFING SERVICES		7,574.07	31-OCT-16	7,574.07	Reconciled
372344		27-OCT-16	HERITAGE FIELDS EL TORO, LLC		713,228.00			Negotiable
372345		27-OCT-16	HILL BROTHERS CHEMICAL COMPANY		16,741.37			Negotiable
372346		27-OCT-16	HINSILBLON LTD		2,650.00			Negotiable
372347		27-OCT-16	HOME DEPOT USA INC		637.16			Negotiable

372348	27-OCT-16	IDEXX	8,953.51	31-OCT-16	8,953.51	Reconciled
372349	27-OCT-16	DISTRIBUTION, INC				
372350	27-OCT-16	INGERSOLL RAND CO	13,213.40			Negotiable
372351	27-OCT-16	IRVINE PIPE & SUPPLY INC	2,207.19	31-OCT-16	2,207.19	Reconciled
372352	27-OCT-16	IRVINE UNIFIED SCHOOL DISTRICT	1,162.45			Negotiable
372353	27-OCT-16	JCI JONES CHEMICALS INC	4,404.40	31-OCT-16	4,404.40	Reconciled
372354	27-OCT-16	KAESER COMPRESSORS, INC.	6,196.39	31-OCT-16	6,196.39	Reconciled
372355	27-OCT-16	KILL-N-BUGS	400.00			Negotiable
372356	27-OCT-16	TERMITE AND PEST CONTROL SERVICES				
372357	27-OCT-16	KLEINFELDER, INC.	19,319.39			Negotiable
372358	27-OCT-16	KONECRANES INC	1,233.36			Negotiable
372359	27-OCT-16	LAGUNA BEACH COUNTY WATER DISTRICT	3,316.98			Negotiable
372358	27-OCT-16	LEWIS INVESTMENT COMPANY, LLC	41,561.11			Negotiable
372359	27-OCT-16	MARINA LANDSCAPE MAINTENANCE, INC.	1,193.47			Negotiable

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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372360		27-OCT-16	MARVIN GARDENS LLC		2,720.06	28-OCT-16	2,720.06	Reconciled
372361		27-OCT-16	MBC APPLIED ENVIRONMENTAL SCIENCES		1,300.00	31-OCT-16	1,300.00	Reconciled
372362		27-OCT-16	MORGAN COMPANY		1,352.97	31-OCT-16	1,352.97	Reconciled
372363		27-OCT-16	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY		215,038.19			Negotiable
372364		27-OCT-16	NATIONAL READY MIXED CONCRETE CO.		1,256.24	31-OCT-16	1,256.24	Reconciled
372365		27-OCT-16	O.I. ANALYTICAL		196.73			Negotiable
372366		27-OCT-16	OLIN CORPORATION		5,782.53	31-OCT-16	5,782.53	Reconciled
372367		27-OCT-16	ON ASSIGNMENT LAB SUPPORT		2,380.00	31-OCT-16	2,380.00	Reconciled
372368		27-OCT-16	ORANGE COUNTY AUTO PARTS CO		264.55	31-OCT-16	264.55	Reconciled
372369		27-OCT-16	ORANGE COUNTY SHERIFF'S OFFICE		62.50			Negotiable
372370		27-OCT-16	ORRICK, HERRINGTON & SUTCLIFFE LLP		175,000.00			Negotiable
372371		27-OCT-16	PACIFIC SALES		3,785.36			Negotiable
372372		27-OCT-16	PAULUS ENGINEERING INC		17,253.48	31-OCT-16	17,253.48	Reconciled
372373		27-OCT-16	PAYNE & FEARS LLP		17,625.42			Negotiable
372374		27-OCT-16	PERS LONG TERM CARE		900.58			Negotiable
372375		27-OCT-16	PMC ENGINEERING LLC.		4,589.95	31-OCT-16	4,589.95	Reconciled
372376		27-OCT-16	PRE-PAID LEGAL SERVICES INC		1,531.10			Negotiable
372377		27-OCT-16	RAM AIR ENGINEERING INC		2,380.00			Negotiable
372378		27-OCT-16	REACH EMPLOYEE ASSISTANCE INC		946.40			Negotiable
372379		27-OCT-16	REFRIGERATION SUPPLIES DISTRIBUTOR		411.75			Negotiable
372380		27-OCT-16	RESPONSE ENVELOPE, INC		2,624.40			Negotiable
372381		27-OCT-16	RICHARD C. SLADE & ASSOCIATES LLC		1,051.00			Negotiable
372382		27-OCT-16	RINCON TRUCK CENTER INC.		60,257.10			Negotiable
372383		27-OCT-16	RITE AID PHARMACY		1,980.00			Negotiable
372384		27-OCT-16	RON TURLEY ASSOCIATES INC		2,550.00	31-OCT-16	2,550.00	Reconciled

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 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372385		27-OCT-16	RYAN HERCO PRODUCTS CORP		681.74	31-OCT-16	681.74	Reconciled
372386		27-OCT-16	SANTA MARGARITA FORD		179.09	31-OCT-16	179.09	Reconciled

372387	27-OCT-16	SHAMROCK SUPPLY CO INC	93.31	31-OCT-16	93.31	Reconciled
372388	27-OCT-16	SIGNATURE FLOORING INC	2,372.50			Negotiable
372389	27-OCT-16	SMISSEN, JENNIFER	138.67			Negotiable
372390	27-OCT-16	SOFTWAREONE INC	4,427.73			Negotiable
372391	27-OCT-16	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	958.42			Negotiable
372392	27-OCT-16	SOUTH COAST WATER CO.	151.68			Negotiable
372393	27-OCT-16	SOUTHERN CALIFORNIA EDISON COMPANY	91,705.89	31-OCT-16	91,705.89	Reconciled
372394	27-OCT-16	SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY	20,000.00			Negotiable
372395	27-OCT-16	SOUTHERN COUNTIES LUBRICANTS LLC	3,044.91			Negotiable
372396	27-OCT-16	SPARKLETT'S	478.69			Negotiable
372397	27-OCT-16	STANDARD & POOR'S FINANCIAL SERVICES LLC	35,750.00			Negotiable
372398	27-OCT-16	STANTEC CONSULTING SERVICES INC.	12,067.79			Negotiable
372399	27-OCT-16	SUNSHINE SUPPLY COMPANY, INC.	2,823.12	31-OCT-16	2,823.12	Reconciled
372400	27-OCT-16	TEKDRAULICS	5,785.87			Negotiable
372401	27-OCT-16	TESTAMERICA LABORATORIES, INC	52.50			Negotiable
372402	27-OCT-16	THE IRVINE COMPANY LLC	2,658.00	31-OCT-16	2,658.00	Reconciled
372403	27-OCT-16	TRI COUNTY PUMP COMPANY	1,182.60	31-OCT-16	1,182.60	Reconciled
372404	27-OCT-16	TROJANOWSKI, SEBASTIAN	17.54			Negotiable
372405	27-OCT-16	TROPICAL PLAZA NURSERY INC	8,626.51	31-OCT-16	8,626.51	Reconciled
372406	27-OCT-16	TUTTLE-CLICK FORD LINCOLN	33,335.39			Negotiable

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 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
372407		27-OCT-16	UNITED PARCEL SERVICE INC		94.00	31-OCT-16	94.00	Reconciled
372408		27-OCT-16	UNITED SITE SERVICES OF CALIFORNIA INC		630.56			Negotiable
372409		27-OCT-16	UNITED WAY OF ORANGE COUNTY		795.00			Negotiable
372410		27-OCT-16	US BANK NAT'L ASSOCIATION NORTH DAKOTA		71,061.47			Negotiable
372411		27-OCT-16	USA BLUEBOOK		543.63			Negotiable
372412		27-OCT-16	VHG LABS, INC		131.00			Negotiable
372413		27-OCT-16	WALTERS WHOLESale ELECTRIC		2,217.85	31-OCT-16	2,217.85	Reconciled
372414		27-OCT-16	WARE MALCOMB		61,724.97			Negotiable
372415		27-OCT-16	WASTE MANAGEMENT OF ORANGE COUNTY		1,536.16	31-OCT-16	1,536.16	Reconciled
372416		27-OCT-16	WATERLINE TECHNOLOGIES INC		6,832.50	31-OCT-16	6,832.50	Reconciled
372417		27-OCT-16	WATERWISE CONSULTING, INC.		1,122.00	31-OCT-16	1,122.00	Reconciled
372418		27-OCT-16	WAXIE'S ENTERPRISES, INC		1,144.33			Negotiable
372419		27-OCT-16	WECK LABORATORIES INC		450.00	31-OCT-16	450.00	Reconciled
372420		27-OCT-16	WEST COAST SAND & GRAVEL INC.		903.32	31-OCT-16	903.32	Reconciled
372421		27-OCT-16	WESTERN EXTERMINATOR COMPANY		516.00			Negotiable
372422		27-OCT-16	WESTERN SAFETY PRODUCTS INC		1,620.00	31-OCT-16	1,620.00	Reconciled
372423		27-OCT-16	WESTERN WEATHER GROUP INC		2,084.00			Negotiable
372424		27-OCT-16	YING, QIANQIAN		1,169.69			Negotiable
372425		27-OCT-16	YSI, INC		30,002.49			Negotiable
372426		27-OCT-16	WILLIAM W. JONGSMAPURCHASE		4,224.24			Negotiable
372427		28-OCT-16	KLINE, KATHY PAY		386.19	28-OCT-16	386.19	Reconciled
372428		28-OCT-16	JOSHUA MILLER TURF REBATE		165.00	31-OCT-16	165.00	Reconciled
372429		28-OCT-16	MICHELLE YUE TURF REBATE		165.00			Negotiable
372430		31-OCT-16	JCI JONES CINCINNATI		7,576.29			Negotiable

CHEMICALS INC
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD CHECK								
Payment Document Subtotal:					7,719,713.68		5,183,871.53	
Payment Document : IRWD Wire								
11736		04-OCT-16	YORK INSURANCE SERVICES GROUP INC - CA	PAY	8,741.76			Negotiable
11737		04-OCT-16	YORK INSURANCE SERVICES GROUP INC - CA	PAY	8,849.22			Negotiable
11738		10-OCT-16	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	14,079.12			Negotiable
11739		10-OCT-16	CALPERS	SACRAMENTO	430,647.96			Negotiable
11740		10-OCT-16	BANK OF AMERICA	SAN FRANCISCO	68,072.17			Negotiable
11741		10-OCT-16	SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	28,886.07			Negotiable
11742		10-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	14,786.48			Voided
11743		10-OCT-16	SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	63,933.68			Negotiable
11744		10-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	2,660,861.88			Negotiable
11745		12-OCT-16	YORK INSURANCE SERVICES GROUP INC - CA	PAY	19,886.45			Negotiable
11746		12-OCT-16	SUMITOMO MITSUI BANKING CORPORATION	NEW YORK	6,936.01			Negotiable
11747		12-OCT-16	U.S. BANK NATIONAL ASSOCIATION	PAY	2,531,896.19			Negotiable
11748		12-OCT-16	BANK OF AMERICA	SAN FRANCISCO	2,530,724.05			Negotiable
11749		12-OCT-16	INTERNAL REVENUE SERVICE	FRESNO	393.83			Negotiable
11750		12-OCT-16	FRANCHISE TAX BOARD	SACRAMENTO	44.79			Negotiable
11751		12-OCT-16	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	34.96			Negotiable

CHEMICALS INC
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Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
11752		17-OCT-16	FILANC-BALFOUR BEATTY JV	ACT 4427724347	2,323,512.78			Negotiable
11753		17-OCT-16	FILANC-BALFOUR BEATTY JV	ESR 211084000	258,168.09			Negotiable
11754		18-OCT-16	YORK INSURANCE SERVICES GROUP INC - CA	PAY	7,330.14			Negotiable
11755		18-OCT-16	KIM, JENNY	TUSTIN	11.47			Negotiable
11756		18-OCT-16	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	855,283.17			Negotiable
11757		18-OCT-16	MUNICIPAL WATER DISTRICT OF ORANGEVALLEY COUNTY	FOUNTAIN	423,640.80			Negotiable
11758		18-OCT-16	U.S. BANK NATIONAL ASSOCIATION	PAY	88,329.37			Negotiable
11759		20-OCT-16	PCL CONSTRUCTION, INC.	ACCT 6971821722	400,499.29			Negotiable
11760		20-OCT-16	PCL CONSTRUCTION, INC.	ESR 141511.1	76,429.90			Negotiable
11761		20-OCT-16	U.S. BANK NATIONAL ASSOCIATION	ST. LOUIS	9,013.66			Negotiable
11762		24-OCT-16	INTERNAL REVENUE SERVICE	FRESNO	184,917.69			Negotiable
11763		24-OCT-16	FRANCHISE TAX BOARD	SACRAMENTO	51,063.11			Negotiable

11764	24-OCT-16	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	9,361.96	Negotiable
11765	24-OCT-16	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR SACRAMENTO	500.77	Negotiable
11766	24-OCT-16	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,866.13	Negotiable
11767	24-OCT-16	EMPLOYEE BENEFIT SPECIALIST, INC	PAY	9,567.36	Negotiable
11768	24-OCT-16	GREAT-WEST LIFE & ANNUITY INSURANCE COMPANY	DENVER	109,468.14	Negotiable
11769	25-OCT-16	YORK INSURANCE SERVICES GROUP INC - CA	PAY	9,913.99	Negotiable
11770	28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	11,479.17	Negotiable

IRWD Ledger Payment Register For 01-OCT-16 To 31-OCT-16 Report Date: 01-NOV-2016 14:14
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 35
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
11771		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	11,479.17			Negotiable
11772		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	729.17			Negotiable
11773		28-OCT-16	U.S. BANK NATIONALPAY ASSOCIATION		14,786.48			Negotiable
11774		28-OCT-16	U.S. BANK NATIONALPAY ASSOCIATION		5,794,250.00			Negotiable
11775		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	3,750.00			Negotiable
11776		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	1,711.11			Negotiable
11777		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	60,937.50			Negotiable
11778		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	17,500.00			Negotiable
11779		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	1,895.83			Negotiable
11780		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	62,812.50			Negotiable
11781		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	2,812.50			Negotiable
11782		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	311.11			Negotiable
11783		28-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	9,965.28			Negotiable
11784		31-OCT-16	BANK OF NEW YORK MELLON TRUST COMPANY NA	NEWARK	26,631.94			Negotiable
11785		31-OCT-16	INTERNAL REVENUE SERVICE	FRESNO	186,757.70			Negotiable
11786		31-OCT-16	FRANCHISE TAX BOARD	SACRAMENTO	51,910.70			Negotiable

IRWD Ledger Payment Register For 01-OCT-16 To 31-OCT-16 Report Date: 01-NOV-2016 14:14
 BANK: Bank of America N.A. Branch : Los Angeles Account: Checking AP and PR Page: 36
 Bank Account Currency: USD (US Dollar) Payment Currency: USD (US Dollar)
 Payment Type: All Display Supplier Address: No

Payment Number	Sequence Num	Date	Supplier Name	Site	Payment Amount	Cleared Date	Cleared Amount	Status
Payment Document : IRWD Wire								
11787		31-OCT-16	EMPLOYMENT DEVELOPMENT DEPARTMENT	W SACRAMENTO	8,720.64			Negotiable
11788		31-OCT-16	ORDONEZ, CYNTHIA MARIE	DESERT HOT SPR	500.77			Negotiable
11789		31-OCT-16	CALIFORNIA DEPARTMENT OF CHILD SUPPORT SERVICES	SACRAMENTO	2,866.13			Negotiable

11790	31-OCT-16	EMPLOYEE BENEFIT PAY	10,067.64	Negotiable
		SPECIALIST, INC		
11791	31-OCT-16	GREAT-WEST LIFE & DENVER	109,535.76	Negotiable
		ANNUITY INSURANCE		
		COMPANY		

Payment Document Subtotal: 19,600,063.54

Bank Account Subtotal : 27,319,777.22 5,183,871.53

Report Count : 920 Report Total: 27,319,777.22 5,183,871.53

Total Disbursement

*** End of Report ***

\$ 27,319,777.22 Disbursement
~~<16,872.93>~~ Voids
 \$ 27,302,904.29 Total Voids and Disbursements

Exhibit "E"

IRWD Gov Code 53065.5 Disclosure Report


Payment or Reimbursements for Individual charges of \$100 or more per transaction for services or product received.
01-OCT-16 to 31-OCT-16

NAME	CHECK NUMBER	CHECK DATE	TRANSACTION	ITEM DESCRIPTION	EXPENSE JUSTIFICATION
Olivolo, Eric J (Eric)	371573	6-Oct-16	185.28	Other(Misc)	Safety Shoe Allowance
Chaney, David (Dave)	371572	6-Oct-16	260.00	Membership/Certifica	Dave Chaney - CWEA
Oldewage, Lars D (Lars)	371577	6-Oct-16	213.12	Auto Rental	LABWORKS 2016 Annual
Bennett, Ray R (Ray)	371582	6-Oct-16	165.24	Mileage	Rosedale Drip Project
O'Neill, Owen H	371580	6-Oct-16	172.00	Membership/Certifica	Owen O'Neill - CWEA
Stuvick, Lindsey R	371578	6-Oct-16	285.19	Lodging	Data Collaborative Water
Sidlin, Wayne	371584	6-Oct-16	172.00	Membership/Certifica	Wayne Sidlin - CWEA Lab
Pan, Jenny W (Jenny)	371854	13-Oct-16	106.46	Other(Misc)	SIT EBS Upgrade & ID
Oldewage, Lars D (Lars)	371856	13-Oct-16	125.00	Other(Misc)	Safety Shoe
Fike, Ethan O (Ethan)	371853	13-Oct-16	115.68	Membership/Certifica	Ethan Fike - CSUS Class Fee
McBride, Damien J	372071	20-Oct-16	172.00	Membership/Certifica	Damien McBride - CWEA
Moeder, Jacob J (Jacob)	372073	20-Oct-16	330.00	Membership/Certifica	ASCE & WEF membership
Moeder, Jacob J (Jacob)	372073	20-Oct-16	295.00	Membership/Certifica	ASCE & WEF membership
McElroy, Dorien	372072	20-Oct-16	155.00	Membership/Certifica	Dorien McElroy - CWEA
Steinbeck, Brandon C	372070	20-Oct-16	107.56	Other(Misc)	safety shoe allowance
LaMar, Steven E	372281	27-Oct-16	137.08	Lodging	Expense Report Sept 2016
Lynch, Toni Marie	372285	27-Oct-16	172.80	Other(Misc)	Safety Shoe Allowance
Sandoval, Rosa M (Rosa)	372280	27-Oct-16	325.00	Other(Misc)	Customer Service Week
Bonkowski, Leslie A (Leslie)	372277	27-Oct-16	149.60	Other(Misc)	Shadetree Partnership
Torres, Richard P (Richard)	372279	27-Oct-16	185.00	Membership/Certifica	Richard Torres - CWEA

Total Amount: 3,829.01

November 28, 2016

Prepared and

submitted by: C. Compton 

Approved by: Paul Cook 

ACTION CALENDAR

REVIEW OF 2016 LEGISLATIVE ACTIVITIES AND 2017 LEGISLATIVE PLANNING

SUMMARY:

This report provides a review of IRWD's 2016 legislative priorities and government relations activities, and an overview of expected 2017 legislative and regulatory issues in Washington, D.C., Sacramento, and regionally. Also described are proposals that the District's associations and stakeholders are considering for sponsorship. The report proposes an initial 2017 staff resource allocation plan for legislative and regulatory issues of importance to IRWD in the coming year. Staff recommends that the Board provide input on the proposed 2017 regional, state and federal legislative issues of interest to IRWD, and adopt the proposed Initial 2017 Legislative and Regulatory Resource Allocation Plan and the Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2017.

BACKGROUND:

2016 IRWD Priorities and Activities:

In November 2015, the Board reviewed an overview of expected 2016 legislative issues in Washington, D.C. and Sacramento, including proposals the District's statewide associations were considering for introduction. At that time, the Board adopted the Initial 2016 Legislative and Regulatory Resource Allocation Plan and the Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2016, which guided the District's governmental relations activities this year.

The 2016 priorities directed staff to engage in policy discussions to protect IRWD's revenues and the District's ability to use its water budget-based tiered rate structure to respond to the drought and water supply shortage. The priorities also directed staff to engage in discussions regarding water and sewer rates reform measures, conservation and drought regulations, the expanded use of recycled water, and energy efficiency in the water and wastewater sectors. Over the last year, staff and IRWD's state legislative advocate have worked on each of these issues and other state issues of importance to the District including the groundwater management, storm-induced overflow restrictions, and other State Water Resources Control Board (State Board) regulations.

At the federal level, IRWD and IRWD's federal legislative advocate engaged on legislation defining environmental infrastructure projects, federal drought legislation, and the Water Resources Development Act (WRDA). Additionally, the District promoted the Syphon Reservoir Recycled Water Storage Project, engaged productively on legislation proposing a Santa Ana Mountains to Sea National Monument, and advocated for the reauthorization of the Bureau of Reclamation's Water Reclamation and Reuse Program (Title XVI).

At the local level, IRWD continued to work to build stronger relationships with its community stakeholders.

Expected 2017 Federal Legislative Issues:

It is expected that the 115th Congress will tackle a number of issues of interest to the water and wastewater communities. Staff and IRWD's federal legislative advocate discussed the expected 2017 political environment and federal issues with the Committee. IRWD's federal legislative advocate will visit with the Board early next year to discuss the expected political environment and federal issues for 2017. More information is also provided below on several key issues of interest to the District.

Passage of the Water Resources Development Act and Defining Environmental Infrastructure Projects:

In June 2015, Representative Mimi Walters (R-CA) introduced H.R. 2689 in response to a U.S. Army Corps of Engineers' decision that it would not consider water resources projects and water resources development projects as falling within the definition of environmental infrastructure projects. This decision made water resource projects ineligible under WRDA. IRWD worked throughout the year with Representative Walters to support the passage of H.R. 2689, which did not move forward, and sought to have the provisions of H.R. 2689 included in the House version of WRDA 2016. As of the writing of this report, the House of Representatives and the United State Senate have passed different versions of WRDA, neither of which includes the language sought by IRWD. It is unclear if the bill will move from conference before the 114th Congress adjourns in December. In 2017, IRWD will continue to strategically work in support of a clarification of the definition of environmental infrastructure projects, where appropriate, in the 115th Congress. IRWD will also continue to advocate for Congress to return to the passage of WRDA every two years.

Tax Parity for Water Efficiency Rebates:

As a means of encouraging greater water use efficiency and conservation, public water agencies throughout California have developed programs offering their customers rebates for the installation of water saving devices and landscapes. Last year, it became apparent that water use efficiency rebates are considered income and taxable under the Internal Revenue Code. This treatment of water efficiency rebates is different from energy efficiency rebates because Congress provided an express exception for energy conservation subsidies in the Energy Policy Act of 1992.

In 2016, IRWD supported congressional efforts to provide tax parity for water conservation rebates. Despite many conversations about the need for tax parity between water and energy efficiency rebates, tax parity has yet to be enacted. Given California's ongoing drought, it is expected that the tax parity issue will continue to be a topic of discussion within Congress and an issue of interest to IRWD.

Title XVI Authorization:

The Bureau of Reclamation's Water Reclamation and Reuse Program (Title XVI) identifies and investigates opportunities to reclaim and reuse wastewater and naturally impaired ground and surface water in the 17 Western States and Hawaii. Title XVI allows the Bureau of Reclamation to provide local projects proponents in the named states funding for the planning, design, and construction of water recycling and reuse projects. As currently enacted, only projects that have been authorized by Congress are eligible for funding, and as a result of the earmark ban new projects have not been authorized. Given the significant role Title XVI has played in the development of water recycling and reuse projects, IRWD has supported the establishment of a new authorization process for qualified water supply projects through the existing Title XVI program. IRWD will continue to work strategically in support of Title XVI reauthorization in 2017.

U.S. Army Corps of Engineers and Bureau of Reclamation Atmospheric River Research Funding and Reservoir Reoperation Process:

The U.S. Army Corps of Engineers currently uses long-term averages of winter storms and spring runoff to manage dams and reservoir levels for flood control. Recent advances have found that up to half of California's total annual precipitation, and almost all of its floods, are caused by atmospheric river rain events. This means that the risk of flooding is dependent upon the atmospheric river storms that flow over California.

Research of atmospheric rivers shows promise that the size and strength of an atmospheric river may be able to be predicted several days before landfall so that those predictions could potentially be used in flood control and water management models. With this new information, it has become more clear that traditional dam operations to mitigate flood risks, which are based on long-term averages of precipitation, are no longer appropriate. Despite the advancements in atmospheric river forecasting, more research is needed so that atmospheric river forecasts can be tailored for water managers and incorporated into dam management. IRWD, in concept, has supported and will continue to support federal programs and funding for atmospheric river research aimed at improving the U.S. Army Corps of Engineers' and Bureau of Reclamation's reservoir operations.

Additionally, the District will continue to seek appropriate language requiring the U.S. Army Corps of Engineers and Bureau of Reclamation to consider reoperation of a reservoir when requested to do so by a water agency downstream of the reservoir, and language allowing a water agency downstream of the reservoir to propose and fund improvements in reservoir operations, if it is in its interest.

Water Allocations from the Colorado River:

Seven western states rely on the Colorado River as a source of water supply for their residents. Beginning nearly a century ago, the water of the Colorado River has been allocated to each state and Mexico through various compacts, agreements and statutes – collectively known as The Law of the Colorado River. The Law of the Colorado River also establishes how water allocations will be impacted when there is a shortage along the river. In light of the extended drought in the

Upper and Lower Colorado River Basins, states that would receive the largest cutback in their water allocations are interested in changing the allocation priorities of the river. There has been some discussion regarding proposed changes in Washington, D.C. Given IRWD's interest, the District will closely monitor this issue in 2017 and engage where appropriate.

Expected 2017 Statewide Legislative Issues:

As California continues to face the historic drought, it is expected that the California Legislature will take up a number of issues of interest to the water and wastewater communities in 2017. Staff and IRWD's state legislative advocate will discuss the expected 2017 political environment and state issues with the Board. More detailed information is also provided below on several expected issues of significant importance to the District.

Enactment of a Long-term Conservation Framework and Adoption of Continued Emergency Conservation Regulations:

In response to the five-year statewide drought, Governor Brown issued Executive Order B-29-15 on April 1, 2015, mandating a 25% reduction in statewide potable water use between June 2015 and February 2016. On May 5, 2015, the State Board adopted an Emergency Regulation to implement the provisions of the Executive Order. On May 9, 2016, Governor Brown issued his most recent drought-related executive order, Executive Order B-37-16. The recent order requires the state to transition from the temporary restrictions implemented during the drought to a statewide long-term conservation framework that aligns with the objective of the California Water Action Plan to "Make Conservation a California Way of Life."

Over the last several months the California Department of Water Resources (DWR) and the State Board have been working to develop the long-term conservation framework. While these state agencies have statutory authority to implement portions of the framework, legislation will be required to implement a majority of the new framework. Legislation on the framework is expected in 2017. Additionally, in early 2017, the State Board will consider modifying or extending the emergency drought regulations-related urban water conservation. IRWD will continue to engage productively on the long-term conservation framework and emergency drought regulations, and will continue to advocate for policies that recognize the need for flexibility and regional differences such as growth, climate, and local investments in water recycling and extraordinary supplies.

Prohibition on Ocean Discharges:

In 2016, SB 163, authored by Senator Bob Hertzberg (D, Van Nuys), proposed a ban on ocean discharge of treated wastewater. Specifically, the bill would have declared that the discharge of treated wastewater from ocean outfalls, except in compliance with the bill's provisions, is a waste and unreasonable use of water in light of the cost-effective opportunities to recycle water for further beneficial use. While Senator Hertzberg did not move SB 163 forward in 2016, he has stated that he will reintroduce the proposal in 2017. Staff has been working with a coalition led by the California Association of Sanitation Agencies and WateReuse California to discuss the coalition's plan of action on any reintroduction on SB 163. IRWD will engage and be a key member of the coalition as it did in 2016.

Proposition 218 Reforms:

Since *Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano*, there has been significant discussion in Sacramento regarding Proposition 218 and tiered water rates. Most recently, the California Water Foundation sought legislation in 2016 to address tiered water rate structures, stormwater funding, and voluntary low income rate subsidization. Given the interest in Proposition 218 reform, it is likely that the topic will continue to be an issue of discussion in Sacramento. IRWD will continue to communicate the District's concern over any water rate legislation which is not consistent with the California Constitution, not voluntary in nature, or that does not provide sufficient clarity or flexibility to water agencies. As authorized by the Board, staff will continue to work with interested parties on issues related to tiered water rates.

As discussions surrounding water infrastructure funding continue, and if a public goods charge for water is raised in those discussions, IRWD will engage with the District's industry and association partners to oppose a public goods charge for water consistent with the Board-adopted policy principle.

Recycled Water Use in Decorative Lakes and Storm-induced Overflow Restrictions:

As California continues to deal with drought facing increasing demands on its fresh water resources, regulatory challenges related to storm-induced overflow restrictions on recycled water impoundments continue to limit water suppliers' abilities to expand recycled water use. One such use is the use of recycled water in decorative lakes. While the use is permitted, storm-induced overflow restrictions discourage the use of recycled water in these decorative bodies of water.

The State Board's *Recycled Water Policy* requires certain practices related to recycled water impoundments including the "Management of any ponds containing recycled water such that no discharge occurs unless the discharge is a result of a 25-year, 24-hour storm event or greater, and there is notification of the appropriate Regional Water Board Executive Officer of the discharge." In order to avoid a discharge of recycled water during the wet weather season and to ensure compliance with State Board policies, some Regional Water Quality Control Boards require the drawdown of water levels stored in these impoundments to reduce the likelihood of a storm-induced overflow. These storm-induced overflow restrictions affect small recycled water impoundments (e.g., frost protection ponds, decorative lakes, golf course ponds) in addition to large recycled water storage facilities. In the case of very small impoundments, storm-induced overflow restrictions often limit use of the impoundment during winter months and discourage customers from using recycled water.

Given the severity of the drought, IRWD has had increased interest from Homeowners Associations (HOAs) that would like to use recycled water to refill their decorative lakes. The District has explained the regulatory challenges to these HOAs and IRWD's efforts to work with the State Board to find a solution to mitigate the impact of storm-induced overflow restrictions. Staff has continued conversations with the State Board on the use of recycled water in decorative lakes to replace evaporative water losses. Staff will continue to work towards a solution to this issue.

California State Budget:

On October 12, 2016, State Controller Betty Yee released her monthly report on the State's finances. She announced that the State took in \$10.57 billion in revenue during the month of September. This amount was above the estimates contained in 2016-2017 Budget Act by 1.5 percent. The State closed the first quarter (July 1 through September 30, 2016) of its fiscal year with \$24.55 billion in revenues, which is 0.1 percent lower than anticipated. The State also ended September with \$28.51 billion in unused borrowable resources, which is \$2.02 billion more than expected.

Given the potential impact of the State's finances and the Fiscal Year 2017-18 Budget on IRWD, staff will continue to work with the District's associations and industry partners to monitor developments associated with the State budget and proposals related to local government revenues including property taxes and reserves, among others.

Expected 2017 Government Relations Activities and Staff Resource Allocations:

Staff will discuss with the Board a proposed list of issues of high concern to IRWD for 2017, which is attached as Exhibit "A", and an initial plan for allocating 2017 staff resources to legislative and regulatory issues, which is attached as Exhibit "B".

IRWD's state and federal legislative advocate will also participate in the discussion with the Board on legislative and regulatory issues of concern to the District.

Expected 2017 Association Proposals:

IRWD's association and industry partners are in the process of completing their 2017 legislative planning. A summary of those planning efforts is provided below:

Association of California Water Agencies:

The Association of California Water Agencies (ACWA) held its 2017 legislative planning meeting on October 21, 2016. ACWA will pursue greater funding for biomass generation within California and will be meeting with the Administration to discuss the likelihood of support for another biomass bill. In January, the ACWA State Legislative Committee will determine if the association will sponsor legislation on biomass in 2017. Additionally, ACWA will be engaged in discussions regarding water conservation and the long-term conservation framework in 2017.

Bioenergy Association of California:

IRWD joined the Bioenergy Association of California (BAC) in 2013. BAC's purpose is the promotion of sustainable bioenergy production with a focus on promoting community-scale bioenergy generation from a wide range of sustainably available organic waste sources, including dairy and agricultural waste, food and food processing waste, water treatment waste, other organic urban waste, and forest biomass. BAC's annual planning, development of its legislative priorities and possible legislative proposals will occur at its membership meeting on December 6. The meeting agenda has yet to be released. Staff will work through the California

Association of Sanitation Agencies (CASA) to ensure that the wastewater sector has representation on the BAC Board of Directors and to encourage BAC to prioritize issues of interest to the wastewater section in 2017. Staff will provide the Board with an update on any new developments.

California Municipal Utilities Association:

CMUA held its 2017 legislative and regulatory planning meeting on November 9. CMUA's Legislative Committee decided not to sponsor a bill banning metallic balloons, as had been suggested by one CMUA member. Staff will provide the Board with an update on any new developments.

California Association of Sanitation Agencies:

CASA has not met to discuss its 2017 legislative and regulatory efforts. The planning meeting will be held on December 9. As of the writing of this report, no specific proposals or topics have been released for consideration at the meeting. Staff will provide the Board with an update on any new developments.

California Special Districts Association:

The California Special Districts Association (CSDA) held its 2017 legislative and regulatory planning meeting on November 3. CSDA will co-sponsor legislation with the California State Association of Counties to provide technical clean-up to AB 2476 (Daly, 2016) related to parcel tax notifications and will co-sponsor legislation with the California Association of Local Agency Formation Commissions to require special district representation on all Local Agency Formation Commissions throughout the state. Staff will provide the Board with an update on the CSDA planning meeting and on any new developments related to these two proposals.

WateReuse California:

The WateReuse Association of California held its 2017 legislative and regulatory planning meeting on November 2. The WateReuse Association of California will sponsor legislation defining direct potable reuse and establishing a timeline for the direct potable reuse regulations.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Policy and Communications Committee on November 7, 2016.

RECOMMENDATION:

THAT THE BOARD PROVIDE INPUT ON THE PROPOSED 2017 REGIONAL, STATE AND FEDERAL LEGISLATIVE ISSUES OF INTEREST TO IRWD, AND ADOPT THE PROPOSED INITIAL 2017 LEGISLATIVE AND REGULATORY RESOURCE ALLOCATION PLAN AND THE LEGISLATIVE / REGULATORY ISSUES AND ACTIVITIES OF HIGH CONCERN TO IRWD IN 2017.

LIST OF EXHIBITS:

- Exhibit "A" – Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2017
- Exhibit "B" – Proposed Initial IRWD's 2017 Legislative and Regulatory Resource Allocation Plan

EXHIBIT “A”

LEGISLATIVE/REGULATORY ISSUES & ACTIVITIES OF HIGH CONCERN TO IRWD IN 2017

As a state and federal leader in water resources public policy and governance, the Irvine Ranch Water District (IRWD) has worked tirelessly to promote policy initiatives that allow the District, along with other water purveyors in California, to enhance the quality and reliability of water supplies throughout the state. While IRWD will engage in a number of legislative and regulatory issues of interest to the District, the following are issues and activities of high concern to the District in 2017.

2017 Federal Issues and Activities of High Concern:

- 1) Advocate for the establishment of a new authorization process for qualified water supply projects through the existing Bureau of Reclamation Water Reclamation and Reuse Program (Title XVI).
- 2) Advocate for legislative clarification that water resources projects and water resources development projects are considered environmental infrastructure projects and eligible for consideration under the Water Resources Development Act of 1986 and the Water Resources Reform and Development Act of 2014.
- 3) Seek appropriate statutory language requiring the U.S. Army Corps of Engineers and Bureau of Reclamation to consider reoperation of a reservoir when requested to do so by a water agency downstream of the reservoir, and language allowing a water agency downstream of the reservoir to propose and fund improvements in reservoir operations, if it is in its interest.
- 4) Support congressional efforts to enact a water resources bill every two years which includes the authorization of projects of benefit to the Orange County community.
- 5) Seek federal authorization and appropriation of funds for the Syphon Reservoir Recycled Water Storage Project. Advocacy would include promotion of the following:
 - Engaging with U.S. Army Corps of Engineers at the Area, Regional and Headquarters levels to facilitate review of the Syphon Reservoir Recycled Water Storage Project in order to obtain the Corps’ recommendation for funding in its Report to Congress, and
 - Working to ensure the professional staffs of the House and Senate authorizing committees are both educated and committed to authorizing the Syphon Reservoir Recycled Water Storage Project.
- 6) Advocate for a change in the operation of the Delta, consistent with the co-equal goals of ecosystem protection and water supply reliability, and seek the federal actions necessary to implement a solution in the Bay Delta, consistent with IRWD’s Bay Delta Conservation Plan (BDCP) Policy Principles and BDCP comment letters, that provides a long-term solution to California’s water crisis, will provide a reliable high-quality water supply to residents, agriculture and businesses across the state; and will protect and improve the Delta ecosystem.

- 7) Continue to work to strengthen relationships with Members of Congress, professional staff, and within Federal agencies to improve IRWD's avenues for engagement of national public policy issues of interest to the District.

2017 State Issues and Activities of High Concern:

- 1) Protect IRWD's revenues and the District's ability to use its water budget-based tiered rate structure to respond to the drought and water supply shortages.
- 2) Engage in discussions surrounding water and wastewater infrastructure financing including discussions related to Proposition 218 reforms to protect IRWD's interests and oppose efforts to establish a public goods charge on water consistent with the Board's adopted policy.
- 2) Engage in discussions surrounding legislation to mandate elimination of ocean discharges in order to protect the District's interest.
- 3) Engage with the Legislature and the State Board on the development and enactment of a long-term conservation framework for California and on any additional emergency conservation regulations. Advocate for policies that provide local agencies flexibility and recognize investments in local supplies and regional factors such as growth and climate differences. Engage with the State Board on policy, regulatory and permits issues of concern to IRWD.
- 4) Promote the expanded use of recycled water and its acceptance as a resource and not a waste by advocating for the removal of hindrances to recycled water projects. Advocacy would include promotion of the following:
 - Removal of recycled water as a waste, including address recycled water discharge requirements;
 - Updating Titles 17 and 22, including relief of dual-plumbed inspection/testing requirements;
 - A "Fit for Purpose" regulatory approach for recycled water;
 - Permissive advanced indirect and direct potable water reuse regulations; and
 - Eliminating operational constraints on recycled water operations and use.
- 5) Promote policies that encourage energy reliability in Orange County and energy efficiency in the water and wastewater sectors without an increase in cost to or mandates on local entities. Advocacy would include promotion of the following:
 - Allocation of Cap-and-Trade revenues to projects that reduce the greenhouse gas emissions and energy demands in the water and wastewater sectors, and
 - Policies and incentives that encourage water and wastewater agencies to implement renewable and solar energy projects in order to offset their energy needs.

- 6) Advocate for a change in the operation of the Delta, consistent with the co-equal goals of ecosystem protection and water supply reliability, and seek the state actions necessary to implement a solution in the Bay Delta, consistent with IRWD's BDCP Policy Principles and BDCP comment letters, that provides a long-term solution to California's water crisis; will provide a reliable high-quality water supply to residents, agriculture and businesses across the state; and will protect and improve the Delta ecosystem.

2017 Regional Issue and Activities of High Concern:

- 1) Engage with the Santa Ana Regional Quality Control Board and community stakeholders to discuss adjusting storm-induced overflow protections and expanding use of recycled water in decorative lakes.
- 2) Engage with the South Coast Air Quality Management District to identify regulatory changes that will positively impact air quality while improving IRWD's ability to respond to emergencies and to operate its water and wastewater systems.

EXHIBIT “B”
DRAFT
IRWD’s Initial 2017 Legislative and Regulatory
Resource Allocation Plan

Expected 2017 Legislative/Regulatory Issues	Priority for Staff Resources
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FEDERAL ISSUES	
Environmental Infrastructure Projects – Advocate for legislative clarification that water resources projects and water resources development projects are considered environmental infrastructure projects and eligible for consideration under the Water Resources Development Act of 1986 and the Water Resources Reform and Development Act of 2014. Advocate for a broad definition of water resources projects and water resources development projects which includes water supply, drinking water projects, surface water protection and development programs, and wastewater infrastructure projects that increase water supply reliability such as water recycling, desalination, and stormwater collection projects.	Very High
Reservoir Reoperation – Advocate for appropriate language requiring the U.S. Army Corps of Engineers and Bureau of Reclamation to consider reoperation of a reservoir when requested to do so by a water agency downstream of the reservoir, and language allowing a water agency downstream of the reservoir to propose and fund improvements in reservoir operations, if it is in its interest.	Very High
Syphon Reservoir Recycled Water Storage Project – Engage with the U.S. Army Corps of Engineers, and Congressional staff on funding the project.	Very High
Title XVI, Water Reclamation and Reuse Program, Reauthorization – Advocate for the establishment of a new project authorization process for the U.S. Bureau of Reclamation’s Title XVI Program.	Very High
Water Resource Development Act – Seek enactment of a WRDA bill every two years.	Very High
Atmospheric River Research – Advocate for federal programs and funding for atmospheric river research aimed at improving the U.S. Army Corps of Engineers’ and Bureau of Reclamation’s reservoir operations.	High
California Water Fix Implementation – Advocate for a change in the operation of the Delta, consistent with the co-equal goals of ecosystem protection and water supply reliability to respond to the drought; seek the federal actions necessary to implement a permanent solution in the Bay Delta.	High
Tax Parity for Water Efficiency Rebates – Advocate for tax parity between water and energy efficiency rebates.	High
Total Maximum Daily Load Limits – Advocate that the Environmental Protection Agency use the best available science when setting Total Maximum Daily Load (TMDL) limitations related to Clean Water Act compliance and approve TMDLs for California based on relevant studies related to California’s environment and local conditions.	High
Clean Water Act Definition of “Waters of the U.S.” – Support efforts to modify the definition of “Waters of the U.S.” to limit impacts to IRWD, including IRWD’s reservoirs. Obtain a “Waters of the U.S.” exemption for the constructed treatment wetlands and IRWD facilities.	Moderate <i>*Staff proposes, if legislative action looks promising and/or the courts</i>

Expected 2015 Legislative/Regulatory Issues	Priority for Staff Resources
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	<i>have ruled against the new WOTUS rule, that the resource allocation be changed to very high.</i>
<p>Tax-Exempt Municipal Bonds – Maintain the current tax-exempt status of municipal bonds; oppose efforts to place a cap on tax-exempt municipal bonds as part of any federal tax reform measure. Oppose prohibitions on the use of tax-exempt bonds if a local government uses WIFI or any similar program.</p>	<p>Moderate <i>*Staff proposes, if a significant threat is raised again tax-exempt municipal bonds, that the resource allocation be changed to very high.</i></p>
<p>Water Allocations from the Colorado River – Monitor discussions related to the Colorado River and advocate for policies that would fairly protect California’s and IRWD’s interests in the Colorado River.</p>	<p>Moderate <i>*Staff proposes, if a significant threat is raised against California’s water rights, that the resource allocation be changed to very high.</i></p>
<p>Water Supply/Reliability Projects – Support federal investment in water supply and reliability projects including large surface storage.</p>	<p>Low <i>*Proposed IRWD resource allocation is low because staff will work through IRWD’s association and industry partners on this issue.</i></p>
STATE ISSUES	
<p>Conservation, Water Use Efficiency and Water Shortage Contingency Plans – Engage productively in policy discussions related to a long-term conservation framework for California and changes in the requirements for water shortage contingency plans.</p>	Very High
<p>Limitations on Ocean Discharges – Engage productively in discussions surrounding proposals to eliminate ocean discharges to protect the District’s interests. Support efforts to promote funding of treatment process upgrades that improve water quality and reuse options.</p>	Very High
<p>Proposition 218 Reforms – Engage in discussions surrounding Prop. 218 reform efforts to protect IRWD’s interests. Communicate the District’s concern over any water rate legislation which is not consistent with the California Constitution, not voluntary in nature, or that does not provide sufficient clarity or flexibility to water agencies.</p>	Very High
<p>Public Goods Charge on Water – Oppose a statewide user fee consistent with IRWD’s Water Infrastructure Financing Policy Paper.</p>	Very High

Expected 2015 Legislative/Regulatory Issues

Priority for Staff Resources


<p>Recycled Water – Promote the expanded use of recycled water, and its acceptance as a resource, by advocating for the removal of hindrances to recycled water projects and storage. Seek to:</p> <ul style="list-style-type: none"> • Remove recycled water as a waste, including address recycled water discharge requirements. • Update Titles 17 and 22, including relief of dual-plumbed inspection/testing requirements. • Promote a “Fit for Purpose” regulatory approach for recycled water. • Promote permissive advanced indirect and direct potable water reuse regulations. • Eliminate operational constrains on recycled water operations and use. 	<p>Very High</p>
<p>Revenues – Protect IRWD’s revenue sources, and seek measures to ensure reliability in revenues.</p>	<p>Very High</p>
<p>State Board – Engage with the State Board on any further conservation regulations and advocate for continued recognition of local supply conditions, growth, climate differences, extraordinary supplies and IPR projects. Engage with the State Board on policy, regulatory and permits issues of concern to IRWD including the Water Quality Enforcement Policy, the Statewide Mercury Program, the Environmental Laboratory Accreditation Program, and expansion of “Waters of the State” designations.</p>	<p>Very High</p>
<p>Water Budget-Based Tiered Rates – Protect the District’s ability to use its water budget-based tiered rate structured to respond to the drought and water supply shortages.</p>	<p>Very High</p>
<p>Water Bond Implementation – Engage productively in discussions surrounding the implementation of the water bond in order to protect IRWD’s interests.</p>	<p>Very High</p>
<p>Water Transfers and Markets – Engage in discussion on additional legislation related to establishing a water market in California.</p>	<p>Very High</p>
<p>California Water Fix Implementation – Advocate for a change in the operation of the Delta, consistent with the co-equal goals of ecosystem protection and water supply reliability. Seek the State actions necessary to implement a solution in the Bay Delta.</p>	<p>High</p>
<p>Energy – Advocate for policies which encourage energy reliability in Orange County and energy efficiency in the water and wastewater sectors, including allocation of Cap-and-Trade revenues to the water and wastewater industries and expanded availability of direct access programs, without an increase in cost to or mandates on local entities; seek incentives for energy self-reliance projects (i.e. storage, generation, efficiency).</p>	<p>High</p>
<p>Groundwater – Engage productively in discussions on regulations related to the implementation of the Sustainable Groundwater Management Act and groundwater management in California to protect IRWD’s interests; promote greater water banking opportunities that would benefit the District.</p>	<p>High</p>
<p>Groundwater Clean-up – Support efforts to obtain State funding to clean up groundwater contamination in the Orange County Basin, and funding for basin replenishment.</p>	<p>Moderate <i>*Proposed IRWD resource allocation is moderate because staff will work with and through IRWD’s industry and community partners on this issue.</i></p>

Expected 2015 Legislative/Regulatory Issues	Priority for Staff Resources
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<p>Integrated Regional Water Management Program –Seek changes to the IRWMP allocation process that benefits IRWD. Oppose program changes that expand funding eligibility to projects that do not further water supply reliability.</p>	<p>Moderate</p>
<p>Natural Treatment System/San Joaquin Marsh – Obtain a "Waters of the State" exemption for the Natural Treatment System (NTS) and San Joaquin Marsh and constructed treatment wetlands. Advocate for a maximum benefit approach to regulation of constructed treatment wetlands and NTS facilities.</p>	<p>Moderate</p>
<p>Operators Certifications – Address inconsistent certification processes for operator certifications (treatment, distribution, and recycling). Monitor for changes in certification requirements.</p>	<p>Moderate</p>
<p>Political Reform Act/FPPC Issues – Monitor for changes to the Political Reform Act and FPPC regulations that could impact IRWD.</p>	<p>Moderate</p>
<p>Public Agency Liability and Public Contracting – Oppose efforts to impose greater liability on public agencies for work performed by its contractors. Oppose proposals that make public contracting for labor, service or public works projects more cumbersome. Eliminate bonding requirements for water efficiency and conservation.</p>	<p>Moderate</p>
<p>Biosolids – Seek a broader spectrum of permissible use of biosolids processing byproducts including a possible fertilizer designation. Reduce restrictions surrounding biosolids processing and seek “feed-in-tariff” rules of benefit to biosolid bioenergy projects.</p>	<p>Low <i>*Proposed IRWD resource allocation is low because staff will work through IRWD's association and industry partners on this issue.</i></p>
<p>CEQA Reform – Seek reforms to CEQA that are beneficial to IRWD.</p>	<p>Low <i>*Staff proposes, if sincere CEQA reform effort arises, that the resource allocation be changed to high.</i></p>
<p>Grant Reporting – Seek changes in state grant reporting requirements to ease the burden of grant recipients while maintaining transparency.</p>	<p>Low <i>*Proposed IRWD resource allocation is low because staff will work through IRWD's association and industry partners on this issue.</i></p>
<p>Public Records Act – Monitor proposed changes to the Public Records Act that could impact IRWD costs.</p>	<p>Low</p>

Expected 2015 Legislative/Regulatory Issues	Priority for Staff Resources
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REGIONAL ISSUES	
<p>Santa Ana and San Diego Regional Water Quality Control Boards – Develop a closer working relationship with Regional Board staff. Work with the Board on issues of concern to IRWD including:</p> <ul style="list-style-type: none"> • Adjusting storm-induced overflow protections and expand the use of recycled water in decorative lakes, • Proposed modifications to Basin Plans, and • Establishing pollution credit trading programs. 	Very High
<p>South Coast Air Quality Control Board – Work with the Board to identify regulatory changes that will positively impact air quality while improving IRWD’s ability to respond to emergencies and operate its water and wastewater systems. Discussion may include:</p> <ul style="list-style-type: none"> • Seeking a change to public fleet/truck alternative fuel rules to ensure that emergency response is not adversely affected; • Seeking permit exemption for diesel generators and motors greater than 50 hp; • Seeking exemption from other restrictions imposed by AQMD that hamper IRWD’s operations and emergency response capabilities; and • Seeking less restrictive engine regulations. 	High <i>*Staff will work with IRWD’s industry and association to further these discussions with AQMD.</i>

November 28, 2016
Prepared by: K. Drake/ B. Meserlian
Submitted by: P. Shields
Approved by: P. Cook 

ACTION CALENDAR

ENTERPRISE ASSET MANAGEMENT SOFTWARE PROCUREMENT AND IMPLEMENTATION

SUMMARY:

The implementation of an Enterprise Asset Management (EAM) program will improve the District's ability to derive maximum value from its business assets, from acquisition to retirement. Following a successful completion of the program's Phase 1 Pre-implementation, the District is now targeting Phase 2 milestones with the procurement and implementation of an EAM software package. Staff recently completed a software evaluation process through which IBM Maximo was selected as the preferred platform. Subsequently, staff issued a Request-for-Proposal (RFP) for software implementation services, and conducted interviews, workshops, and negotiations over the course of several months prior to selecting Total Resource Management (TRM) as the preferred implementer. Staff recommends the Board:

- Approve the procurement of EAM system software and hardware for a not-to-exceed cost of \$545,000;
- Authorize the General Manager to execute a Professional Services Agreement with Total Resources Management for *Phase 2 Implementation – Part 1 Work & Asset Management*, for a not-to-exceed cost of \$988,330; and
- Authorize the General Manager to execute a Professional Services Variance with Kayuga Solution (EAM Consultant) for a not-to-exceed cost of \$202,020.

BACKGROUND:

The term "Enterprise Asset Management" refers to the lifecycle management of assets through its various states: planning, design, construction, commissioning, operation, maintenance, and decommissioning or replacement. An EAM system records the state and criticality of assets, identifies rehabilitation and replacement needs, and enhances the planning and scheduling of maintenance activities. The system capabilities can ultimately be expanded from the management of core assets (pumps, reservoirs, pipes, hydrants, etc.) to support other types of assets within a water and resource recovery utility such as vehicles, information system equipment, laboratory equipment, and regulatory compliance reports.

Traditionally, utilities have relied on software tools known as "Computerized Maintenance Management Systems" (CMMS) to manage asset information and maintenance work orders. EAM systems offer such functions with a more holistic approach to asset management, providing life-cycle planning capabilities, reliability-centered maintenance scheduling, robust work-flow analysis, and ability to track Key Performance Indicators (KPIs). Recent technological advances in EAM software, coupled with the performance of the District's current CMMS software, has required a significant change to the District's asset management system. As a result, the District initiated the "Enterprise Asset Management Software Implementation" project in 2011 with the

goal of replacing its existing CMMS use with a best-in-class enterprise system. The system will provide tools for scheduling and tracking corrective, preventive and predictive maintenance; regulatory compliance; budgeting, procurement analysis, and monitoring of KPIs. Ultimately, the system will evolve into a comprehensive enterprise management tool supporting many facets of the District’s operation.

EAM Program:

The current EAM program approach was established in January 2015, including the retention of a specialized EAM consultant (i.e. GHD/ Kayuga Solution). The program is subdivided into multiple phases and milestones, as illustrated in Table 1.

Table 1: EAM Program Phases and Milestones

EAM Program Milestones	Target Completion	Current Status
Phase 1: Pre-Implementation		
Asset Identification/ Inventory	August 2016	Complete
EAM Software Selection	May 2016	Complete
Implementer Selection Process	October 2016	Complete
Phase 2: Implementation		
EAM Software Procurement	December 2016	-
Part 1: Work & Asset Management - Go Live	October 2017	-
Part 2: Mobile Solutions & GIS	Future	-
Part 3: Info. Services, Fleet, Facility Assets	Future	-

Phase 1 of the program included pre-implementation activities such as asset inventory database development, business process refinement, as well as asset criticality and consequence of failure analysis. In May 2016, staff initiated negotiations with the selected software vendor, and prepared a Request for Proposal for software implementation services. Staff is now recommending Board approval for procuring the selected software package, and initiating Part 1 of the software implementation process: “Work and Asset Management”.

Given the nature of the District’s asset-intensive business, the implementation phase of the program will require extensive collaboration between multiple District departments. A stepped approach was adopted for implementation to mitigate the impact on District staff and enhance the overall success of the implementation. The stepped approach will expedite the development of a maintenance platform for major facilities, before the focus of the EAM system shifts to other types of District functions and assets.

EAM Software/ Hardware Procurement:

Staff considered multiple software vendors for the new EAM software. The software selection process was presented to the Engineering and Operations Committee at the June 21, 2016 meeting. Benchmarking visits helped solidify the decision to select IBM Maximo as the District’s EAM platform. This selection was based on the following criteria:

- Very positive user feedback from local agencies
- Proven industry leader
- Core focus on CMMS
- Strong user community among local agencies
- Financially sound parent company
- Proven integration capabilities for IRWD
- Recommendation confirmed by the District’s EAM consultant

The District negotiated a final price with IBM for a package of Maximo licenses, as summarized in the Table 2. Maximo’s total cost of \$313,210.80, which includes one year of IBM technical support services, is guaranteed through December 12, 2016. Technical support services beyond the first year, estimated at approximately 20-percent of the procurement cost, will be included in IRWD’s future annual operating budgets.

To enhance the administration of Maximo, and provide additional help tools for the end-user, staff recommends the installation of an add-on software developed by the implementer TRM. Total cost for this add-on software is \$41,052, which includes one year of technical support services.

The Maximo software solution will require additional hardware components as well as upgrades to existing equipment. The additional hardware includes servers to host Maximo environments. The Oracle Database software required for Maximo is already included in the District’s Unlimited License Agreement (ULA), and does not require additional expenditure. The procurement cost of hardware required to implement Maximo is \$165,000.

Table 2: Software/ Hardware Procurement Costs

Software/ Hardware	Cost
IBM Maximo Software Licenses	
- Asset Management Authorized User	\$269,920.00
- Asset Management Scheduler	\$31,962.00
- Health, Safety, & Environment Manager	\$11,328.80
Subtotal	\$313,210.80
TRM RulesManager Studio for Maximo	\$41,052.00
Hardware	\$165,000.00
Contingency (±5%)	\$25,737.20
Total Software/ Hardware	\$545,000.00

Scope of Work: Phase 2 - Implementation, Part 1 - Work and Asset Management:

The first major goal of Maximo implementation is to replace IRWD’s existing CMMS software (known as the legacy “TabWare” system), which will be achieved by establishing a new Work and Asset Management system. The scope of work for this effort includes the following tasks:

1. Business Process Design Services: The implementer will evaluate, align, and document all processes and solutions needed to create the new Work and Asset Management platform. This will require a comprehensive review of current IRWD business processes, and a thorough understanding of the District's assets. The implementer will provide recommendations based on common industry solutions, standardize all processes, and improve accessibility, efficiency, transparency, and consistency toward proactive asset management. An overall Change Management plan will be developed in consideration of various District stakeholders.
2. Build, Test, and Deploy Services: The implementer will build, test, and implement the newly designed platform, support "go-live" activities, and provide adequate training and support services for an effective transition.

Implementer Selection for Phase 2 - Implementation, Part 1 - Work and Asset Management:

With the input of various IRWD groups, the District's Asset Management consultant (i.e. Kayuga Solution) led the effort in preparing an RFP for Part 1 of the Maximo implementation process. Staff researched a list of IBM premier business partners, and reviewed their experiences in Maximo implementations within the water/ water recycling industry. The RFP was issued on August 15, 2016 to six consultants with relevant experiences: Infosys Limited (Infosys), Total Resources Management (TRM), Interloc Solutions (Interloc), Starboard Consulting (Starboard), Genesis Technology Solutions, and Ontracks Consulting.

Four consultants submitted proposals: Infosys, TRM, Interloc, and Starboard. The proposals were reviewed by a cross-functional evaluation team, and references were contacted for input. After completing a thorough evaluation of the proposals, TRM and Starboard were invited to participate in an interview process. Each firm was required to have its key team members participate in the interviews so that staff could evaluate team dynamics and strategic fit with the District. Based on the evaluation criteria listed in the RFP, TRM was the clear first choice. Key advantages for TRM included:

- Firm Qualifications and Experience: TRM's company profile and experience includes numerous Maximo implementations for water/ water recycling agencies. TRM's long dedicated Maximo experience within the industry promotes an efficient deployment of Maximo, and its add-on (accelerator) tools. Staff initiated reference check discussions with the Los Angeles Department of Water and Power, the Orange County Sanitation District, and Vallecitos Water District, all previous and current TRM customers. All references indicated a high level of satisfaction with TRM's services.
- Team Qualifications and Experience: TRM presented a cohesive team, equipped with various certifications and past experiences that would appropriately serve project goals. TRM's key team members, which have worked together on various Maximo implementation projects, will be led by a dedicated project manager with various experiences in Maximo implementations, re-implementations, upgrades, enhancements, and support services. The team's proximity to IRWD offices is also a plus from both staff accessibility and cost standpoint.

- **Project Approach and Timeline:** TRM’s proposal addressed all aspects of the project in a thoughtful, structured manner. The proposal demonstrated an understanding of IRWD’s needs, and TRM’s ability to address them. TRM clearly outlined project deliverables, and provided a thorough description of its approach to each task. TRM proposed a 11-month implementation plan for Part 1, with three months of post go-live support.

Final rankings are summarized in the Table 3:

Table 3: Maximo Implementers – Final Rankings and Cost

Criteria	TRM	Interloc Solutions	Starboard Consulting	Infosys Limited
Firm Qualifications and Experience	1	4	2	3
Team Qualifications and Experience	1	4	2	3
Project Approach and Timeline	1	4	2	3
Interview	1	-	2	-
Final Cost	\$988,330	\$ 2,136,484	\$ 1,200,000	\$ 3,384,540
Final	1	4	2	3

Upon selecting TRM as the finalist, the District’s evaluation team performed further due diligence through “Solution Confirmation Workshops”. These workshops focused on optimizing TRM’s proposed solution, and confirming their scope. The solution confirmation workshops resulted in the following changes at the request of the District:

- An expanded scope for Maximo fundamentals training;
- Supplemental subject-matter-expert workshops; and
- The implementation of Maximo Health, Safety, and Environment.

The above changes resulted in a \$113,200 increase to TRM’s initial cost of \$875,130.

The final scope of work, as detailed in Section 5.3 of TRM’s Work and Asset Management Implementation proposal, is provided as Exhibit “A”. Staff recommends awarding a professional services agreement to TRM in the amount of \$988,330. This is a fixed price contract with payments made based on key milestone completions.

EAM Program Staff Augmentation Services:

In January 2015, the services of a specialty EAM consultant (Mr. Iday Syachrani, PhD., of Kayuga Solution) were retained to optimize the District’s approach to EAM, and provide day-to-day management of the District’s asset management team. Kayuga’s services were also utilized in Summer 2016 for the preparation of Maximo implementation RFP. Moving forward, staff is seeking to extend the services of Kayuga Solution through December 2017 to:

- **Provide Asset Management Support:** Kayuga will continue to augment internal IRWD resources, maintaining valuable continuity within the newly assembled asset management team. Kayuga’s principal consultant, who will be on-site on a part time basis, will continue to provide specialty asset management expertise, consultation, and advise to IRWD management and executive sponsors.

- Provide Maximo Implementation Support: Kayuga staff will provide technical support services during the implementation, ensuring a successful transition to IBM Maximo.

Kayuga staff will be scheduled to provide the above services through December 2017. Staff recommends the execution of a variance, in the amount of \$202,020 with Kayuga Solution for these services. This constitutes a variance of 65% over the original contract, bringing the total contract amount to \$512,220. Kayuga's proposal is attached as Exhibit "B".

FISCAL IMPACTS:

The total costs associated with the retention of TRM and the extension of Kayuga's services are detailed in Exhibits "A" and "B", respectively. Projects 3566 and 3567 are included in the FY 2016-17 Capital Budget, and the existing budget is sufficient to fund the software/ hardware procurements and consulting services described above.

Project No.	Current Budget	Addition <Reduction>	Total Budget
3566	\$2,432,100	\$-0-	\$2,432,100
3567	\$2,432,100	\$-0-	\$2,432,100
Total	\$4,864,200	\$-0-	\$4,864,200

ENVIRONMENTAL COMPLIANCE:

This activity is not subject to the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15060 (c)(1) Preliminary Review. An activity is not subject to CEQA if the activity will not result in a direct reasonably foreseeable indirect physical change to the environment.

COMMITTEE STATUS:

This item was reviewed by the Engineering and Operations Committee on November 10, 2016.

RECOMMENDATION:

THAT THE BOARD APPROVE THE PROCUREMENT OF SOFTWARE AND HARDWARE FOR A NOT-TO-EXCEED COST OF \$545,000; AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH TOTAL RESOURCES MANAGEMENT FOR *PHASE 2 IMPLEMENTATION - PART 1 WORK & ASSET MANAGEMENT*, FOR A NOT-TO-EXCEED COST OF \$988,330; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES VARIANCE WITH KAYUGA SOLUTION FOR A NOT-TO-EXCEED COST OF \$202,020.

LIST OF EXHIBITS:

Exhibit "A" – Section 5.3 of TRM Proposal: Scope of Work

Exhibit "B" – Kayuga Proposal

Section 5.3: Scope of Work

Submitted to:

Irvine Ranch Water District

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Maximo Implementation Project

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Western Region Services Director



Irvine Ranch
WATER DISTRICT

November 2, 2016

TRM total
resource
management

A Consulting and Technology Company

Project Team members at offsite facilities. Remote access to the hardware environment will be granted to the TRM Team upon compliance with the District’s Security requirements.

5.3 Scope of Work

The following describes TRMs approach to executing the work for this project. We understand the District has divided their project work into two parts, Design and Execute. You will see we have further sub divided each of those into two stages for Design, and three stages for Execute. The costs can, and are, rolled up into the District’s original two. TRM’s five stages are

- **Design**
 - Stage 1A – Project and BPD planning
 - Stage 1B - BPD
- **Execute**
 - Stage 2A - Configure and Unit Test,
 - Stage 2B - User Acceptance, Training, Asset & Work Go Live,
 - Stage 2C - Planning & Scheduling Go Live

5.3.1 Design Stage 1A - Project and Work Shop Planning

During this initial stage the TRM team and the IRWD team is being assemble and conducting enablement tasks to ensure that the BPD workshops are conducted in the most efficient manner.

Project and Work Shop Planning	
Tasks:	<ul style="list-style-type: none"> ▪ Project Planning ▪ Conduct Organizational Research ▪ Install 3 of 7 Maximo Environments – Vanilla, Dev & QA ▪ Install TRM RulesManager into Maximo Environments ▪ Prepare and Organize Detail Agenda for Asset Management Work Shops ▪ Provide Maximo Fundamentals Training to Work Shop SME’s
Deliverables:	<ul style="list-style-type: none"> ▪ Roles And Responsibilities Document ▪ Project Schedule in MS Project ▪ Communications Plan ▪ Scope Maximo Plan ▪ Approved Project Status format ▪ Approved Risk Management Template ▪ Approved Requirements Management Template ▪ Approved Configurations Management Template ▪ Approved Decisions Log Template ▪ Approved Test Case Template ▪ Vanilla, Dev & QA installed at IRWD ▪ RulesManager installed in Maximo Environments ▪ Finalized Agenda for Asset Management Work Shops ▪ Two 4 Day SME Training for 15 students each, and two 1-Day Overveiw classes (includes 50 Fundamentals guides and 15 training laptops)
Assumptions	<ul style="list-style-type: none"> • TRM will utilize their standard templates for requirements and Maximo process documentation • TRM will utilize existing Maximo test cases in excel • IRWD will have provisioned hardware to support initial environments •

Primary Resources:	TRM – Project Manager, Sr. Business Consultant(s), Maximo Consultant, Sr. Trainer, System Engineer District – Project Manager, System Administrator, Functional Subject Matter Experts (SMEs)
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Planning Stage Detail

Project Planning

TRM will successfully implement the District’s Maximo project by following our standard guidelines for project execution and adhering to several key principals:

- Assembling a team with a mix of skills that compliments each team member to ensure that each project task is executed with a high degree of quality
- Merge TRM’s Maximo and industry experience with the customer’s vision and organizational knowledge
- Manage the project plan by following PMP and Agile methods

TRM’s Project Manager will do the resource planning necessary for the team to be up-and-running quickly. In order to set the right foundation, we will assemble the project documentation which will provide the guidance for the how the project is managed and executed.

Organizational Research

The Sr. Business Consultant and Maximo Consultant will begin organizational research. This will consist of the TRM BPR team conducting a high level review of the organization, and the key artifacts that exist today. This ensures the TRM team will already be familiar with basic elements of the District’s current organization and processes when they walk in the room.

Establish initial Maximo Instances

Once IRWD has procured the initial servers TRM will install the Vanilla, Development and QA Maximo instance. These instances will be utilized by no more than 12 simultaneous users and the hardware can be sized for this initial use pending final architecture design. The Vanilla instance will be used to conduct the initial fundamentals class and for demonstration purposes during the business process design works shops. The development instance will be utilized to execute the initial configurations and the QA instance will be under CM control and function as the Seed Database.

In addition, the TRM RulesManager Software will be installed in order to have it available for all future development, testing and QA activities.

Initial Overview Training

TRM’s Senior Trainer will conduct a Maximo Fundamentals Training for the District members attending the BPR’s. This is to prep them on Maximo’s capabilities and reporting in order to get them started on thinking of the cross over from their existing systems. This ensures they are more fully enabled when workshops start and are familiar with the new system terminology.

5.3.2 Design Stage 1B – Discovery to Design

Business process design and configuration is the most critical element in the implementation of Maximo. The success of Maximo hinges on having sensible business processes that are understandable and repeatable.

At the end of the Business Process Design Phase the following goals will be met and the design for all functional areas will be complete and ready to move to the development and configuration phase.

- The District/TRM project team will have a good understanding of the current and future business process requirements and design which will be translated to the Maximo configuration process. This allows secondary project activities like use cases, testing script outlines, and training frameworks to be started.
- During the Design stage the project team will have identified gaps between process requirements and the Maximo out of the box application and they will have been addressed through the change management process.
- Maximo Workflow processes will be documented which will be utilized to assist with the development of materials for train-the-trainer and end-user training. Also IT will now have an Architecture plan, an a mobile project outline

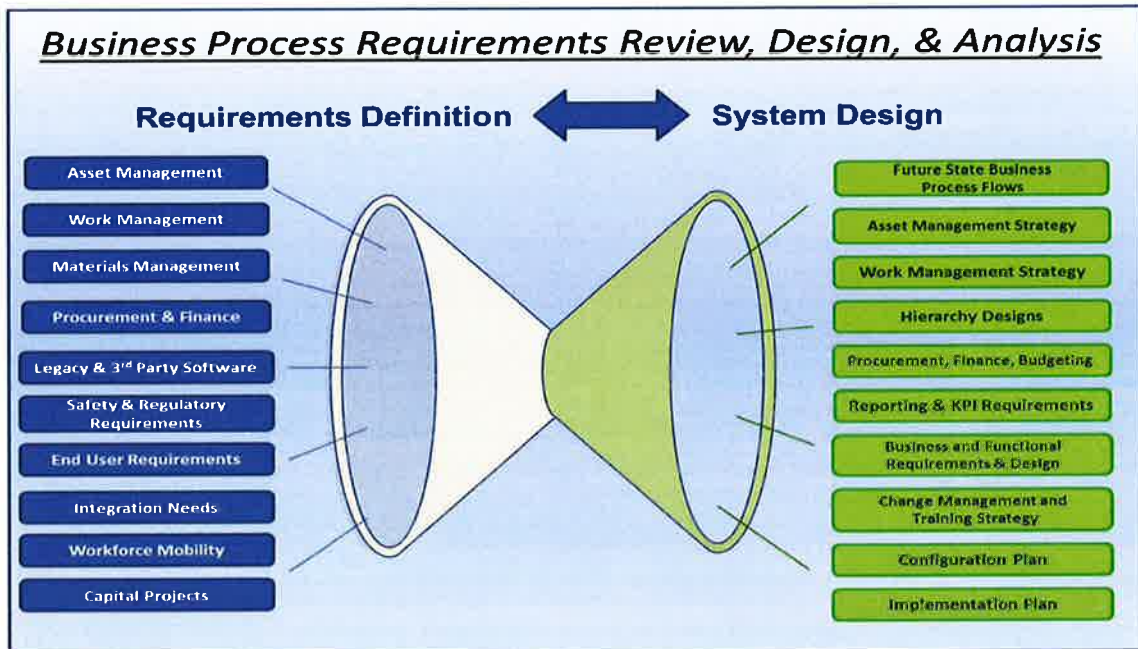
Business Process Discovery & Requirements Definition	
Tasks:	<ul style="list-style-type: none"> ▪ Conduct BPD Work Shops – Asset Management ▪ Conduct BPD Work Shops – Work Management ▪ Conduct BPD Work Shops – Integration ▪ Conduct BPD Work Shops – Field Mobility & GIS ▪ Conduct BPD Work Shops – Maximo System Architecture ▪ Conduct BPD Work Shops – Maximo HSE Manager ▪ Conduct follow-up BPD Work Shops ▪ Present Key Findings to Sr. Management ▪ Generate Final Documents
Deliverables:	<ul style="list-style-type: none"> ▪ Execution of Workshops per approved Agendas ▪ Sr. Management Presentation ▪ Approved Maximo Requirements and Configuration Recommendations ▪ Integration Design ▪ Business Process Definitions ▪ Business Case Write Up ▪ Performance Metrics ▪ KPI's & Reporting Strategy ▪ Organizational Impact Assessment ▪ Change Management Plans ▪ Business Process Flows ▪ Risk Analysis ▪ FFP for Detailed Design/Execution Phase ▪ Architectural Design ▪ Implementation Strategy ▪ Maximo Prototype ▪ Data Migration Strategy ▪ Mobile Maturity Plan ▪ Revised Job Roles ▪ Master Test Plan
Assumptions	<ul style="list-style-type: none"> • Work Shops will be conducted on-site • Work Shops will focus on IRWD adoption of Maximo OOB functionality • IRWD will assign resources to review and accept final documentation • IRWD will review and comment on one draft of the documents within 5 days of submittal • IRWD will review and accept final document within 5 days of submittal
Primary Resources:	<p>TRM – Business Process Experts, Subject Matter Experts (SMEs), Functional leads, Implementation Leads</p> <p>District – Implementation Lead(s), Functional Subject Matter Experts (SMEs)</p>

Design Stage – Detail

BPD Methodology

1. After both TRM and IRWD teams have done their pre-work, the TRM team will then start to conduct workshops and interviews where we will review the existing District processes and requirements – and alignment or gaps with Maximo 7.6.
2. The workshops are a cross-section of key District Subject Matter Experts (SMEs) from various business functions selected from the key District departments (**Maintenance Water, Recycling - Ops, IT etc**). TRM will work with the District to ensure the right mix.
3. Sessions will be scheduled in advance and agendas published to ensure required District team members can attend, are prepared and time is optimized. Active participation and attendance is Critical.
4. Sessions will be very interactive where the TRM Business Consultants, Scott Stukel and Danean LeNoir, will lead the District team through analysis of your business today. Main Workshops will be:
 - **Asset Management**– Broken down by the asset classes: Vertical, Horizontal, ITAM, Fleet, Facility
 - **Work Management** – Organized by work execution phases – Creation, Planning, Scheduling, Assignment, Completion & Close Out
5. During these workshops we will collaborate with your staff to go over their process flows, sample reports and artifacts, requirements and current system in order to confirm and understand the current system requirements for all applicable business departments
6. Scott Stukel will conduct the first Asset Management Work Shop for Vertical assets introducing Water Utility asset management, reliability best practices and TRM’s standard application of those processes utilizing Maximo.
7. Danean Lenoir will then conduct the remaining Asset Management Work Shops focusing on Linear, Facilities, Fleet & IT. Danean will review the concepts identified in the initial sessions and then identify additional nuances needed to manage each specific asset class.
8. Once the Asset Management Maximo processes have been identified then Scott Stukel will lead all of the work management workshops. These workshops will be attended by the SME’s for all asset classes. This will ensure that throughout the IRWD organization everyone is utilizing the same priority codes, work types, statuses and so forth. The core work management processes should be shared by all with only slight additions of data for specific work identification processes.
9. The reaming workshops will be more technical in nature focusing on interface, field mobility and system architecture requirements. Each workshop will be led by TRM’s technical SME and supported by TRM’s change management lead.
10. The BPR sessions will also include dynamic demonstrations where the District SMEs will provide information about their current system and future processes. TRM will provide live Maximo demonstrations which will allow the District personnel to visualize your business processes in Maximo.
11. Sessions will always focus on the desired optimum state for the District, putting discussion of Maximo configuration within the context of your business so examples are easier to relate to by the District’s teams.
12. Workshops will be run to build core standard Work and Asset processes as laid out in Maximo and as the District requested and if there are variances for say Fleet, or Capital Planning , a smaller focused break out session maybe run.
13. Processes will be discussed, governed and decided with consideration of timeline and budget. No Items will ever be lost. Instead they will added to the “Parking Lot” as potential work for follow on phases.

The following highlights general session content for input and then output :



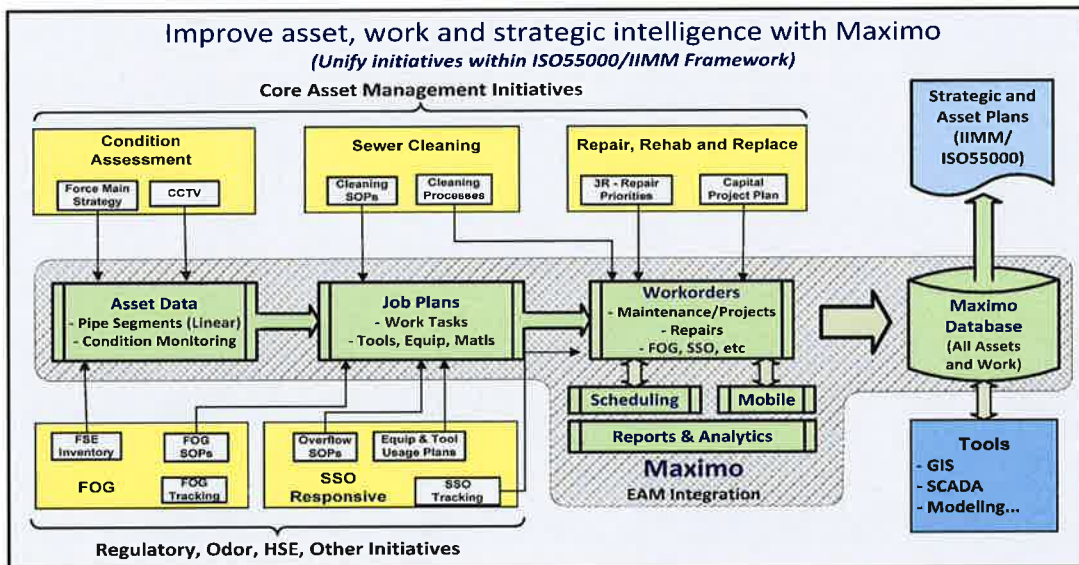
Our approach of “show and tell” review sessions streamlines what can be a long and arduous process for the customer:

- By taking time to understand how you manage your work, assets and inventory, we are typically able to apply our extensive experience with Maximo and the utilities industry to present at least an 80% solution from the start. The remaining 20% is accomplished through collaboration between TRM and the customer to balance what is important to the business and the project budget while adding value to the organization.
 - We avoid prolonged review sessions and extensive documentation that arduously identify every (many unnecessary) nuance and detail of the client processes. Instead we focus on identifying processes and practices that are managed by Maximo. This constrains the process identification activity to fit within the budget and schedule and provides the team with a manageable workload that provides the right amount of information to successfully implement the Maximo solution.
14. Each agreed-to system requirement will be given a unique number and will be documented in the TRM Requirements Traceability Work Sheet that will serve as the functional agreement for what the District wants the system to do and is the basis for the subsequent system design. Comments are cataloged for the initial content or specific data needs for that requirement. An Example:

Phase I Requirements Matrix		Asset Management Tab					
No.	Process/Application	Requirement Description	Release I	Design? Scope	Design/Configuration Necessary to Meet Requirement	Comments	Approved By
AM-020	Asset	System needs to allow a new Asset to be created.	Y	INT	Lawson interface - Receipts touch point	The Lawson interface will provide receipt data for a new Rotating Asset to Maximo, which will then use OOB Maximo functionality to create the Asset record.	
AM-021	Asset	System needs to generate the Asset Description from the Item Description, for a Rotating Asset.	Y	Y	Rule- Make Description readonly if Rotating Item identified.		
AM-022	Asset	System needs to auto-generate Asset Numbers.	Y	Y	Autonumber configuration in the Organizations application		
AM-023	Asset	System needs to create new Assets with a status = "NOT BEING USED"	Y	INT			
AM-024	Asset	System needs to allow a Planner/PP Rep to update an Asset record and to change the Status of an Asset to "ACTIVE".	Y	SEC		Updating the Asset record means to associate a Classification, Failure Class, and User to the Asset.	
AM-025	Asset	System needs to allow meter readings from PICs to be imported.	Y	INT	Per Maximo-Pi interface requirements and design document (IDD)		
AM-026	Asset	System needs to prevent an Asset Status from changing to "SOLD" or "SALVAGED" until the Asset has been moved to the designated Surplus Holding location.	Y	Y	Rule, additional status values: SOLD (synonym of DECOMMISSIONED) Sold	ASH: Need Asset Status values from MWRA (posted in 5070)	
AM-027	Asset (ix)	System needs to allow the following custom Status values for Fleet Assets: ACTIVE, INACTIVE, Pending Decision, Pending Sale	Y	Y	PENDDISCUSSION (synonym OPERATING)- Pending Decision. PENSADSALE (synonym OPERATING)- Pending Sale. Original design called for Dynamic ValueList using Rules Manager using assettype, but in reqs meeting 3/7/16 it was decided not necessary. Can display all statuses.	ASH: Need Asset Status values from MWRA (the other values are all identified in other reqs or OOB, per the approved spreadsheet posted in 5070)	

15. At the conclusion of the BPD workshops, each work stream will have an initial review of the draft process and requirements documents. This will ensure that TRM has captured the salient points. There will be a final review and approval gate where District/TRM leads, SMEs, stakeholders, and process owners will meet to finalize the design, approve, and sign off on the final documentation for that functional area. The process is structured to permit one functional area to move to configuration before others, for example the design for assets may be completed well before the design of work management is approved. This will only be done where there is not hard-dependency on one design by the other

16. Prior to the completion of the final documents TRM will create a Senior Management Presentation highlighting the key areas of improvement, biggest area of change and highest risk items. The presentation is intended to alert Sr. Management to the areas that will need the biggest support and formally gain the approval and understanding to move forward with the change. The following diagram is an example from one Wastewater – Distribution Executive presentation where TRM was showing how the Maximo system supported the companies initiative toward ISO 55000.



Additional Deliverables

As the BPR workshops are taking place we will also be cataloging content for all other deliverables requested by the District. You will see that TRM has a significant amount of proven content from other engagements that we will share to jump start the development process. The following lists those

Business Process Definitions	TRM has a starting list and will modify it throughout the BPR sessions
Business Case Write Up	TRM has samples but will need to work with the District to personalize
Performance Metrics	We have content to start and will finalize content throughout the BPR's
KPI's & Reporting Strategy	TRM has a rich set of these for Asset and Work Management
Organizational Impact Assessment	Standard component as stated in 5.2.2
Change Management Plans	Standard as stated in 5.2.2 this is always a deliverable
Business Process Flows	Standard output from the BPR
Risk Analysis	As stated in 5.1.2 this is standard practice
FFP for Detailed Design/Execution	TRM will be prepared to review estimates
Revised Job Roles	TRM has significant content available to assist in roles and descriptions
Maximo Prototype	Standard for our process as we modify v7.6 for the BPR discussions
Architectural Design	Standard - Derived from the Infrastructure specialty workshop
Implementation Strategy	Standard a template that we customize to the District's deployment
Data Migration Strategy	Derived from the Migration specialty workshop
Mobile Maturity Plan	Build a phased plan from the District's current use, policy and projections
Master Test Plan	Standard content that will be adjusted out of the BPR and Design content

5.3.2.1 Specialty Workshops

In addition to the main functional workshops there will be several specialty workshops to address specific considerations that impact the entire Maximo system. Those include:

- **Architecture** – This workshop will involve an experienced TRM system engineer working with IT to conduct an assessment of the District's infrastructure to include servers, system software, and network infrastructure in which Maximo would reside and rely upon. Topics will include things like back up/recovery, LDAP integration, database sizing, system monitoring, network, server sizing etc. The result will be TRM creating a recommended Maximo system architecture that will include hardware and software specifications necessary in meeting the District's Maximo requirements and expectations specifically around system performance, availability, and scalability.
- **Interface** – TRM will have a separate interface workshop. This will consist of a team from TRM, IT and the functional & Technical SMEs to meet and decide on the correct data and mapping, the update attributes and technical method for transfer. This will also include error processing and required level of documentation and skills needed on the 3rd party system side. The result will be an interface plan that details the mapped content. The workshop will focus on
 - Oracle EBS Purchasing, Inventory, Finance & HR
 - SCADA
 - Hach WIMS

TRM recognizes that the District expects point to point integration between Maximo and external systems. We have implemented several point to point systems but in our experience with Oracle EBS the integration is typically executed through the interface tables. This has been a requirement by Oracle EBS not Maximo. Since Maximo has a robust and flexible integration framework we typically build integrations based on the external systems requirements. TRM expects the functional and technical lead for each external system to participate in the Integration workshops to clarify the capabilities of each external system. The workshops should be a functional and technical collaboration between the key stakeholders for each system.

- **Mobile** – TRM will have a separate mobile workshop. This will consist of a team from TRM, IT and the functional SMEs. We have found mobile to be a very dynamic space. Devices and software capabilities are progressing all the time. Therefore this workshop will review current use of Mobility at the District, the long range plan which we will use as input into the specifics of delivering mobile solutions for Maximo. We have a list of areas that help to align requirements with the ultimate right fit for the District. The intent for Phase 1 will be to establish a targeted Maximo mobile pilot that can be evaluated in anticipation of the Phase 2 general roll out.
 - GIS Field Mapplet
 - Maximo Anywhere for Work and Asset

5.3.3 Execution Stage 2A – Configuration, Integration Dev, Unit Testing

In Stage 2A, the requirements specific to the District’s Phase 1 Asset and Work functions will now be taken forward for configuration, testing and eventual Go Live. In this Stage the Business Process Requirements will be converted into the core Maximo configurations and initial interfaces developed as they go through a Configuration and Unit Test cycle. Throughout the development phase the Maximo configurations will be tested and presented to key district stakeholders for review and approval. Upon approval the configurations will be promoted to the “seed” database in the QA instance.

Configuration, Develop, & Unit Testing	
Tasks:	<ul style="list-style-type: none"> • Maximo System Administration Training • Maximo Application Configuration • Interface Development - EBS HR & Financials • Create Application Test Scripts • Static Data Upload in Development • Application & Data Unit testing • Interface Development - EBS Inventory, Purchasing & Warehouse • Develop MaxAssist Page Guides
Deliverables:	<ul style="list-style-type: none"> • TRM Standard System Administrator Training • Maximo configured to support all approved requirements • Application Test Cases • Up to 60 hours worth of MaxAssist Page Guides (~12) • Asset, Location & PM data loaded • Application & Data Unit tested following test cases • Interfaces configured per approved requirement and design • Interface test cases created and unit tested
Assumptions	<ul style="list-style-type: none"> • 3 Day System Administrator classes for no more than 5 students • Maximo configurations include basic configurations for establishing system data, security groups, users, adding data fields, value lists, 6 role based start centers, • Test cases will reflect Maximo processes & configuration items • Data Upload will not include any transactional data • Data upload will not include job plan tasks or planned material, labor or tools • Data upload will not include Classification data
Primary Resources:	TRM – Functional & Implementation Leads, Technical Consultants, SMEs District – Implementation/IT Lead(s), SMEs

Stage 2A Details

Enablement

In order to build skills in support of the OCM plan, TRM will provide System Administration training to the District's IT SME's so they can learn the base skills associated with establishing the system and static data. They can then actively participate in the configuration process to gain hands on experience with the Maximo application.

Maximo Application Configuration

TRM will begin to utilize the Dev and QA instances that were installed during the planning phase. The QA instance will serve as the initial Seed Database as described in section 5.1.1.

With the requirements finalized and approved by the District leads/stakeholders, the District/TRM team will start through configuration of the Maximo solution and catalog each required configuration and feature. All Maximo configurations will be tagged with the requirement number for end-to-end traceability. This part of our proven methodology ensures that every change, addition, deletion, or configuration is necessary and is attributable back to a business need. That will be critical the farther you get into the project and discover possible inconsistencies. A sample of a design/configuration document:

Traceability					Design Details			Environment: max-dev				
Syst Setup#	REQ#	In Scope?	Design Complete?	Issue?	Design Description	Values	Notes	Build By	Build Date	Unit Tested By	Unit Tested Date	Development / Testing Notes
SS01	1	Yes	Yes	No	Create Item Set	ITEM	Item Set, set Item Status = ACTIVE	TL	8/8/2012	JC	9/6/2012	
SS02	1.44	Yes	Yes	No	Create Company Set	COMPANY	Company Set	TL	8/8/2012	JC	9/6/2012	
SS03	1	Yes	Yes	No	Create Currency Code	USD/United States of America	Active: Yes	TL	8/8/2012	JC	9/6/2012	
SS04	1	Yes	Yes	No	Establish Org	OCSD_ORG	Set Item Status ACTIVE	TL	8/8/2012	JC	9/6/2012	
SS05	1	Yes	Yes	No	Establish Site	SITE		TL	8/8/2012	JC	9/6/2012	
SS06	1.12	Yes	Yes	No	Establish GL Structure - Component 1	BUSUNIT/7/ALN/Required		TL	8/8/2012	JC	9/6/2012	
SS07	1.13	Yes	Yes	No	Establish GL Structure - Component 2	ACCOUNT/5/ALN/Required		SS	12/11/2012	JC	12/11/2012	GL Components needed to be v
SS08	1.14	Yes	Yes	No	Establish GL Structure - Component 3	SUBSIDIARY/4/ALN/Not Required		TL	8/8/2012	JC	9/6/2012	
SS09	1.15	Yes	Yes	No	Establish GL Structure - Component 3 Is Not Required			SS	12/11/2012	JC	12/11/2012	GL Components needed to be v
SS10	1.8	Yes	Yes	No	Enter GL Accounts	0000000.00000.0000	Insert placeholder GL account - actual GL accounts will be migrated	TL	8/8/2012	JC	9/6/2012	
SS11	1.11	Yes	Yes	No	GL Delimiter			TL	8/8/2012	JC	9/6/2012	
SS12	1	Yes	Yes	No	Set Financial Period	Start July 1, 2012 + 10 years	Use fiscal year 7/1 to 6/30, start with July 1, 2012 and go out 10 years, add one Period for each month with dates for that month (e.g From 07/01/2012 12:00 AM - To 7/31/2012 11:59 PM), Format for Period = 2012-12, with July being 01 and June being 2012-12, then July 2013 starting new fiscal year = 2013-01. Earlier financial periods to be migrated	TL	8/8/2012	JC	9/6/2012	
								JC	9/28/2012	JC	10/1/2012	Rebuilt based on final design, added only fiscal year 2012 and first period for 2013 in max-dev, will need all 10 years in seed.
								JC	removed TZ from user acct & fixed times	MN	off by 3 hours	
								JC		TL	10/12/2012	

Configuration Items:

Included will be: All of the Maximo technical & functional set-up, screen changes, database configuration, value lists, statuses, workflows, relationships, domains, system and user defaults, security groups, system parameters, necessary to configure the District's solution. Also included is development and implementation of data migration, mobile workforce, integrations, reports, metrics, and KPIs.

TRM will configure Maximo to perform the business functions detailed in the Requirements and Process Flow documents developed in Stage 1 including, but not limited to the following:

- Complete all Maximo configuration and set-up tasks.
- Load the equipment and location hierarchy
- Configure the interfaces to the companion software identified in these specifications.
- Configure the necessary start centers and key performance indicators.
- All other configuration, integration, programming or customizations required to meet design specifications necessary for a complete and operating Maximo system.

Throughout the configuration process, we will conduct application reviews to demonstrate the Maximo configurations so that key stakeholders, SMEs, and process owners have the opportunity to review and comment. Inevitably during the process there will be gaps that are identified that will require alteration of the configuration or a rethinking of the requirement. These interim informal reviews will provide the forum for the project team to communicate the gap, assess the risk/impact, and make

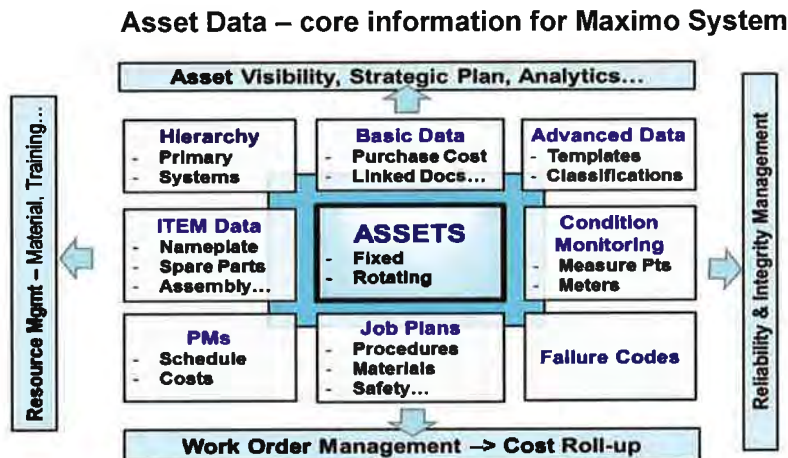
recommendations to mitigate the risk or address the issue. The District will have the ability to make informed decisions throughout this process. Too often implementers wait until late in the configuration phase to identify these gaps and show the application to stakeholders and process owners. The TRM methodology fosters collaboration, communication, and reviews throughout the process to minimize these risks and potential impacts to the project.

5.3.3.1 Configuration Highlights for Business Areas

In the following section we have highlighted some of the specific items and configurations that we envision for each of the District business areas:

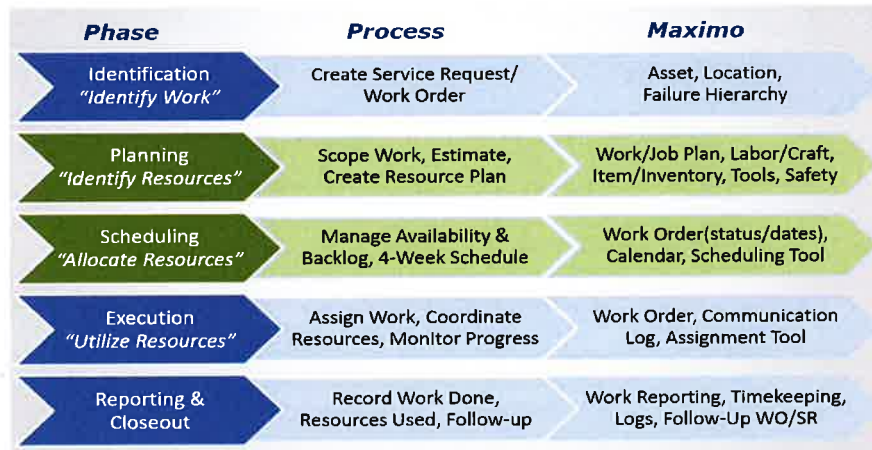
Maintenance – The maintenance department will be the primary users of Maximo to track and manage the District equipment as well as aspects of the supply chain for running the business. We will also provide the ability to view/print reports and KPI's to monitor Maintenance functions and make informed decisions. Maximo will be configured with workflows that enforce process standards and will manage all maintenance business functions including:

- Assets, Systems, and Project IDs including Bills of Materials through configuration of Maximo Assets, Locations, Hierarchies and classifications/specifications. TRM will work with the District to configure the most effective hierarchies and identify the information necessary to meet requirements.



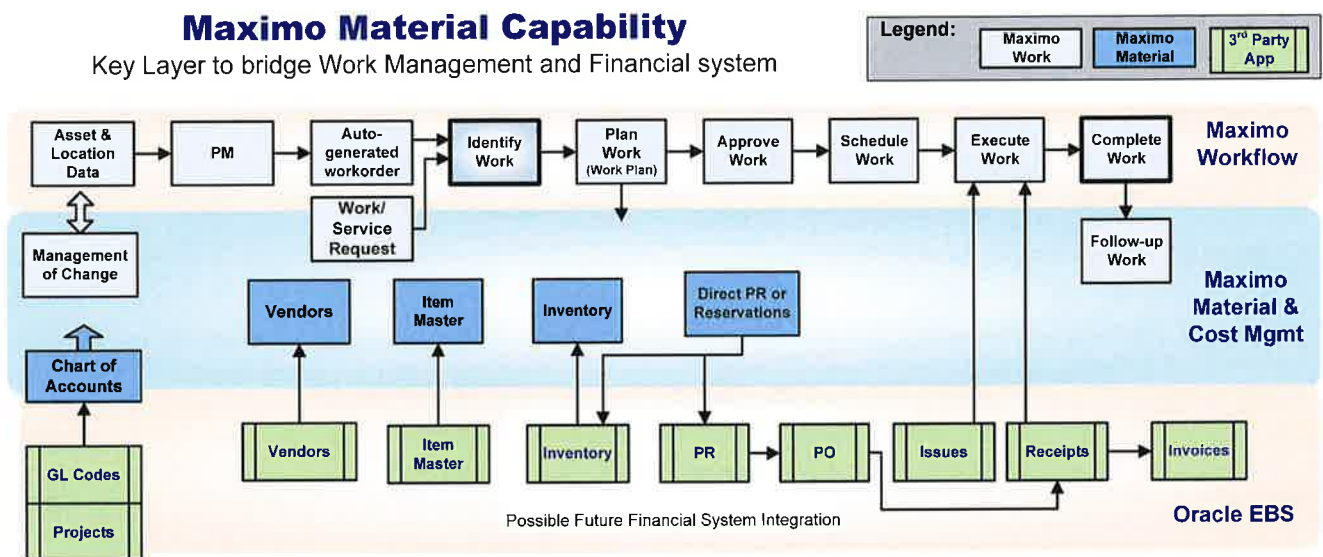
- Maintenance Planning, Scheduling, and Work Management through configuration of Maximo Work Order Tracking, Service Requests, Preventive Maintenance, Job Plans, Assignments, and Scheduler. The configured system will allow maintenance workers to search for parts, tools, and equipment as well as view availability, purchase materials & services, and other resources required to plan, schedule and complete maintenance work. They will be tied and viewable on associated work orders, and may be managed by authorized maintenance & operations personnel.

Macro Template for Maintenance Planning Process



- Maintenance work requests via configuration of the Maximo service request functionality that will allow authorized personnel to identify and communicate requests for maintenance.
- Maintenance Labor, Crafts, and Crews through Maximo Labor, Crafts, Crew Management, and People/Person Groups, also for timekeeping through Maximo Work Order Reporting and Labor Time Reporting.
- Materials/Parts through configuration of Maximo EBS interface. Workers will be able to view planned materials, view availability in stores, and/or procure items that are needed to execute work.
- Cost, Budget, and Depreciation Tracking through Maximo General Ledgers, Accounts, Reporting. This will allow maintenance personnel to monitor cost/budget performance and make informed decisions.

Material and Finance Capabilities – Based on RFP information, TRM has developed an initial material flow bridging work and financial management – illustrated below.



TRM can leverage this initial mapping as starting point to discuss with the District Material and Financial Management personnel to configure Maximo to manage business functions that support Asset Management & Maintenance. TRM will design and configure your Maximo system to provide the means to integrate maintenance, stores, purchasing, and accounting. District personnel will use the TRM configured Maximo to manage the following business functions:

- Materials, Tools, & Warehouses – TRM will design the integration to consume the information from Oracle EBS. The main goal of the integration will be to provide actual costs to Maximo and current inventory levels to assist with the planning phase in Maximo
- Items & Inventory – will be updated VIA EBS integration
- Storerooms – Will be configured to reflect current EBS balances
- Companies – Will be updated by EBS so Purchase Requisitions can be created
- Purchase Requisitions – We will configure Maximo Purchase requisitions for users to request materials and services. The Maximo Purchase Request Application functionality will allow your people to create purchase requisitions for items or for services. Requisitions will be configured to interface with Oracle EBS to enable the purchase order capability in Oracle.
- Receiving – Will be updated by EBS to apply direct purchase cost to Work Orders
- Depreciations – TRM will enable Depreciation schedules for assets.
- Chart of Accounts - Through the Maximo Chart of Accounts application, we will set up District general ledger accounts and resource codes for standard accounting functions. We will load accounts and resource codes to correspond with accounts that you use in your external accounting system. If necessary, we will also set up financial periods, and specify general validation options to enforce account combinations and facilitate financial reporting. We will use chart of accounts to allow the District to manage & track costs to produce cost & budget reports from Maximo materials, purchasing, labor, service, and other transactions that will contain GL Accounting.
- Cost Management – Depending on the results of the project and budget tracking requirements and design, we may configure the Maximo Cost Management application to track project costs and manage budgets through Oracle EBS. By creating a project in the Cost Management application and linking work orders to that project in the Work Order Tracking application, the District can generate project cost information to track the financial resources required to complete the project.

5.3.3.2 Data Upload

Since the District is not migrating data but is instead starting new in Maximo TRM will use MX Loader, and TRM standard spreadsheet templates to load all relevant asset, work etc information. TRM will work with IRWD to update their current format so it can be loaded and validated against the Maximo Business Object when uploaded to Maximo. TRM will load the data as provided by IRWD. TRM will also configure the asset, location, and PM applications to provide the ability to upload spreadsheet files through the application. Maximo provides the framework for this functionality and TRM will implement. TRM will document the configuration changes and provide support for the production system. The application data upload can then be used by power users to upload additional asset, location & PM data.

5.3.3.3 Reporting

TRM has extensive experience providing Maximo reporting including BIRT and Cognos. It starts with us configuring the system architecture to effectively perform all reporting capabilities and provide for historical data capture. In reporting use TRM has developed the following Reporting strategy:

Daily reports - are reports that are utilized every day to execute the Maximo processes. These reports are typically work order print out, PR print and summary reports. The reports are often based on a record or query in Maximo. It is most efficient to utilize BIRT to execute these reports.

Ad Hoc - BIRT provides an adhoc reporting engine. TRM will turn on the ad hoc reporting capabilities and provide the District users with the training necessary to utilize the adhoc report engine. These adhoc reports typically replace the list reports that users ask for, allowing them to query the Maximo database, pick fields for the reports, group and print the report.

Start Center - In addition to the “out of the box” and ad hoc reporting capabilities, Maximo has the Start Center, that allows the user to identify data that is applicable to their role in the organization. We utilize the start centers to provide users with information such as work orders open in my work group, my PR’s waiting for approval, Work Orders assigned to me, PM’s due for generation, etc.

We also utilize the Start Centers to provide users with information that helps them keep the data clean. Example of these start centers are Work Orders that have not been completed but the PM is due in a week, Work Orders that are past due, Completed work orders with no labor hours, etc.

Analysis reports are typically more complex and can be run outside of the Maximo application. These reports are the best candidate for being executed utilizing the clients preferred tool. TRM has experience creating BIRT reports, creating Cognos reports and sending data to an existing data warehouse. For analytical reports the District should utilize the reporting tool that the District is the most comfortable with that can connect to the Maximo database.

Specifically for this project TRM will have reviewed the OOB reports during the workshops to identify which reports will be utilized by IRWD. Those reports will be tested during the testing phase.

5.3.3.4 Mobile

For this Phase 1 work TRM will configure Everyplace as a pilot mobile solution to meet the District’s technical preference of “enabling mobility functions leveraging a web-based, responsive design solution”. An agreed upon work management set of functions captured during the BPD sessions will be modeled using existing technology. This will allow for the refinement of mobile processes and technology as we ready for Phase 2 of the system wide mobile roll out.

5.3.3.5 Unit Testing

Application, Data & Reports

Unit testing in Maximo will occur throughout the Development & Configuration Phase. In order to speed this process TRM will provide baseline test scripts that will be adjusted as needed. We will use the business process workflows and TRM provided test scripts to perform testing as the configuration progresses to validate the design and confirm that the Maximo configuration meets Design specifications and District expectations.

Interfaces

Unit testing of the interfaces will also occur throughout the Development & Configuration Phase. TRM will test the Maximo portion of the interface functionality to ensure that the data exchanges between Maximo and the external system occur correctly as specified. We will develop and follow test scripts to perform testing as the configuration progresses to validate the design and confirm that the interface configuration meets Design specifications and District expectations.

Any issues/gaps during the testing will be documented and addressed. Configuration anomalies will first be tackled through troubleshooting and configuration modifications to resolve the anomaly. Any issues/gaps that impact business processes, design specifications, or core requirements will be addressed through the formal project change management process.

5.3.4 Execution Stage 2B - Testing, Training, Deployment & Support

Upon completion of the configuration and Unit testing, the Maximo project will transition to the User review process for testing and final approval. Additionally the final stages of the Maximo systems are prepared for the Go Live and formal testing.

Testing, Training, Deployment & Support

<p>Tasks:</p>	<ul style="list-style-type: none"> • Maximo Implementation and RulesManager Training • Install Maximo Test, Training and Production • Integration Testing • Refresh QA and Regression Testing • Provide Maximo BIRT Training • Develop and Execute User Acceptance Testing • Establish Disaster Recovery Environment • Plan and Execute Role Based End-User Training • Provide System Management Training • Go-Live with 2 weeks of on-site support • Post Go-Live Support – 3 months
<p>Deliverables:</p>	<ul style="list-style-type: none"> • 4 day Implementation and RulesManager class for 5 students • Installation of Maximo environments as identified in the architecture plan • End to End System Integration testing • Maintained Issues Log through the end of Go-Live Support • Completed Regression & Performance Testing • Completed and Approved User Acceptance Testing • 4 day BIRT training class for 5 students • Installed and Tested disaster recovery site • Training Schedule and End-User training guides submitted and approved • Completed 20 days of Role Based End User training sessions (training laptops provided) • Completed 2 days HSE training (training laptops provided) • Maximo System Management training / Knowledge transfer for one Maximo system engineer • Live Maximo system and on-site support for 2 TRM resources for 2 weeks • Post Go-Live support – 3 months
<p>Assumptions:</p>	<ul style="list-style-type: none"> • TRM will provide training laptops for Implementation and BIRT training • User Acceptance Testing will be conducted in IRWD training facilities • TRM will conduct one round of user acceptance testing to not exceed 8 days • IRWD will provide training facilities for end-user training • TRM installs the disaster recovery site and provides IRWD with the items that need to be refreshed for fail over • IRWD has the existing software and skills to refresh the database, files, etc for the disaster recovery site • During post go-live TRM will respond to system outages in production and issues in production that had been previously resolved in QA
<p>Primary Resources:</p>	<p>TRM – Functional & Implementation Leads, Technical Lead, SMEs, Trainers District – Implementation/IT Lead(s), SMEs, User Acceptance Testers,</p>

Stage 2B Details

Formal Testing

Test Tools and approach

There are two approaches that should be considered when identifying the tools for testing. One approach is to script test plans using automated testing software. The other is to create written test plans that are executed by project team members. Automated test plans give the organization the ability to quickly test an application, after a configuration change, prior to releasing the change.

Creating and utilizing automated test plans is a good investment if you are making frequent configuration changes to a production system, which requires extensive application regression testing and quick turn-around times. The benefits to writing automated test plans are:

- Ability to run test plans for the application after each test migration
- Ability to run test plans after changes to an application during testing
- Ability to run test plans during go-live weekend

Automated test plans will provide the team with the ability to quickly test the application. However, the biggest risk to the Maximo project is the Oracle Financials/Maximo interface. This area is the most complex with the highest level of configuration. These integration points cannot be tested through automated test scripts. The map tabs also cannot be scripted which is another risk area to the project. Reports are the most time consuming testing task and this task cannot be scripted either.

Since the automated testing tool does not address the highest risk item or the highest volume item, it is suggested that test scripts be created in excel and ran manually by assigned team members. The excel testing scripts will also be used as the basis for UAT and as input to the role based manuals. Regardless of the testing approach, the testing team should be composed of individuals from multiple disciplines within IRWD to ensure that the upgraded Maximo system is thoroughly tested at all levels:

- SME's who have participated in the workshops and throughout the application review.
- Maximo administration and support personnel that have a broader view across multiple applications
- Technical experts who are knowledgeable of the integration and system level issues such as performance and stability

The testing team should consist of members from the following areas:

- IRWD Maximo support staff
- IRWD external system stakeholders
- IRWD SME's
- TRM Maximo Consultants and OCM lead

Consistency of methodology and accumulated knowledge are extremely difficult to "hand-off" during a project and typically result in extended timelines and temporary loss of quality and efficiency. Therefore it is imperative that once it has been established, the testing team remains intact throughout the project's lifecycle. Additionally, it is important that once assigned to a particular functional area, testing resources remain assigned to that particular functional area throughout the project lifecycle.

Testing Tools and Techniques

The testing tools will consist of written test scripts, process flows, configuration spreadsheet and integration test scripts.. The written test scripts will identify the functionality that is being tested, testing steps (including sample data) and expected results. Documentation of the system configurations, requirements and workflows can also serve as a testing guideline and will be used instead of test scripts in some instances

The Maximo applications are extremely complicated with hundreds of features per application therefore it will be unreasonable to write a test script for every possible scenario. Therefore the test scripts will reflect the most common features and functions that are used in the application as well as what the users do during a typical day. TRM will begin with their standard OOB test scripts and enhance them with any specific configuration, process expectation or key functionality identified in the requirements.

5.3.4.1 Testing Phases

Integration Testing

Integration testing serves two purposes; testing the functionality of the interfaces and the communication and file/data transfer between systems. Integration testing requires the most coordination of resources and systems. Integration testing cannot occur until the integration points have been established in the testing environments. The integration team must consist of functional and technical experts for both the Maximo system and the integrated systems. It is critical that the entire interface testing team be engaged during the testing task.

TRM will develop functional test scripts that reflect the interface testing steps in Maximo and it is expected that the external interface SME identify their test steps supporting the creation of a joint interface testing document. Additionally TRM and IRWD technical experts will identify how to test and manage the actual interface including the error checking and re-validating functions associated with the interface processing.

Regression & Performance Testing

Regression testing task begins with a fresh migration of the QA environment after the acceptance of the integrations testing phase. This QA environment will be utilized for UAT and will be expected to be an exact replication of production. The TRM team will execute application test scripts, Maximo interface test scripts and UAT test scripts. Upon validation of the QA system UAT can begin. TRM will prepare for and conduct the Performance/System Testing. This will include creating performance test scripts and running and documenting the Performance Test. There will be time allocated for Error Resolution and retesting. Performance test includes TRM's RulesManager product that can be utilized by TRM project team members.

User Acceptance Testing UAT

Throughout the configuration process the SME's will have had the opportunity to see Maximo and play with the system. This phase is the official User Acceptance of the system. The client's UAT team may consist of additional stake holders that will be involved with the acceptance of the system. Therefore we plan that each testing day will begin with application training and presentation of the test scripts. TRM will begin each UAT training day with a review of which applications and functionality will be tested. We will present the requirements, the process flows and explain how the system is intended to work. We will additionally step through the UAT test scripts. After each mornings presentation the users will then have the knowledge to follow and execute the UAT test scripts. Additionally, once the UAT scripts have been followed and issues have been logged TRM will encourage additional adhoc testing.

5.3.4.2 Training

Through the training plan, TRM will assist the District in identifying functional and technical staff that should be trained. TRM will also outline the schedule and content that should be taught. TRM will provide qualified and experienced Maximo functional, technical and training consultants to develop materials for and conduct training (Please see section 5.1.2.2 for details)

Enablement Training

- Implementation training will be conducted before the installation of the Training, QA and production system. This will provide the IRWD Maximo systems manager with the knowledge and training they will need to administer the system. Providing this training prior to installation allows the systems manager to participate and/or understand the installation process. It will also provide the internal IT with the knowledge required to participate in the UAT training. As part of the implementation training, TRM will also instruct appropriate IT SME's and possibly Business SME's on the use of RulesManager applications, how to write basic rules and a half day on MaxAssist and how to build page guides.
- The BIRT training will be provided prior to UAT. This will enable IRWD with the ability to update and modify reports as requested by the end users during UAT.

End User Training

- Training sessions will be optimally organized by functional areas and teach the Maximo processes in the context of the District's business process. (See detailed schedule for role based training classes)
- Training shall be role based and be held on site using the District Training environment with the District specific data. TRM will develop all role based training and reference materials

IRWD System Admin training and knowledge Transfer

TRM will also:

- Update and Finalize System/Application Configuration.
- Update and Finalize Disaster Recovery Procedure.
- Update and Finalize Administration Procedures.
- The TRM team will obtain certification by the project team that the System is complete in all respects and all known defects have been remedied, the System will be prepared for live operations.

Go Live

TRM will work with the District to implement the deployment plan and schedule for the cutover to the new Maximo system. With no transactional data to migrate the expectation is that the Go-live will have few technical tasks. The expectation is that the users will be closing work orders in the legacy system while creating new work in Maximo. The primary technical test will be to ensure LDAP and EBS integration is functioning properly. Once end-users start creating work orders using the production system, TRM will assign 2 resources from the project team (Integration Lead and Functional Lead) to be on-site for two full weeks.

Post Go Live Support

Following the on-site go-live support weeks, TRM will provide off-site post go-live support for 3 months. TRM will respond to issues escalated by IRWD's Maximo administrator. TRM will respond to system outages and to issues identified in production that had been correct in the QA environment. Any change requests or additional enablement for the remainder of the year can be estimated and billed on a time and materials basis where a "pool" of funding can be allocated for "as needed" support.

5.3.5 Execution Stage 2C – Implementation of Planning & Scheduling

As the District's timeline and objectives were reviewed by the TRM team, we decided to propose a slightly different process for Go Live of the system. The idea is to launch the Planning and Scheduling process and features 3 months after the core Asset and Work Go Live. There are several reasons for TRM suggesting this approach. They are

- Go Live can be accelerated earlier than scheduled in order to meet or exceed deadlines. This can be especially true if an organization has not traditionally had Planner/Schedulers. Sometimes this process can take more time to establish.
- It allows the team to get comfortable with Maximo and its effective use, before taking the next step up with more formal planning and scheduling.
- This approach will allow the District teams time to capture more accurate and precise actuals and build historical data so that Maximo content for work estimation and scheduling will be more realistic and exact.
- It will allow the District more time to understand their scheduling nuances to better tune the Scheduling tool and adjust training.

Planning and Scheduling Implementation	
Tasks:	<ul style="list-style-type: none"> • Evaluate actual data as input to the job plan creation process • Retest the planning and scheduling features and interfaces • Execute Role Base Training • Execute Refresher Training
Deliverables:	<ul style="list-style-type: none"> • Analysis and recommendation for planned materials and plan labor for job plans • Provide 8 days for Planner, Scheduler and Assignment Manger training • Provide 4 days of refresher training including additional tips and tricks.
Assumptions:	<ul style="list-style-type: none"> • IRWD have recorded actual material and labor on work order • EBS stakeholders are available to retest integration for reservations and warehouse • Training will be conducted at IRWD training facilities
Primary Resources:	TRM – Functional & Implementation Leads, Technical Lead, SMEs, Trainers District – Implementation/IT Lead(s), End Users

Details

After the Maximo system has been in place for three months, the project team will turn its attention to enabling the Planning, Scheduling, and Assignment functions within IRWD. It is worth noting that in order for the Planners and Schedulers to be successful at their function, they must have access to “good” and timely data within the Maximo environment. Calendars for People, Crews, Locations, Assets, etc. must be established and maintained, in essence confirming the “availability” of any element a Planner/Scheduler would need.

With the Maximo system live and daily tactical data being collected, Planners/Schedulers will be able to utilize the Maximo Planning tools and functions efficiently. The first step will be to refresh/retest the material interface(s) to ensure they are functioning to requirements after the initial Go-live. Any issues will be resolved and the interface will be promoted to production.

Then the project team will update training manuals, plan, schedule, and conduct role-based training sessions with the Planner/Scheduler/Assigner user community. All three of the Planning, Scheduling, and Assignment functions will be provided training. Refresher training will be provided to the field crews. This is an opportunity to address any changes with the implementation of assigning. It will also be an opportunity to hear issues from the field that can be addressed with training as well as provide short cuts and tips and tricks on using the system. In our experience the user adoption increases when the end-users have a chance to ask questions and learn more about the system after a few months of system use. Training will be hands-on in the TRAIN Maximo environment with the learners performing relevant exercises and end-to-end activities so they can see the big picture of their job functions.

5.4 Detailed Schedule

Task Name	Duration	Start	Finish
IRWN Maximo Work & Asset Management System Design and Phase 1 Implementation	318 days	Mon 12/12/16	Wed 2/28/18
Contract Award	0 days	Mon 12/12/16	Mon 12/12/16
Phase 1 Business Process Design Phase (Design Phase	102 days	Mon 12/12/16	Tue 5/2/17



October 27, 2016

Mr. Patrick Shields
 Executive Director of Operations
 3512 Michelson Dr.
 Irvine, CA 92612

Subject: Proposal for 2017 Asset Management Program Development Assistance

Dear Mr. Shields,

Kayuga Solution (Kayuga) is pleased to present this proposal for your consideration. Irvine Ranch Water District (IRWD) is continually strengthening its asset management program. To date, IRWD has completed the following core asset management tasks:

- Development of an asset management strategy
- Creation of an Enterprise Asset Management (EAM) implementation roadmap
- Establishment of an asset management team
- Completion of asset inventory, asset hierarchy, and asset data standards
- Selection of Maximo Computerized Maintenance Management System (CMMS)
- Development of Maximo Implementer Request for Proposal (RFP)

With the key tasks completed, IRWD is now phasing into one of the most critical and resource-intensive aspects of an asset management program: the implementation of Maximo CMMS.

Kayuga is honored to be part of IRWD's asset management team. Together, we are able to make great progress and find success in development of IRWD's asset management program. As IRWD enters into to this milestone phase, the implementation of Maximo CMMS, Kayuga proposes to continually guide and support IRWD to ensure successful achievement of this milestone. The following tasks outline Kayuga's proposed asset management scope for 2017:

Task 1 - Asset Management Support – Kayuga has been guiding and supporting asset management program development work (e.g., asset inventory, asset data standards, asset hierarchy, Maximo CMMS implementer RFP). As the asset management program develops, IRWD will require support for asset management training, knowledge transfer, best practice process development, and other tasks. Kayuga's asset management scope is broadly developed to support IRWD's asset management goals and objectives for 2017.

Kayuga will provide a Principal Consultant on-site for two days a week. The Principal Consultant will report to and work out of IRWD Operations Center at 3512 Michelson Drive, Irvine, CA. He will report directly to IRWD's Assistant Director of Maintenance and/or the Asset System Manager. Although the Principal Consultant will be on site two days per week, he will also continue to provide assistance remotely.

Task 2 - Maximo Implementation Support – The key focus of this task is to assist IRWD with the management of Maximo implementation work. IRWD has selected an implementer for Maximo. There is significant preparation, communication, and coordination required for IRWD to successfully support the implementation work. This requires a Maximo specialist who can act as an owner's representative to guide, educate, and prepare IRWD staff. Kayuga proposes to have our Maximo Specialist be available to support IRWD in managing Maximo implementation. The

Maximo Specialist will be available based on IRWD's needs. The Specialist will be on-site or work remotely as requested by IRWD.

Cost of Services

The cost to provide these services will be based on an hourly rate schedule shown below. The cost shall not exceed \$202,020. Any work beyond the scope or budgeted amount will be performed, with IRWD's approval, on the proposed rate schedule as time and material.

Tasks	Colin Chung Principal Management Consultant		Iday Sychranl Principal Management Consultant		Kennedy Oyoo Maximo Specialist		Charisse Kimura Management Consultant	
	Hours	\$200/hr	Hours	\$170/hr	Hours	\$185/hr	Hours	\$115/hr
	1. Asset Management Support	24	\$ 4,800	800	\$ 136,000		\$ -	24
2. Maximo CMMS Implementation Support	16	\$ 3,200	200	\$ 34,000	100	\$ 18,500	24	\$ 2,760
Total:								\$ 202,020


We thank you for the opportunity to submit this proposal. Please review our proposal and contact us with any questions at your convenience. Thank you again for your consideration.

Sincerely,



Colin Chung, PhD

President
 Kayuga Solution, Inc.
 colin.chung@kayugasolution.com
 (949) 300-3903

November 28, 2016
Prepared and
Submitted by: L. Bonkowski
Approved by: Paul Cook 

ACTION CALENDAR

PLACING NOMINATION OF STEVEN LAMAR AS VICE PRESIDENT OF ACWA

SUMMARY:

The Association of California Agencies (ACWA) Nominating Committee will be seeking nominations for a slate of candidates for Vice President and President of ACWA for a two-year term beginning spring 2017. This slate of candidates will be presented to the ACWA membership for election at the ACWA Fall Conference in November 2017. IRWD Director Steven LaMar has expressed an interest in the position of Vice President of ACWA and staff has prepared a resolution, provided as Exhibit "A", for placing his name as a potential nominee.

BACKGROUND:

The Association of California Agencies (ACWA) Nominating Committee will be seeking candidates for a two-year term for the positions of Vice President and President of the association. It is anticipated that all nominations must be received by ACWA by September 1, 2107 to be considered by the Nominating Committee. The Nominating Committee typically will announce its recommended slate of candidates in October and the election will occur at the ACWA Fall Conference in November 2017. Director LaMar has expressed his interest in serving as Vice President of ACWA, and a resolution has been prepared supporting his nomination and also determining that related expenses will be borne by the District.

FISCAL IMPACTS:

The ACWA Vice President will be responsible for attending all ACWA Board meetings and other related industry meetings, including the ACWA conferences; therefore, travel expenses and director fees will be incurred.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

None.

RECOMMENDATION:

THAT THE BOARD SUPPORT THE NOMINATION OF IRWD DIRECTOR STEVEN LAMAR FOR VICE PRESIDENT OF ACWA FOR A TWO-YEAR TERM BEGINNING JANUARY 1, 2018 AND THAT THE FOLLOWING RESOLUTION BE ADOPTED BY TITLE SUBJECT TO NON-SUBSTANTIVE CHANGES AND IN ACCORDANCE WITH ACWA'S REQUIREMENTS:

RESOLUTION NO. 2016-

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA
PLACING IN NOMINATION STEVEN LAMAR AS VICE PRESIDENT OF THE
ASSOCIATION OF CALIFORNIA WATER AGENCIES

LIST OF EXHIBITS:

Exhibit "A" – Resolution

EXHIBIT "A"

RESOLUTION NO. 2016-

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
IRVINE RANCH WATER DISTRICT, ORANGE COUNTY, CALIFORNIA
PLACING IN NOMINATION STEVEN LAMAR AS VICE PRESIDENT OF THE
ASSOCIATION OF CALIFORNIA WATER AGENCIES FOR 2018/2019

WHEREAS, the Board of Directors of the Irvine Ranch Water District will be receiving a call for nominations for Vice President of the Association of California Water Agencies' Region for the 2018/19 term, and;

WHEREAS, Irvine Ranch Water District's Board of Director Steven LaMar has indicated a desire to serve as Vice President of the Association of California Water Agencies; and

WHEREAS, Steven LaMar is a current member of ACWA's Region 10's Federal Affairs Committee where he has served for several years and a member of the Headwater Task Force during which time he assisted with drafting the Policy Principles and Headwaters framework; and

WHEREAS, Steven LaMar is a committed and experienced leader in the water industry and his in-depth knowledge and understanding of critical water issues facing California would be a great benefit to the Association; and

WHEREAS, ACWA is the largest coalition of public water agencies in the country and the premier water organization in California.

NOW, THEREFORE, the Board of Directors of the Irvine Ranch Water District DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

Section 1. Reaffirms its support with the nomination of Steven LaMar for Vice President of the Association of California Agencies in 2018/19, and the Secretary is hereby directed to forward a certified copy of this resolution to the Association of California Water Agencies.

ADOPTED, SIGNED AND APPROVED this 28th day of November, 2016.

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

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