

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

**January 24, 2011**

**PLEDGE OF ALLEGIANCE**

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

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

**NOTICE**

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

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**COMMUNICATIONS TO THE BOARD**

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1.     A. Written:
- B. Oral: Mrs. Joan Irvine Smith relative to the Dyer Road Wellfield.

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

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

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**PRESENTATION**

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3.     **FEDERAL ISSUES UPDATE BY MR. HAL FURMAN**

The District's consultant, Mr. Hal Furman, will provide the Board an update on Federal Issues for 2011.

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**WORKSHOP**

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4.     **MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES VARIANCES**

Recommendation: That the Committee recommend the Board approve an Expenditure Authorization in the amount of \$1,344,000; and approve Variance No. 1 and No. 2 in the amounts of \$783,000 and \$458,000, respectively, with Black and Veatch for the MWRP Biosolids and Energy Recovery Facilities, Project 20847.

CONSENT CALENDAR	Next Resolution No. 2011-2	Items 5-17
5.	<u>MINUTES OF REGULAR BOARD MEETINGS</u>	
	Recommendation: That the minutes of the January 10, 2011 Regular Board Meeting, the January 14, 2011 Adjourned Regular Board Meeting, and the January 17, 2011 Regular Board Meeting be approved as presented.	
6.	<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.	
7.	<u>DECEMBER 2010 FINANCIAL REPORTS</u>	
	Recommendation: That the Board receive and file the Treasurer's Investment Summary Report and the Monthly Interest Rate Swap Summary for December 2010; approve the December 2010 Summary of Wire Transfers and ACE payments in the total amount of \$14,423,437.64; and approve the December 2010 Warrants Nos. 316193 through 317039, Workers' Compensation distributions and voided checks in the total amount of \$8,574,911.74.	
8.	<u>DISTRICT STRATEGIC MEASURES DASHBOARDS</u>	
	Recommendation: That the Board receive and file the Strategic Measures Dashboards and Information items.	
9.	<u>CALIFORNIA SPECIAL DISTRICTS ASSOCIATION CALL FOR NOMINATIONS</u>	
	Recommendation: That the Board nominate Mary Aileen Matheis as a Region 6 representative to the California Special Districts Association Board of Directors.	
10.	<u>BAKER WATER TREATMENT PLANT DESIGN VARIANCE</u>	
	Recommendation: That the Board authorize the General Manager to execute Variance No. 3, in the amount of \$95,370, with RBF Consulting for the Baker Water Treatment Plant, project 11218.	

**CONSENT CALENDAR - Continued**

**Next Resolution No. 2011-2**

**Items 5-17**

11. MICHELSON WATER RECYCLING PLANT CLARIFIER FLIGHTS AND DRIVES REPLACEMENT – FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Michelson Water Recycling Plant Clarifier Flights and Drives replacement, project 20784; authorize the General Manager to file a Notice of Completion; and authorize the release of retention 35 days after the filing of the Notice of Completion.

12. SAN JOAQUIN MARSH CAMPUS PERIMETER WALL IMPROVEMENT FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the San Joaquin Marsh Campus Perimeter Wall Improvements, projects 20542 and 30542; authorize the General Manager to file a Notice of Completion; and authorize the release of retention 35 days after the filing of the Notice of Completion.

13. HVAC CONTROL SYSTEM REPLACEMENT AT SAND CANYON AND OPERATIONS CENTER FINAL ACCEPTANCE

Recommendation: That the Board accept the construction of the HVAC Control System Replacement at Sand Canyon and the Operations Center, projects 11074, 21074, 31074, 10611, 20611 and 30611; and authorize filing of a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

14. 2011 STATE LEGISLATIVE UPDATE

Recommendation: That the Board receive and file.

15. 2011 SELECTION OF FEDERAL LOBBYIST

Recommendation: That the Board approve a 24-month contract with the Furman Group for \$10,000 per month plus reimbursable direct expenses not to exceed \$276,000.

16. PLANNING AREA 18 NORTH – BUDGET INCREASE AND EXPENDITURE AUTHORIZATION

Recommendation: That the Board authorize an increase to the Fiscal Year 2010/11 Capital Budget for project 30444 in the amount of \$39,700, from \$1,760,000 to \$1,799,700; approve Expenditure Authorizations for project 10444 in the amount of \$495,400 and project 30444 in the amount of \$1,562,300 for Planning Area 18 North, projects 10444 and 30444.

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**CONSENT CALENDAR - Continued**

**Next Resolution No. 2011- 2**

**Items 5-17**

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17. PLANNING AREA 40 PHASE 1, BUDGET ADDITION, EXPENDITURE AUTHORIZATION AND SUPPLEMENTAL REIMBURSEMENT AGREEMENT

Recommendation: That the Board authorize the addition of project 11563 for \$229,900, project 21563 for \$231,000, and project 31563 for \$194,700 to the Fiscal Year 2010/11 Capital Budget; approve Expenditure Authorizations for project 11563 for \$229,900, project 21563 for \$231,000, and project 31563 for \$194,700; and authorize the General Manager to execute a Supplemental Reimbursement Agreement with the Irvine Community Development Company for the design and construction of the IRWD Facilities within Planning Area 40 Phase I - Cypress Village, projects 11563, 21563 and 31563

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**ACTION CALENDAR**

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18. WELLS 21 AND 22 WELLHEAD FACILITIES AND PIPELINES EXPENDITURE AUTHORIZATION AND DESIGN VARIANCE

Recommendation: That the Board approve an Expenditure Authorization in the amount of \$78,800, and authorize the General Manager to execute Variance No. 2 in the amount of \$74,510 with RBF Consulting for engineering services for the Wells 21 and 22 Wellhead Facilities and Pipelines, project 10286

19. MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION AND FLOOD PROTECTION IMPROVEMENTS - VARIANCES

Recommendation: That the Board authorize the General Manager to execute Variance No. 4 in the amount of \$604,960 with HDR Engineering, Inc. for engineering support services during construction for the Michelson Water Recycling Plant Phase 2 Expansion, projects 20214 and 30214; and recommend the Board authorize the General Manager to execute Variance no. 1 in the amount of \$98,389 with DLT&V Systems Engineering for SCADA programming services for Michelson Water Recycling Plant Phase 2 Expansion, projects 20214 and 30214.

20. DAM MONITORING AND SURVEILLANCE – DESIGN VARIANCE EVALUATION OF SOIL FAILURES AT SYPHON CANYON DAM

Recommendation: That the Board authorize the General Manager to execute Variance No. 2 with Genterra Consultants, Inc., in the amount of \$86,240, to perform a limited subsurface investigation, interpret the results of the investigation, and provide recommendations for repair of Syphon Canyon Dam.

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**ACTION CALENDAR - Continued**

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21. APPROVAL OF AGREEMENT BETWEEN MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (MWDOC) AND ITS MEMBER AGENCIES ON BUDGET, ACTIVITIES, CHARGES AND OTHER SERVICES

Recommendation: That the Board approve and authorize the President to execute the December 10, 2010, agreement between MWDOC and its member agencies on budget, activities, charges and other issues.

22. SUPPORT FOR ALTERNATE SPECIAL DISTRICT POSITION ON THE ORANGE COUNTY LOCAL AGENCY FORMATION COMMISSION

Recommendation: That the Board consider supporting a candidate for the alternate commissioner representing Special Districts on the Orange County Local Agency Formation Commission and take action as appropriate.

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**OTHER BUSINESS**

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

23. A. General Manager's Report

B. Directors' Comments

1)

2)

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**OTHER BUSINESS**

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23. B. Directors' Comments

3)

4)

5)

C. Adjourn.

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Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office.

The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

January 24, 2011

Prepared by: C. Spangenberg/S. Malloy

Submitted by: K. Burton

Approved by: Paul Jones

## WORKSHOP

### MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES VARIANCES

#### SUMMARY:

As the design for the Biosolids and Energy Recovery Facilities at the Michelson Water Recycling Plant (MWRP) progresses, staff has identified design improvements and additional components of the project. These improvements and additions to the MWRP biosolids facility constitute a substantial change in design and construction costs that require approval by the Board.

One key design change proposed is the installation of egg-shaped anaerobic digesters which are expected to provide lower lifecycle costs and other important operational benefits. Another component is the addition of sludge receiving and drying facilities to accommodate the delivery and processing of dewatered biosolids from the South Orange County Wastewater Authority (SOCWA) and the Los Alisos Water Recycling Plant (LAWRP). Staff recommends that the Board:

- Approve an Expenditure Authorization in the amount of \$1,344,000 for Project 20847;
- Approve Variance No. 1 with Black & Veatch (B&V) in the amount of \$783,000 to implement design changes for treatment of the biosolids generated at MWRP; and
- Approve Variance No. 2 with B&V in the amount of \$458,000 to design a receiving station and upsized dryer system to accommodate the SOCWA and LAWRP biosolids.

#### BACKGROUND:

B&V initiated the design of the MWRP Biosolids and Energy Efficiency Facilities project in July 2010. At this meeting staff and representatives from B&V will provide an update regarding the project in general, as well as major design improvements and new components to the project since the last workshop with the Board. A copy of the PowerPoint presentation is included as Exhibit "A". At this time two variances, as summarized below, are recommended in order to implement modifications to the biosolids facilities.

#### Variance No. 1 for MWRP Solids Processing:

The largest component of Variance No. 1 is to modify the design from conventional-shaped digesters to egg-shaped digesters. Egg-shaped digesters provide a lower lifecycle cost as well as process performance, maintenance, and aesthetic benefits. As a result of the geometry of the egg-shaped digesters, the site plan will need to be revised to optimize the area available for biosolids treatment. This item represents \$578,000 of the total variance.

Variance No. 1 also includes designing for the addition of OpenCEL focused-pulsed equipment to treat the thickened waste activated sludge. This addition was reviewed and approved by the

Board at its last workshop on the project in October 2010. The benefits of OpenCEL include potentially increasing biogas production, increasing the volatile solids reduction of the digestion process, and providing a substitute to the expensive methanol used in the nitrification/denitrification process at MWRP. This item represents \$55,000 of the total variance.

Other Variance No. 1 items include design services to increased dryer size from 4,000 kg per hour (as recommended in the preliminary design) to 6,000 kg per hour to dry solids from both MWRP and LAWRP, as discussed at the October 2010 workshop. This task represents \$150,000 of the total variance. Cost credits associated with reducing the level of effort to investigate phosphorous recovery at MWRP and eliminating the project risk management evaluation are offset by increasing the hazardous operations (HAZOP) study scope of work to address other areas of the design.

The incremental construction cost resulting from all of these modifications is estimated at \$11,040,000. However, the projected 30-year lifecycle operating cost savings for the egg-shaped digesters is \$27,760,000. The design changes associated with Variance No. 1 will result in a schedule impact of nine weeks which is more specifically described below under Schedule Impact. Variance No. 1 is included in Exhibit "B".

B&V Variance No. 2 for Sludge Receiving and Drying Facilities:

The SOCWA Board of Directors has signed a Letter of Intent to negotiate with IRWD regarding trucking digested and dewater sludge from SOCWA facilities to MWRP for heat drying. This also presents the option for IRWD to truck sludge from LAWRP to MWRP for heat drying. This proposal requires that sludge receiving facilities be added to the project along with upsizing the heat dryer system. Since both SOCWA and LAWRP solids will use the sludge-receiving facilities, the design and construction costs of this component will be shared equally between IRWD and SOCWA. For upsizing the heat dryer from 6,000 kg per hour to 7,000 kg per hour to dry the SOCWA sludge, SOCWA will also be charged the full incremental cost of the design and a share of the dryer construction equal to their reserved capacity right in the dryer system.

Variance No. 2 covers the costs for design and construction management of the solids receiving facilities at \$308,000. IRWD will be reimbursed by SOCWA for \$154,000 of this amount. Design and construction management costs for upsizing the dryer system from 6,000 kg per hour to 7,000 kg per hour equal \$150,000 for which IRWD will be fully reimbursed by SOCWA. Variance No. 2 is included as Exhibit "C".

This cost-sharing will be addressed in a project participation agreement between IRWD and SOCWA which is currently being prepared. The Draft IRWD/SOCWA Biosolids Agreement Terms and Conditions have been transmitted to SOCWA and are included in Exhibit "D". These terms are currently being reviewed by SOCWA and may be subject to change. The final terms will be incorporated into the agreement and will be brought back to the Committee and the Board for review and consideration. Per the executed Letter of Intent between IRWD and SOCWA, the agencies have until mid-March 2011 to complete and approve the project participation



agreement. The incremental construction cost for implementing solids-receiving and upsizing the solids drying facilities for SOCWA and LAWRP is estimated at \$9,810,000 of which SOCWA's share will be \$4,910,000.

Schedule Impact:

Approval of Variances No. 1 and No. 2 requires a nine-week schedule extension for completion of Final Design and Construction. However, the biosolids handling facilities will still be operational and allow IRWD to cease diverting biosolids to the Orange County Sanitation District prior to their deadline of 2015. The new schedule is as follows:

- Heat Drying and Centrifuge Procurement Award April 2011
- Final Design Completion December 2011
- Award Construction Contract March 2012
- Class B Facilities Construction Completion March 2014
- Heat Drying Facilities Completion August 2014

In order to meet the above schedule, staff is currently working closely with B&V to prepare procurement documents for the heat dryer and centrifuges. Evaluation of the equipment manufacturers and recommendations for short-listing suppliers are also being prepared.

FISCAL IMPACTS:

Project 20847 is included in the FY 2010-11 Capital Budget. An Expenditure Authorization is shown in the table below and attached as Exhibit "E."

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
20847	\$141,000,000	-\$0-	\$141,000,000	\$14,686,400	\$1,344,000	\$16,030,400

ENVIRONMENTAL COMPLIANCE:

Staff has initiated the CEQA process for the Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities. It is anticipated that the Final Environmental Impact Report will be completed in September 2011.

COMMITTEE STATUS:

This item was reviewed at the Engineering and Operations Committee on January 18, 2011.

**RECOMMENDATION:**

THAT THE BOARD APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$1,344,000; AND APPROVE VARIANCE NO. 1 AND NO. 2 IN THE AMOUNTS OF \$783,000 AND \$458,000, RESPECTIVELY, WITH BLACK AND VEATCH FOR THE MWRP BIOSOLIDS AND ENERGY RECOVERY FACILITIES, PROJECT 20847.

**LIST OF EXHIBITS:**

- Exhibit "A" – Michelson Water Recycling Plant Biosolids and Energy Recovery Facility  
PowerPoint Presentation Slides
- Exhibit "B" – Black & Veatch Variance No. 1
- Exhibit "C" – Black & Veatch Variance No. 2
- Exhibit "D" – Draft IRWD/SOCWA Biosolids Agreement Terms and Conditions
- Exhibit "E" – Expenditure Authorization

# Exhibit "A"



**Michelson Water Recycling Plant  
Biosolids & Energy Recovery Final Design  
Egg Shaped Digesters & SOCWA Facilities  
Board Workshop  
January 24, 2011**



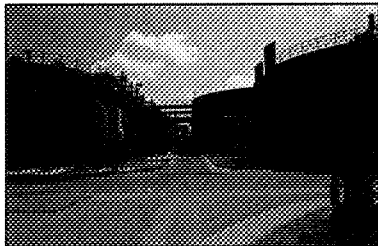
Irvine Ranch Water District

## Agenda

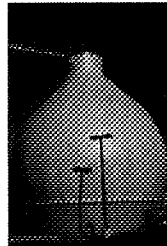
- Proposed change from Conventional to Egg-Shaped Digesters with revised site plan
- Change to allow importing biosolids from SOCWA and LAWRP
- Equipment procurement updates
- Proposed variances



## Conventional and Egg-Shaped Digesters



- Lower profile; larger diameter
- Appears as a cylinder
- Exposed piping and equipment
- Greater mixing energy required; multiple mixers



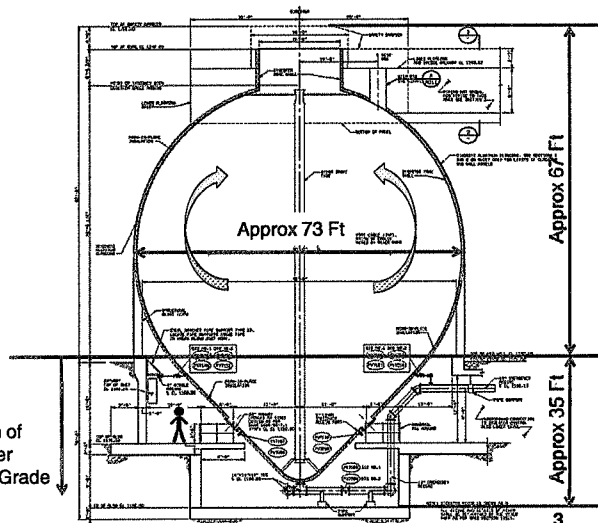
- Higher profile; smaller diameter
- Dome appearance
- Piping and equipment hidden in basement and inside walkway
- Less mixing energy required; single mixer



## Egg Shape Digester Characteristics

- Operational benefits
  - More efficient mixing
  - Foaming control
  - Grit removal
- Structural
  - Steel shell
  - Insulated exterior
  - Ring wall
- Pile foundation required
- Dewatering during construction required

Portion of Digester Below Grade





## Non-Economic Factors

### ■ Advantages for Egg-Shaped Digesters

- Smaller Footprint for Improved Functionality
- Improved Facility Aesthetics (less exposed piping & equipment)
- Better Access to Equipment and Piping
- Improved Safety
- Enhanced Noise Control
- Better Odor Containment
- More consistent operation – better dryer pre-treatment



## Opinion of Probable Construction Costs Conventional Versus Egg Shaped Digesters

Conventional Digesters	
General Requirements	\$1,150,000
Methane Digesters	12,810,000
Contingencies (25%)	3,490,000
<b>Total Probable Construction Cost</b>	<b>\$17,450,000</b>

Egg-Shaped Digesters	
General Requirements	\$1,590,000
Egg-Shaped Digesters	15,390,000
Stair Access Tower	590,000
Piping Galleries	1,720,000
Contingencies on Structures (25%)	2,060,000
Egg Digester Contingency (25%)	2,760,000
<b>Total Probable Construction Cost</b>	<b>\$24,110,000</b>



## Life Cycle Cost Analysis (30 Years) Conventional versus Egg Shaped Digesters

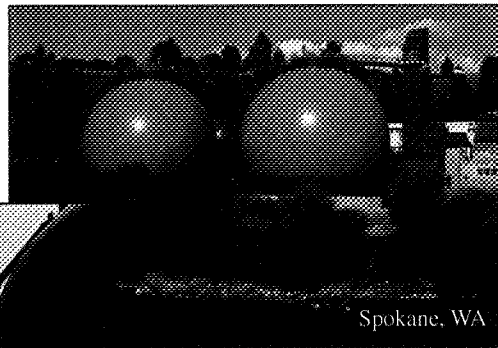
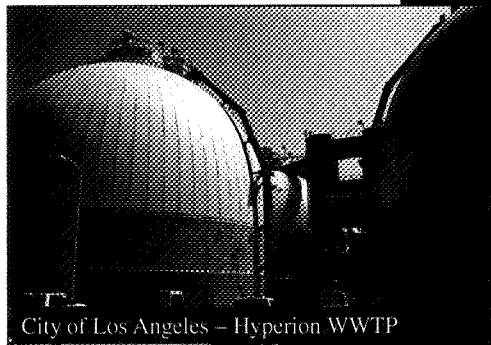
	Conventional Digesters	Egg-Shaped Digesters
<b>Capital Cost Opinion</b>	<b>\$17,450,000</b>	<b>\$24,110,000</b>
<b>30 Year Operating Costs:</b>		
Mixing Energy	*\$20,980,000	\$5,320,000
Maintenance Labor (Mixing)	\$1,500,000	\$910,000
Cleaning	\$10,690,000	\$590,000
Disposal (Pellet)	\$252,690,000	\$246,910,000
Energy Savings (Biogas)	(\$103,830,000)	(\$106,120,000)
<b>Total O&amp;M Costs</b>	<b>\$182,030,000</b>	<b>\$147,610,000</b>
<b>Total 30 Year Life Cycle Costs</b>	<b>\$199,480,000</b>	<b>\$171,720,000</b>

**Assumptions:**

- Life Cycle Escalation Rates:
  - Labor (IRWD and Contract) - 3%
  - Energy - 4%
  - Biosolids Haul and Disposal - 4%
- Capital and O&M costs do not include common items such as circulation pumps, heat exchangers, digester gas piping, etc. Only differential costs are captured.
- Maintenance Labor costs are for maintenance of the mixing system. \* 3 mixers/tank.

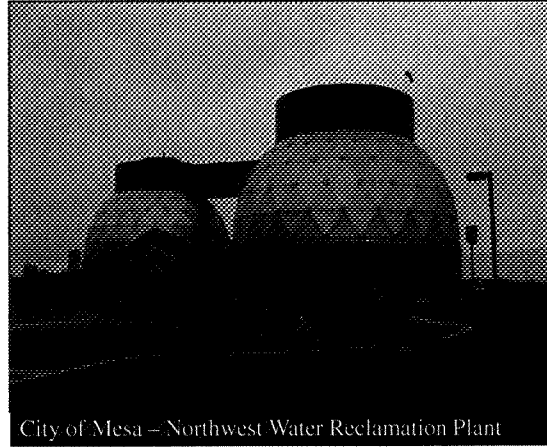


## Aesthetics - Mechanically Attached Insulation with Aluminum Cladding





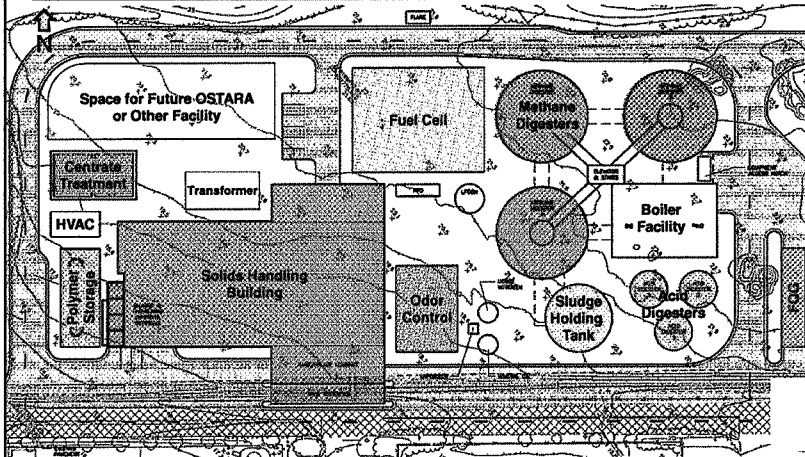
## Aesthetics - Insulated Steel with Geodesic Dome Cover



City of Mesa – Northwest Water Reclamation Plant



## Revised Site Plan with Egg-Shaped Digesters



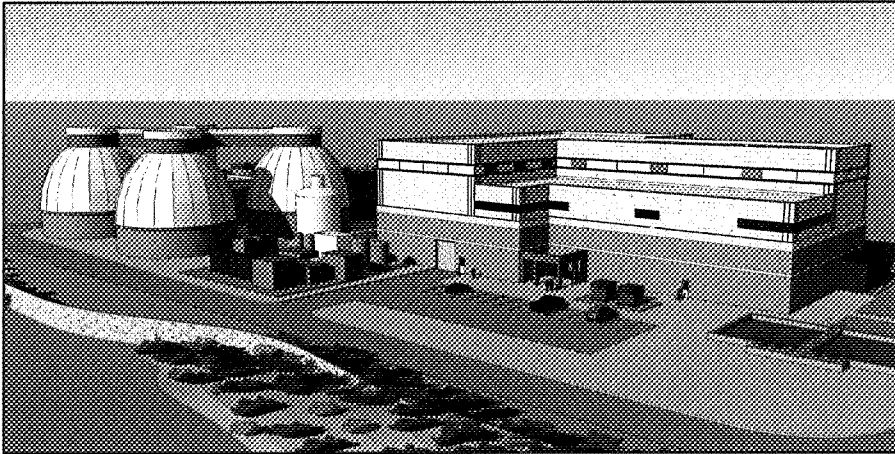
- Eliminates extraneous roadways
- Grouping digesters takes less space
- Reduced pipe runs located in the basement
- Improved FOG receiving facilities
- Improved facilities access

- |                                  |                              |                      |
|----------------------------------|------------------------------|----------------------|
| ▲ Methane Digesters – Egg Shaped | ▲ FOG Receiving Station      | ▲ Centrate Treatment |
| ▲ Acid Digesters                 | ▲ Solids Handling Building   | ▲ Polymer Storage    |
| ▲ Digested Sludge Holding Tank   | ▲ Gas Conditioning/Fuel Cell | ▲ Odor Control Area  |



Irvine Ranch Water District

### Biosolids and Energy Recovery Facilities View from the North-West

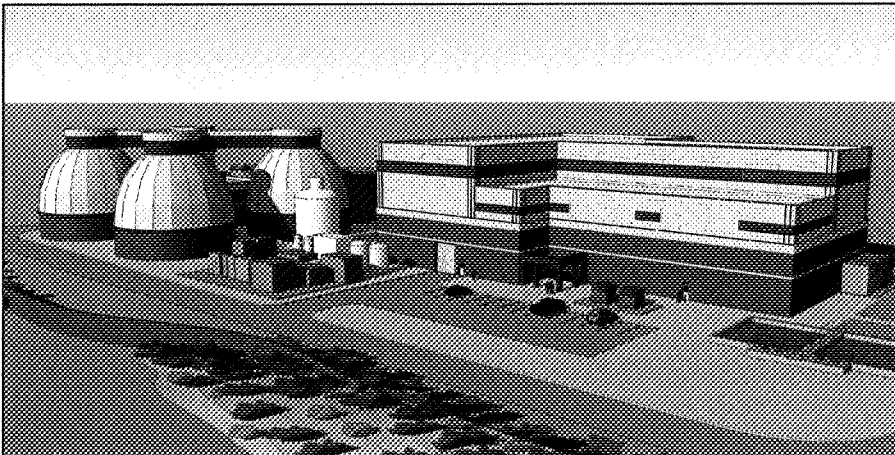


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Irvine Ranch Water District

### Biosolids and Energy Recovery Facilities View from the North-West

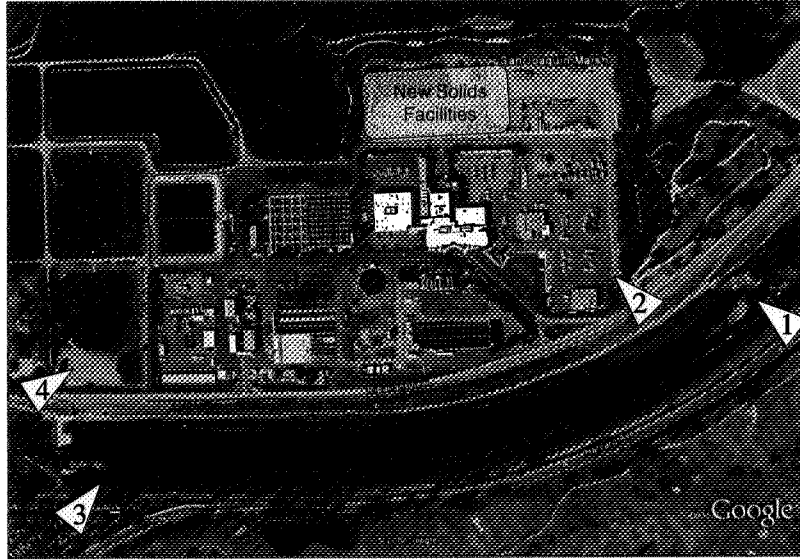


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### Perimeter View Key Plan



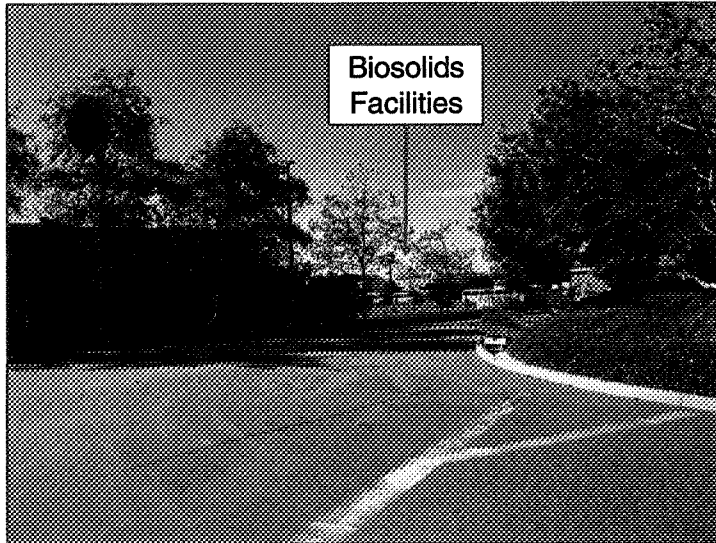
### Perimeter View of Facility – Viewpoint 1





Irvine Ranch Water District

## Perimeter View of Facility – Viewpoint 2

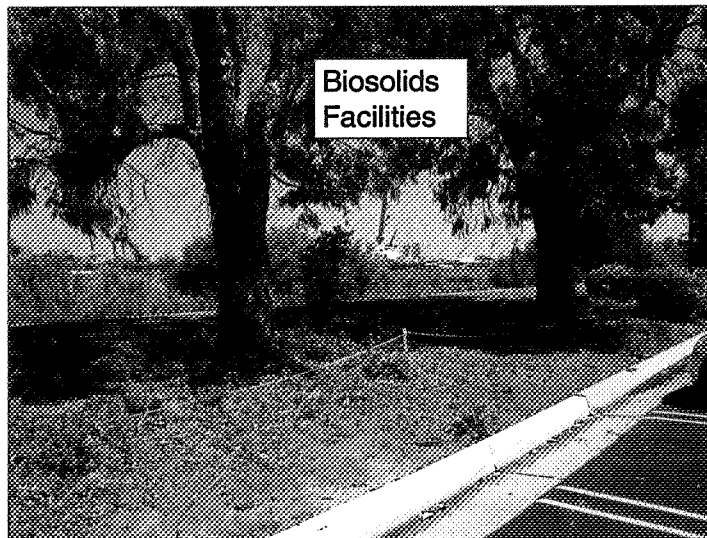


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Irvine Ranch Water District

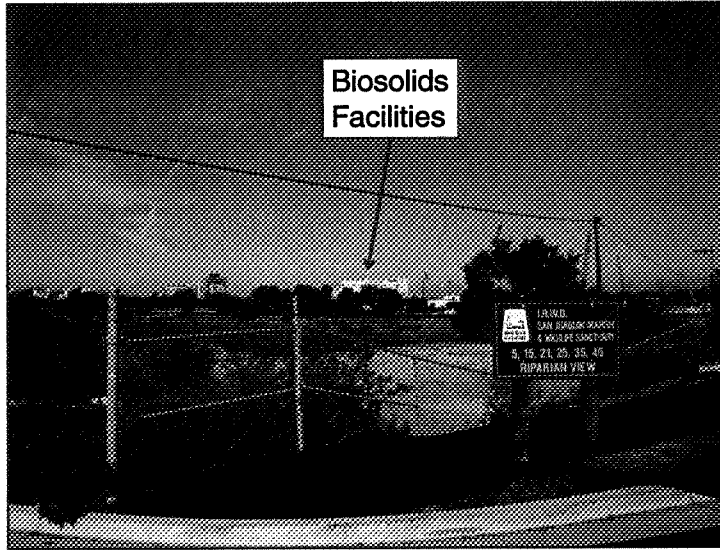
## Perimeter View of Facility – Viewpoint 3



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## Perimeter View of Facility – Viewpoint 4



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## Solids Receiving and Processing Facilities for SOCWA and LAWRP

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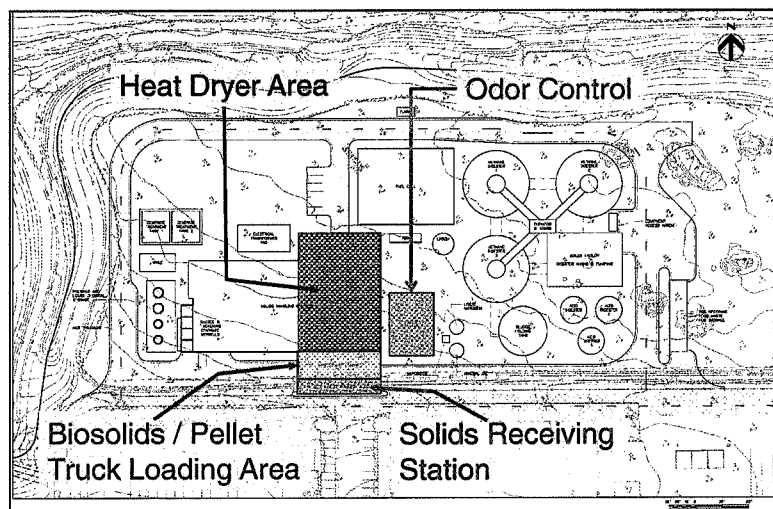


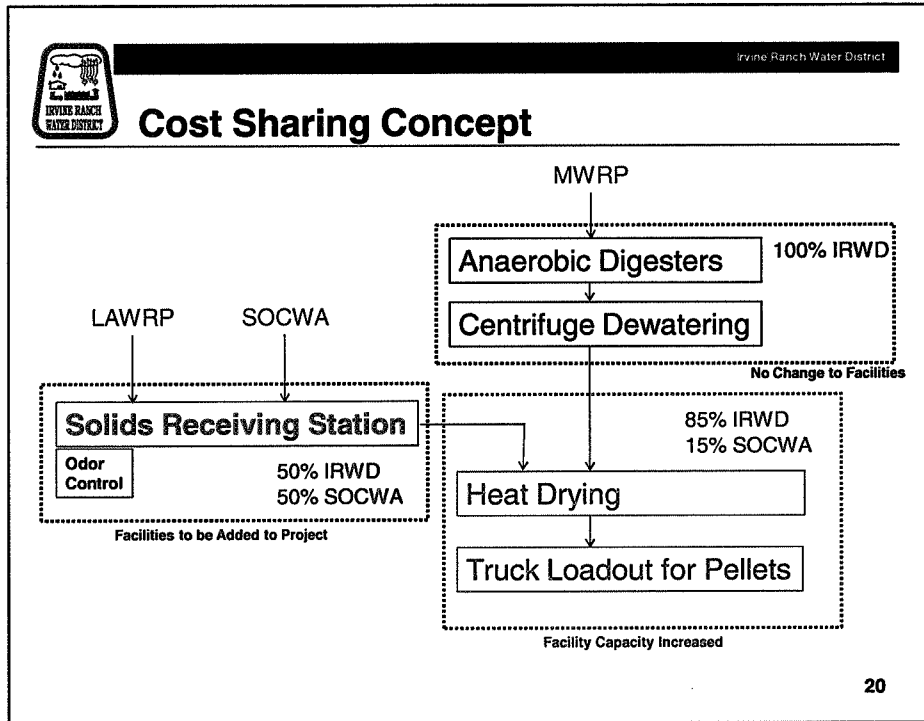
## SOCWA Participation - Letter of Intent

- **Objective: Provide biosolids receiving facility and heat dryer capacity**
- **Timing: 90 days to negotiate agreement (mid-March)**
- **Major points:**
  - 25 wet tons per day (approx 15.3% of capacity)
  - Participation in capital and O&M costs
  - Add treatment to SOCWA facilities to meet biosolids quality requirement (sludge strainer)
  - Right to take proportionate amount of pellets to offset SOCWA portion of O&M cost
- **Draft terms and conditions for agreement being negotiated with SOCWA**



## Solids Receiving Station Site Plan

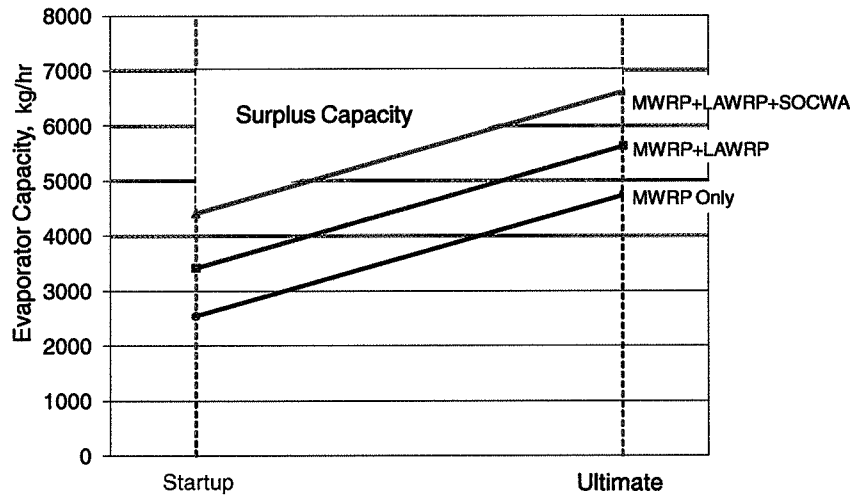




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- SOCWA Solids Quantity and Quality**
- **Projected Quantity**
    - 25 wet tons per day (7-day basis)
    - 35 wet tons per day (5-day basis)
  - **Anaerobically digested & dewatered sludge**
  - **22-26% solids content**
  - **Sludge strainer to remove debris, fibers, and hair (constructed at SOCWA at their expense)**
  - **Goal: Biosolids quality and volatile solids content similar to MWRP**
- 21



### SOCWA & LAW RP Impact on Heat Dryer Capacity



### SOCWA / LAW RP Project Considerations

- **Capital cost**
  - Add solids receiving facility to project
  - Additional dryer system capacity required
  - Additional odor control capacity required
- **Additional engineering costs**
- **Design schedule impact**
- **Additional O&M**
  - Pellet disposal
  - Energy usage (drying, conveying solids)
  - Equipment maintenance
  - Solids delivery/pickup coordination



### Capital and Engineering Costs for Solids Receiving Station

	Total	SOCWA
Construction Cost w/Cont.	*\$9,810,000	\$4,910,000
Engineering Cost	\$1,430,000	\$960,000
<b>Total Capital Cost</b>	<b>\$11,240,000</b>	<b>\$5,870,000</b>
Annualized Capital Cost	\$830,000	\$430,000
Capital Cost per Wet Ton		\$48

For Imported Solids Only

\*Includes Solids Receiving Station and dryer upsizing from 5,000 kg/hr to 7,000 kg/hr



### Operating Cost Impacts for SOCWA Solids Receiving

Expense*	SOCWA Capital	Annualized	Per Wet Ton
Construction Costs	**\$4,910,000	\$360,000	\$40
Engineering Costs	\$960,000	\$110,000	\$8
O&M Costs		\$450,000	\$49
<b>Total Cost @ MWRP</b>	<b>\$5,870,000</b>	<b>\$920,000</b>	<b>\$97</b>
Sludge Strainer @ SOCWA		\$120,000	\$13
Hauling to MWRP		\$60,000	\$7
<b>Total SOCWA Cost</b>		<b>\$1,100,000</b>	<b>\$117</b>

\*These costs include 30% contingency

\*\*Includes Solids Receiving Station and dryer upsizing from 6,000 kg/hr to 7,000 kg/hr



## **Procurement Status & Requested Variance**

26



## **Dryer Procurement Status**

- **Sizing recommendations complete**
- **Recommend sole-sourcing Andritz dryer**
- **Procurement document complete January 24**
- **Dryer procurement award required by April to complete design**

27





## Centrifuge Procurement Status

- Sizing recommendations complete
  - Sludge thickening
  - Sludge dewatering
- Manufacturers have been short listed
- Procurement report complete January 26th



## Variance Summary

Variance Item	IRWD		SOCWA		TOTAL	Schedule Impact
	Engineering Design	Engineering Construction	Engineering Design	Engineering Construction		
OpenCEL	\$35,000	\$20,000	n/a	n/a	\$55,000	No
Egg Shape Digesters	\$383,000	\$195,000	n/a	n/a	\$578,000	Yes
P Recovery / Risk Mgmt / HAZOP	n/a	n/a	n/a	n/a	\$0	No
Upsize Dryer System to 6,000 kg/hr	\$150,000	n/a	n/a	n/a	\$150,000	Yes
Subtotal Variance #1	\$568,000	\$215,000	\$0	\$0	\$783,000	Yes
Solids Receiving Station	\$99,000	\$55,000	\$99,000	\$55,000	\$308,000	Yes
Upsize Dryer System to 7,000 kg/hr	n/a	n/a	\$150,000	n/a	\$150,000	Yes
Subtotal Variance #2	\$99,000	\$55,000	\$249,000	n/a	\$458,000	Yes
<b>Total</b>	<b>\$667,000</b>	<b>\$270,000</b>	<b>\$249,000</b>	<b>\$55,000</b>	<b>\$1,241,000</b>	<b>9 wks</b>

Total Variance            \$1,241,000  
 IRWD Participation        \$937,000  
 SOCWA Participation      \$304,000



## Schedule Impact

Milestone	Contract	Revised
Equipment Procurement Award	--	4/25/11
Final Design Complete	10/12/11	12/14/11
Award Construction Contract	1/23/12	3/26/12
Class B Facility Complete	1/23/14	3/26/14
Heat Drying Facility Complete	6/12/14	8/14/14

- **Nine week extension**
- **Facilities complete before OCSD deadline of 2015**



**Michelson Water Recycling Plant  
Biosolids & Energy Recovery Final Design  
Egg Shaped Digesters & SOCWA Facilities  
Board Workshop  
January 24, 2011**

IRVINE R **Exhibit "B"** ISTRICT  
PROFESSIC ARIANCE

Project Title: MWRP  
Biosolids & Energy Recovery Facilities

Project No.: 20847

Purchase Order No.: 126171

File No.: \_\_\_\_\_

Date: January 13, 2011

Variance No.: 1

Project No.: 20847

Originator:     IRWD     ENGINEER/CONSULTANT     Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*):

Additional design and construction phase services associated with: (1) new OpenCEL focused pulse WAS pretreatment facilities, (2) change from conventional to egg-shaped digesters and associated site plan changes, (3) changes to the evaluations for phosphorus recovery, risk management, and HAZOP, and (4) upsizing of the dryer system to 6,000 kg/hour. – See attachment for further details.

Engineering & Management Cost Impact:

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
<b>See Attachment</b>						
<b>Total \$ =</b>						<b>783,000</b>

Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
	<b>See Attachment</b>			

Required Approval Determination:

Total Original Contract                    \$ <u>12,883,316</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.  <input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.  <input checked="" type="checkbox"/> Board: Single Variance greater than \$60,000.  <input type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
Previous Variances \$ <u>0</u> This Variance        \$ <u>783,000</u>	
Total Sum of Variances                    \$ <u>783,000</u> New Contract Amount                      \$ <u>13,666,316</u>	
Percentage of Total Variances to Original Contract <u>6.1%</u>	

ENGINEER/CONSULTANT: Black & Veatch Corp.

[Signature]                    01-13-11  
Project Engineer/Manager                    Date

[Signature]                    01-13-11  
Engineer's/Consultant's Management                    Date

IRVINE RANCH WATER DISTRICT

[Signature]                    1-13-11  
Department Director                    Date

\_\_\_\_\_  
General Manager/Comm./Board                    Date



## VARIANCE 1 ATTACHMENT

### Description of Variance

Variance Items	Description
OpenCEL	Perform additional design work to add OpenCEL focused-pulsed equipment to pretreat waste activated sludge prior to anaerobic digestion. Perform additional construction phase services such as site inspections, shop drawing reviews and performance testing associated with the OpenCEL facilities. The benefits of this change include potentially increasing biogas production, increasing the volatile solids reduction in the digester process, and providing a substitute for methanol used in the nitrification/denitrification process at MWRP.
Egg-Shaped Digesters	Modify the design to change from conventional-shaped digesters to egg-shaped digesters. Also, coordinate this change with design changes to the site plan to achieve a more functional, accessible, and safer layout for operations and maintenance staff. Add additional construction phase services to accommodate the egg-shaped digesters in terms of site inspections, shop drawing reviews, and performance testing. The benefits of this change will provide a lower life-cycle cost and improve process performance, maintenance, and aesthetic benefits. The egg-shaped digesters also allow the site plan to optimize the area available for biosolids treatment.
P Recovery / Risk Mgmt / HAZOP	Modify the scope of work for the special study on phosphorus recovery at MWRP (Task 4-I) to instead: (1) establish a sampling and testing program for monitoring phosphorus levels within the MWRP, and (2) perform a phosphorus mass balance evaluation based on the sampling program. Eliminate the project risk management special study (Task 4-J). Expand the HAZOP evaluation (Task 6 - Page 21) to include all major systems of the biosolids facilities over a three-day time period. The overall cost impact with these three changes is zero.
Upsize Dryer System to 6,000 kg/hr	Perform additional design work in order to increase the dryer system capacity from 4,000 kg/hr to 6,000 kg/hr, including expanding the building size to accommodate the larger facilities. Also, implement design changes associated with the dryer support systems to accommodate the change in dryer capacity. Support systems include centrifuge dewatering, odor control (RTO) system, biosolids handling, biosolids storage, and biosolids loading. There is no change to construction phase services associated with this item.

### Engineering & management Cost impact

	Project Manager	Engineering Manager	Senior Engineer	Engineer	CAD	Admin	Manhours	Direct Costs	Total \$
<b>Hourly Rate</b>	<b>\$230</b>	<b>\$190</b>	<b>\$175</b>	<b>\$150</b>	<b>\$125</b>	<b>\$110</b>			
<b>Variance 1</b>									
OpenCEL	8	24	40	103	123	46	344	5,715	\$55,000
Egg Shape Digesters	240	432	464	910	1080	486	3,612	34,560	\$578,000
P Recovery / Risk Mgmt / HAZOP	0	0	0	0	0	0	0	0	\$0
Upsize Dryer System to 6,000 kg/hr	24	72	120	283	336	126	961	11,490	\$150,000
<b>Total - Variance 1</b>	<b>272</b>	<b>528</b>	<b>624</b>	<b>1296</b>	<b>1539</b>	<b>658</b>	<b>4,917</b>	<b>51,765</b>	<b>\$783,000</b>

### Schedule Impact (combined impact for Variance #1 and Variance #2 shown)

Task Description	Original Schedule	New Schedule
Final Design Complete	10/12/11	12/14/11



**IRVINE R** **Exhibit "C"** **DISTRICT**  
**PROFESSIONAL SERVICES VARIANCE**

Project Title: MWRP  
Biosolids & Energy Recovery Facilities

File No.: \_\_\_\_\_  
 Date: January 13, 2011  
 Variance No.: 2  
 Project No.: 20847

Project No.: 20847  
 Purchase Order No.: 126171

Originator:     IRWD     ENGINEER/CONSULTANT     Other (Explain) \_\_\_\_\_

**Description of Variance (attach any back-up material):**

Perform additional design and construction phase services associated with: (1) a new Solids Receiving Station and associated facilities to receive dewatered biosolids from SOCWA and LAW RP for pellet production and (2) upsizing the dryer system to 7,000 kg/hr, including the building and support facilities. – See attachment for further details.

**Engineering & Management Cost Impact:**

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
<b>See Attachment</b>						
<b>Total \$ =</b>						<b>\$458,000</b>

**Schedule Impact:**

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
	<b>See Attachment</b>			

**Required Approval Determination:**

Total Original Contract                    \$ <u>12,883,316</u>  Previous Variances \$ <u>783,000</u> This Variance            \$ <u>458,000</u>  Total Sum of Variances                    \$ <u>1,241,000</u> New Contract Amount                    \$ <u>14,124,316</u>  Percentage of Total Variances to Original Contract <u>9.6%</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.  <input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.  <input checked="" type="checkbox"/> Board: Single Variance greater than \$60,000.  <input type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
--	--

ENGINEER/CONSULTANT: Black & Veatch Corp.

David J. Burmester                    01-13-11  
 Project Engineer/Manager                    Date  
  
J. K. [Signature]                    01-13-11  
 Engineer's/Consultant's Management                    Date

IRVINE RANCH WATER DISTRICT

[Signature]                    1-13-11  
 Department Director                    Date  
  
 \_\_\_\_\_  
 General Manager/Comm./Board                    Date

# IRVINE RANCH WATER DISTRICT

## PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: MWRP Biosolids and Energy Recovery Facilities

Project No.: 20847 Project Manager: Carl Spangenberg

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	OpenCEL, Egg-Shaped Digesters, P Recovery, Risk Mgmt, HAZOP, Upsize Dryer System to 6,000 kg/hr.			\$783,000
2	Solids Receiving Facility and Upsizing of Dryer System to 7,000 kg/hr.			\$458,000



## VARIANCE 2 ATTACHMENT

### Description of Variance

Variance Items	Description
Solids Receiving Station	Design a new Solids Receiving Station for the MWRP biosolids facilities to receive dewatered biosolids by truck from LAW RP and SOCWA. Design the receiving facilities to store the imported biosolids and then feed these to the heat drying system to form pellets. Expand the odor control system design accommodate the new receiving station. Perform additional construction phase services to accommodate the new receiving station and associated facilities, including site inspections, shop drawing reviews, and performance testing.
Upsize Dryer System to 7,000 kg/hr	Perform additional design work in order to increase the dryer system capacity from 6,000 kg/hr to 7,000 kg/hr, including expanding the building size to accommodate the larger facilities. Also, implement design changes associated with the dryer support systems to accommodate the change in dryer capacity. Support systems include centrifuge dewatering, odor control (RTO) system, biosolids handling, biosolids storage, and biosolids loading. There is no change to construction phase services associated with this item.

### Engineering & Management Cost Impact

	Project Manager	Engineering Manager	Senior Engineer	Engineer	CAD	Admin	Manhours	Direct Costs	Total \$
<b>Hourly Rate</b>	<b>\$230</b>	<b>\$190</b>	<b>\$175</b>	<b>\$150</b>	<b>\$125</b>	<b>\$110</b>			
<b>Variance 2</b>									
Solids Receiving Station	128	232	248	485	575	259	1,927	17,965	\$308,000
Upsize Dryer System to 7,000 kg/hr	24	72	120	283	336	126	961	11,490	\$150,000
<b>Total - Variance 2</b>	<b>152</b>	<b>304</b>	<b>368</b>	<b>768</b>	<b>911</b>	<b>385</b>	<b>2,888</b>	<b>29,455</b>	<b>\$458,000</b>

### Schedule Impact (combined impact for Variance #1 and Variance #2 shown)

Task Description	Original Schedule	New Schedule
Final Design Complete	10/12/11	12/14/11



**DRAFT IRWD/SOCWA BIOSOLIDS AGREEMENT**  
**TERMS AND CONDITIONS**

**January 11, 2011**

**1. DESIGN AND OPERATING BASIS**

- A. SOCWA shall have the right to deliver and process 9,100 wet tons per year (wt/yr) of digested and dewatered sludge at the "Project." This shall be SOCWA's "Capacity Reservation Right" in the "Project."
- B. SOCWA "Capacity Reservation Right" shall be in the "Sludge Receiving Facilities" and the "Sludge Drying Facilities" (collectively, the "Project"), defined as follows:
- i. "Sludge Receiving Facilities" include the truck unloading station, associated odor control facilities (either separate from the main sludge drying building's odor control system or an expansion of a combined odor control system), sludge receiving bins, and sludge pumping and piping to the sludge cake bins.
  - ii. "Sludge Drying Facilities" include upsized cake storage and handling system, the heat dryer system (all components for solids and off-gas handling), the pellet and cake load-out facilities, and the sludge drying building's odor control facilities.
- C. IRWD shall be the manager and operator of the "Project" and shall be responsible for design, construction, operations and maintenance (O&M). All design and O&M decisions will be at the sole discretion of IRWD.
- D. SOCWA's sludge delivery shall be limited to a maximum of 35 wet tons per day (five days per week only) for a total maximum of 175 wet tons per week of digested and dewatered sludge.
- E. SOCWA shall supply digested sludge that is dewatered between 22% to 26% solids. IRWD reserves the right to reject sludge deliveries from SOCWA that are outside of these parameters. SOCWA shall be required to measure these characteristics for all truck loads and report this on a quarterly basis to IRWD.

- F. If SOCWA sludge must be dried separately from MWRP or LAWRP sludge, additional sludge storage capacity will be required. The cost for additional storage is not currently included in the capital cost estimate and would be the responsibility of SOCWA.
- G. Design of the “Sludge Receiving Facilities” will be based upon IRWD’s design requirements (i.e. use of live-bottom sludge delivery trucks which allows for smaller less costly sludge receiving and odor control facilities). SOCWA shall use trucks consistent with this design criterion.
- H. IRWD and SOCWA will be equally sharing the use of the “Sludge Receiving Facilities” and will divide capital costs on a 50%/50% basis.
- I. IRWD and SOCWA will be sharing the use of the “Sludge Drying Facilities” and will divide capital costs on pro-rata basis based upon SOCWA’s “Capacity Reservation Right”.
  - i. SOCWA’s pro-rata share based upon its “Capacity Reservation Right” is calculated to be 15.3% (SOCWA 9,100 wt/yr, MWRP 42,600 wt/yr, and LAWRP 7,600 wt/yr).
- J. SOCWA’s pro-rata share for the purposes of allocating O&M costs shall be defined by the percentage of SOCWA’s annual sludge processed compared to the total annual sludge processed from SOCWA, MWRP and LAWRP. Sludge quantities shall be measured on a wet tons basis. As of this time, SOCWA’s share is estimated to be 15.3%. For O&M cost allocation purposes, this percentage will be re-calculated annually to reflect actual sludge processed from MWRP, SOCWA and LAWRP; plus sludge IRWD may accept from others. Sludge accepted from others will be on a second priority and will not reduce SOCWA’s capacity reservation right to 9,100 wt/yr and 35 wt/day.
  - i. IRWD has the option, without obligation, to accept more wet tons of sludge from SOCWA, at IRWD’s discretion, and O&M costs would be re-allocated accordingly.
- K. SOCWA’s share for future capital replacement and refurbishment items and regulatory driven upgrades will be as follows:
  - i. “Sludge Receiving Facilities” at 50% to SOCWA; and
  - ii. “Sludge Drying Facilities” at 15.3% to SOCWA.

L. SOCWA's overall cost participation percentages are summarized as follows:

	<b>"Sludge Receiving Facilities"</b>	<b>"Sludge Drying Facilities"</b>
<b>Design</b>	50%	100% of variance
<b>Construction</b>	50%	15.3%
<b>O&amp;M</b>	Based on wet tons	Based on wet tons, except dryer gas is 100% purchased
<b>Replacement &amp; Refurbishment</b>	50%	15.3%

## 2. CAPITAL FACILITIES AND COSTS

- A. IRWD will retain an engineer for design (Black & Veatch) and construction management of the "Sludge Receiving Facilities" and "Sludge Drying Facilities" at Michelson Water Recycling Plant (MWRP); IRWD will include in the capital costs SOCWA's share of the engineering services of the "Sludge Receiving Facilities" and "Sludge Drying Facilities". The design variance for the "Sludge Receiving Facilities" will be shared 50%/50% between SOCWA and IRWD. The design variance for the "Sludge Drying Facilities" will be allocated to SOCWA 100%.
- B. Capital costs will be based upon the "Final Construction Cost" (defined as bid amount plus any approved change orders for the "Sludge Receiving Facilities" and the "Sludge Drying Facilities"), and design and construction management fees by outside consultants (including but not limited to surveyor, geotechnical, environmental, specialized testing, and legal). IRWD staff's design and construction management costs will not be included the "Final Construction Cost".
- C. Separate bid form line items will be included for the general contractor to document the capital costs for the "Sludge Receiving Facilities" and "Sludge Drying Facilities" such that the cost allocation can be defined.

D. SOCWA will install and use sludge strain presses at any and all of their wastewater treatment plant(s), such as the Regional and Latham plants, that will be the source of digested and dewatered sludge trucked to the "Project" for processing. The strain press shall remove coarse material such as paper, wood, plastic, tinfoil, rubber, debris, fiber, hair and textiles from the sludge. Design, construction and operation of the strain presses will be funded by SOCWA outside of this agreement.

### **3. CAPITAL FINANCING OPTION**

- A. If requested by SOCWA, IRWD is willing to amortize SOCWA's share of the capital costs over 20 years.
- B. Interest rate shall be based upon a municipal bond market index for similar credit quality and transactions:
- i. Requirement to structure rate/terms consistent with IRWD's Investment Policy and qualify as "arms length" investment transaction.
  - ii. Rate would be based on a current *Bloomberg Municipal Utility* debt rate and depend on SOCWA's expected credit rating; term of 20-years with rate resets every five years using the then applicable *Bloomberg Municipal Utility* rate for the remaining term.
  - iii. There is flexibility for IRWD and SOCWA to structure mutually acceptable maturity and pre-payments terms.
  - iv. Collateral would be SOCWA's capacity reservation right in the system.
  - v. IRWD would assess no cost of issuance.
- C. SOCWA would be billed amortized capital payments quarterly: July, October, January and April.
- D. SOCWA would make amortized capital payments for the next 20 years whether or not SOCWA sends sludge to MWRP in any given year.
- E. SOCWA may pre-pay the capital costs at any time over the 20 period without penalty.

#### **4. O&M COSTS**

- A. O&M will be billed quarterly: July, October, January and April.
- B. O&M will be based on previous year's actual expenses for the same quarter.
- C. O&M costs will be based upon cost of labor, chemicals, utilities, expendables, laboratory, and regulatory fees associated with sludge receiving, drying, and pellet reuse or disposal.
- D. O&M costs for IRWD's labor will include IRWD's contract G&A rate (approximately 80%) based upon IRWD labor hours associated with sludge receiving and drying.
- E. O&M costs allocated to SOCWA for use of the "Sludge Receiving Facilities" and the "Sludge Drying Facilities" shall be based upon SOCWA's pro-rata share as defined in DESIGN AND OPERATING BASIS, above, adjusted as described in G (pellet acquisition) and H (purchased dryer gas) below..
- F. O&M costs or revenue for pellet reuse or disposal shall be based upon SOCWA's pro-rata share as defined in DESIGN AND OPERATING BASIS, above.
- G. If SOCWA takes delivery at the "Project" of its pro-rata share of the dried pellets based on the DESIGN AND OPERATING BASIS, above, then SOCWA O&M costs will not include in the cost or revenue of pellet reuse or disposal.
- H. SOCWA's sludge will be dried with 100% purchased natural gas and O&M costs will be charged accordingly; no bio-gas credit from IRWD's digestion facilities will be given for drying SOCWA's sludge.
- I. O&M billings will be reconciled and available for audit by SOCWA at end of IRWD's fiscal year, June 30.

#### **5. CAPACITY RESERVATION RIGHTS AND TERM**

- A. SOCWA's capital payments will be for the purchase of a "Capacity Reservation Right" to process sludge in the IRWD facilities as defined in the DESIGN AND OPERATING BASIS, above. No physical ownership of the "Project" or capacity will be acquired by SOCWA.

# EXHIBIT "E"

## IRVINE RANCH WATER DISTRICT

### Expenditure Authorization

**Project Name:** MWRP BIOSOLIDS HANDLING & ENERGY RECOVERY FACILITY

**Project No:** 20847 **EA No:** 2

**ID Split:** Sewer Tributary to MWRP (11/08)

**Improvement District (ID) Allocations**

**Project Manager:** MALLOY, STEVEN

**Project Engineer:** SPANGENBERG, CARL

**Request Date:** January 12, 2011

**ID No. Allocation % Source of Funds**

ID No.	Allocation %	Source of Funds
211	10.8	CAPITAL FUND
212	4.6	BONDS YET TO BE SOLD**
213	.3	BONDS YET TO BE SOLD**
221	21.6	BONDS YET TO BE SOLD**
230	14.2	BONDS YET TO BE SOLD**
250	33.5	BONDS YET TO BE SOLD**
253	1.2	BONDS YET TO BE SOLD**
261	8.8	BONDS YET TO BE SOLD**
282	2.4	BONDS YET TO BE SOLD**
284	2.6	BONDS YET TO BE SOLD**

**Total 100.0%**

**Summary of Direct Cost Authorizations**

<b>Previously Approved EA Requests:</b>	\$14,686,400
<b>This Request:</b>	\$1,344,000
<b>Total EA Requests:</b>	\$16,030,400
<b>Previously Approved Budget:</b>	\$141,000,000
<b>Budget Adjustment Requested this EA:</b>	\$0
<b>Updated Budget:</b>	\$141,000,000
<b>Budget Remaining After This EA</b>	\$124,969,600

**Comments:**

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING OUTSIDE	0	0	0	0	0	0	11/10	12/13
ENGINEERING DESIGN - IRWD	0	600,000	600,000	0	600,000	600,000	7/10	11/11
ENGINEERING DESIGN - OUTSIDE	920,000	7,500,000	8,420,000	920,000	7,500,000	8,420,000	7/10	11/11
DESIGN STAFF FIELD SUPPORT	0	87,000	87,000	0	87,000	87,000	7/10	11/11
ENGINEERING - CA&I IRWD	0	0	0	0	3,000,000	3,000,000	12/11	7/15
ENGINEERING - CA&I OUTSIDE	330,000	5,500,000	5,830,000	330,000	6,300,000	6,630,000	12/11	7/15
CONSTRUCTION FIELD SUPPORT	0	0	0	0	98,700	98,700	12/11	7/15
CONSTRUCTION	0	0	0	(1,280,000)	116,300,000	115,020,000	12/11	7/15
LEGAL	0	0	0	0	100,000	100,000	12/11	7/15
WATER QUALITY	30,000	0	30,000	30,000	0	30,000	7/10	7/15
ENGINEERING ENVIRONMENTAL-OUTS	0	300,000	300,000	0	300,000	300,000	7/10	9/11
Contingency - 5.00% Subtotal	\$64,000	\$699,400	\$763,400	\$0	\$6,714,300	\$6,714,300		
<b>Subtotal (Direct Costs)</b>	<b>\$1,344,000</b>	<b>\$14,686,400</b>	<b>\$16,030,400</b>	<b>\$0</b>	<b>\$141,000,000</b>	<b>\$141,000,000</b>		
Estimated G/A - 195.00% of direct labor*	\$58,500	\$1,339,700	\$1,398,200	\$58,500	\$7,382,200	\$7,440,700		
<b>Total</b>	<b>\$1,402,500</b>	<b>\$16,026,100</b>	<b>\$17,428,600</b>	<b>\$58,500</b>	<b>\$148,382,200</b>	<b>\$148,440,700</b>		
Direct Labor	\$30,000	\$687,000	\$717,000	\$30,000	\$3,785,700	\$3,815,700		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

**EA Originator:**

*Carl Spangenberg SLM* \_\_\_\_\_ 1/12/11

**Department Director:**

*Kevin L. Burtas* \_\_\_\_\_ 1/12/11

**Finance:**

\_\_\_\_\_

**Board/General Manager:**

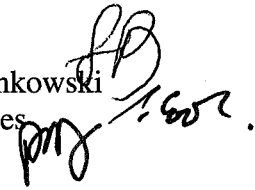
\_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$151,410,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.





January 24, 2011  
Prepared and  
Submitted by: L. Bonkowski  
Approved by: P. Jones



CONSENT CALENDAR

MINUTES OF REGULAR BOARD MEETING

SUMMARY:

Provided are the minutes of the January 10, 2011 Regular Board Meeting, January 14, 2011 Adjourned Regular Board Meeting, and January 17, 2011 Regular Board Meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JANUARY 10, 2011 REGULAR BOARD MEETING, THE JANUARY 14 ADJOURNED REGULAR BOARD MEETING, AND THE JANUARY 17, 2011 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

- Exhibit "A" – January 10, 2011 Regular Board Meeting
- Exhibit "B" – January 14, 2011 Adjourned Regular Board Meeting
- Exhibit "C" – January 17, 2011 Regular Board Meeting



## EXHIBIT "A"

### MINUTES OF REGULAR MEETING – JANUARY 10, 2011

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 Vice President Swan on January 10, 2011 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Matheis, LaMar, Swan, and Withers

Directors Absent: Reinhart

Also Present: General Manager Jones, Assistant General Manager Cook, Director of Planning/Water Resources Heiertz, Director of Engineering Burton, Director of Finance Cherney, Assistant Treasurer Jacobson, Director of Information Services Mossbarger, Director of Recycling Posey, Secretary Bonkowski, Legal Counsel Arneson, Director of Public Affairs Beeman, Director of Operations Pedersen, Mr. Alex Aguilar, Mr. Paul Weghorst, Mr. Bruce Newell, Mr. Jim Reed, and other members of the public and staff.

#### WRITTEN COMMUNICATIONS:

Vice President Swan noted that a letter had been received from Mesa Consolidated Water District asking for the District to endorse Mr. James Fisler for the Local Agency Formation Commission's Special District Alternate Seat.

#### ORAL COMMUNICATION:

1) Mrs. Joan Irvine Smith addressed the Board of Directors with respect to the Dyer Road Wellfield. Mrs. Smith said it was her understanding that currently wells C-8 and C-9 will operate in accordance with the District's annual pumping plan. Wells 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 16, 17 and 18 will be off. The District's currently planned pumping for January is 2,940 AF. This was confirmed by Mr. Jones, General Manager of the District.

With respect to the Orange County Basin Groundwater Conjunctive Use Program being coordinated by Municipal Water District of Orange County (MWDOC) and Orange County Water District (OCWD), a Notice of Completion was approved by the OCWD Board of Directors on March 19, 2009. Metropolitan Water District has given notice to OCWD to extract 22,000 acre feet in fiscal year 2009/10. The extraction is being performed by agencies that constructed conjunctive use wells under this program. IRWD is not a participant. This was confirmed by Mr. Jones.

With respect to the OCWD annexation of certain IRWD lands, on June 5, 2009, IRWD received a letter from OCWD noting that OCWD has completed the formal responses to comments they previously received on the draft program Environmental Impact Report. The letter further noted that with this task completed, OCWD has exercised its right to terminate the 2004 Memorandum of Understanding (MOU) regarding annexation. OCWD also indicated that due to the lack of progress on the annexation issue, the draft program Environmental Impact Report will not be completed. On June 8, 2009, the OCWD completed the Long-Term Facilities Plan which was

received and filed by the OCWD Board in July 2009. Staff has been coordinating with the City of Anaheim (Anaheim) and Yorba Linda Water District (YLWD) on their most recent annexation requests and has reinitiated the annexation process with OCWD. IRWD, YLWD and Anaheim have negotiated a joint MOU with OCWD to process and conduct environmental analysis of the annexation requests. The MOU was approved by the OCWD Board on July 21, 2010. This was confirmed by Mr. Jones.

With respect to the Groundwater Emergency Service Plan, IRWD has an agreement in place with various south Orange County water agencies, MWDOC and OCWD, to produce additional groundwater for use within IRWD and transfer imported water from IRWD to south Orange County in case of emergencies. IRWD has approved the operating agreement with certain south Orange County water agencies to fund the interconnection facilities needed to affect the emergency transfer of water. MWDOC and OCWD have also both approved the operating agreement. This was confirmed by Mr. Jones.

2) Vice President Swan noted that Mr. James Fisler has asked to speak to the Board relative to Item No. 10 (see page five).

ITEMS TOO LATE TO BE AGENDIZED – None

#### PRESENTATION

#### NATIONAL PURCHASING INSTITUTE ACHIEVEMENT OF EXCELLENCE IN PROCUREMENT AWARD

Purchasing Manager Aguilar presented the Achievement of Excellence in Procurement Award given to IRWD by the National Purchasing Institute for the 10<sup>th</sup> consecutive year. The award is achieved by those organizations that demonstrate excellence in procurement by obtaining a high score on a rating of standardized criteria. General Manager Jones recognized Mr. Aguilar and staff' efforts.

#### CONSENT CALENDAR

Vice President Swan said he had received information that staff would like to pull Item No. 7, Revisions to Conflict of Interest Code, which will be agendized at a future Board meeting. There being no objection, on MOTION by Withers, seconded and unanimously carried, CONSENT CALENDAR ITEMS 4 THROUGH 6 WERE APPROVED AS PRESENTED.

#### 4. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the December 13, 2010 Regular Board Meeting be approved as presented.

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

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

CONSENT CALENDAR (CONTINUED)

6. ORCHARD HILLS BOOSTER PUMP STATION AND TOMATO SPRINGS  
BOOSTER PUMP STATION AIR COMPRESSOR MODIFICATIONS PROJECT –  
FINAL ACCEPTANCE

Recommendation: That the Board authorize the General Manager to accept construction of the Orchard Hills Booster Pump Station and Tomato Springs Booster Pump Station Air Compressor Modifications for projects 11456 and 31456; authorize the General Manager to file a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

ACTION CALENDAR

2010 SERIES B GENERAL OBLIGATION BONDS FIRST SUPPLEMENTAL INDENTURE  
APPROVAL

General Manager Jones reported that on November 22, 2010, the IRWD Board adopted a Resolution of Issuance for \$175,000,000 of General Obligation bonds which included approval of the Indenture of Trust, the Preliminary Official Statement and a covenant that the Board will approve, execute and deliver a First Supplemental Indenture of Trust for the purpose of making a pledge of revenues to the bonds at its first meeting held after January 1, 2011, but in no event later than January 31, 2011. Mr. Jones said that consistent with the District's covenant, staff recommends that the Board adopt a resolution approving the First Supplemental Indenture of Trust for the 2010 Series B General Obligation bonds (2010B Bonds), and authorize and direct the President and Secretary to execute the same. He said that the purpose of the First Supplemental Indenture is to incorporate the provisions of Senate Bill 613 (SB 613) allowing IRWD to pledge the net revenues of the District to certain General Obligation bond issues. SB 613 was signed by the Governor in late 2010 and became effective January 1, 2011.

Vice President Swan reported that various matters in regard to the 2010 B Bonds were acted upon or reviewed at meetings of the Finance and Personnel Committee on October 5, 2010 and November 2, 2010 and the Board on October 8, 2010, October 25, 2010, November 8, 2010 and November 22, 2010. On MOTION by Swan, seconded and unanimously carried, THE FOLLOWING RESOLUTION WAS ADOPTED BY TITLE:

RESOLUTION NO. 2011-1

RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE IRVINE RANCH WATER DISTRICT APPROVING  
FIRST SUPPLEMENTAL INDENTURE OF TRUST (BONDS  
OF IRVINE RANCH WATER DISTRICT SERIES 2010B)

## DECEMBER 2010 STORM DAMAGE RECOVERY EFFORT – RATIFICATION OF EMERGENCY REPAIR CONTRACTS

General Manager Jones reported that on December 22, 2010, IRWD's water system facilities sustained significant damages due to the severe rainstorms. Staff contacted Paulus Engineering, Inc. to assist with major emergency repairs required for the water mains in Williams Canyon and the 39-inch Irvine Lake Pipeline (ILP) in Santiago Creek at Irvine Park.

Using a PowerPoint presentation, Director of Operations Pedersen summarized the damages. Mr. Pedersen said that a large portion of Williams Canyon Road was washed away on December 22, 2010, initially preventing all vehicular access. Approximately 700 feet of an 8-inch PVC potable water main near the creek crossing was destroyed along with the roadway. Also, a segment of 12-inch AC pipe near the Williams Canyon Pump Station was damaged. IRWD crews and Paulus Engineering, Inc. began making repairs on December 23 once the flood waters began to recede. The repairs consisted of constructing two bypass water mains and restoring numerous broken water services. The first bypass, approximately 200 feet of 12-inch PVC pipeline, was completed on December 24, 2010 and allowed Williams Reservoir to be placed back in service. The second bypass, approximately 700 feet of above-ground 8-inch HDPE main, was completed on December 28, 2010 and allowed Benner Reservoir to be placed back in service.

Mr. Pedersen said that in Modjeska Canyon, the 12-inch raw water supply pipeline from Harding Canyon Dam to Manning Water Treatment Plant and an adjacent 8-inch potable water main broke. The pipelines were damaged when the creek washed away a portion of a residential back yard and exposed the pipelines. He said that both pipelines remain isolated until repair work can be coordinated with the property owner.

Mr. Pedersen said that approximately 200 feet of the 39-inch Irvine Lake Pipeline (ILP) washed out in Santiago Creek at Irvine Park. One entire segment of the pipeline was washed a short distance downstream. He said that staff secured two bids for the emergency repair work, from Paulus Engineering, Inc. for \$172,101.17 and from J.R. Filanc Construction Company for \$209,450. On January 4, 2011, the General Manager authorized the low bidder, Paulus Engineering, Inc., to begin the emergency repair work which is expected to require approximately two weeks for completion. In accordance with the February 6, 1928 Agreement and its amendments, the cost share for construction and support work on the pipeline is 75 percent IRWD and 25 percent Serrano Water District (SWD). SWD countersigned a letter agreement regarding the estimated cost for the work and their responsibility for 25 percent of the total cost.

Mr. Bruce Newell, a resident in Santiago Canyon, thanked the District for the quick response and its efforts in the community. Director Matheis thanked Mr. Pedersen and his crews for their efforts.

On MOTION by LaMar, seconded and unanimously carried, THE BOARD AUTHORIZED THE ADDITION OF PROJECTS 11570 AND 11571 IN THE AMOUNTS OF \$165,000 AND \$220,000 TO THE FISCAL YEAR 2010-11 CAPITAL BUDGET; APPROVED EXPENDITURE AUTHORIZATIONS FOR PROJECTS 11570 AND 11571 IN THE AMOUNTS OF \$165,000 AND \$220,000; AND THE GENERAL MANAGER'S EXECUTION OF EMERGENCY CONSTRUCTION CONTRACTS WITH PAULUS ENGINEERING, INC., FOR PROJECTS 11570 AND 11571 IN THE AMOUNTS OF \$165,000 AND \$220,000 WAS RATIFIED.

SUPPORT FOR CHARLEY WILSON FOR THE REGULAR SPECIAL DISTRICT POSITION ON THE ORANGE COUNTY LOCAL AGENCY FORMATION COMMISSION

General Manger Jones reported that the regular special district position on the Orange County Local Agency Formation Commission (LAFCO), formerly held by Commissioner Arlene Schafer, is now vacant. Mr. Jones said that LAFCO announced that it is now accepting nominations for this position and, if necessary, the alternate special district position. Nominations are due to LAFCO by January 14, 2011. He said that staff recommends that the Board support Mr. Charley Wilson for the regular special district position, and designate Director John Withers as the alternate to vote on behalf of the District on January 27, 2011, if IRWD's Board President is unavailable to cast IRWD's vote.

Mr. Jones said that if Charley Wilson is successful, the alternate special district position will become vacant and an election for this position will also be held on January 27, 2011. As noted earlier, staff has received written communication that Mr. James Fisler is interested in the alternate seat. He said that staff would like to carry over taking a position on an alternate position until the January 24 Board meeting as nominations for this position do not close until January 14, 2011.

Director Withers said that both Mr. Charley Wilson and Ms. Cheryl Brothers are excellent candidates for this position; however, since Mr. Wilson has been the alternate for 10 years, that he has earned the District's support for the regular Special District position. On MOTION by Withers, seconded and unanimously carried, THE BOARD SUPPORTED CHARLEY WILSON FOR THE REGULAR SPECIAL DISTRICT POSITION ON LAFCO. Director LaMar said he would like the Board to defer the Alternate Special District position recommendation until the January 24 Board meeting. Mr. James Fisher introduced himself to the Board and said that he has been attending LAFCO Board meetings on a regular basis for over a year. He then provided an overview of his background of professional and governmental experiences and asked the Board for their support. On MOTION by LaMar, seconded and unanimously carried, JOHN WITHERS WAS DESIGNATED AS THE ALTERNATE TO VOTE ON BEHALF OF THE DISTRICT ON JANUARY 27, 2011 IF THE BOARD PRESIDENT IS UNAVAILABLE TO CAST THE IRVINE RANCH WATER DISTRICT VOTE. Mr. Jones said that he would agendize an item for the January 24, 2011 Board relative to the Alternate Special District position on the LAFCO Board.

General Manager's Report

Mr. Jones reported that he attended MWD's Water Resources Committee meeting today and the item on Wells 21/22 was approved. He said that this item will go before its Board on Tuesday.



He said as a follow-up to the item on soil erosion downstream of the Syphon Reservoir, as noted in his Weekly Report, that the consultant believes the erosion to be superficial and that staff is putting a plan in place to address this issue.

Mr. Jones further said that last week he received the final MWDOC agreement and that he finds the language to be consistent with what was agreed to among the South County agencies. He said that an item will be placed on the January 24, 2011 Board agenda for approval.

#### DIRECTORS' COMMENTS

Director LaMar said that he attended two newly-elected official briefings with staff, one with Mr. Don Wagner and another with Mr. Jeff Lalloway, providing them an overview of IRWD issues. He also said that on very short notice he had an opportunity to meet with Mr. Scott Baugh and Mr. Kevin McCarthy asking for support of IRWD's Syphon Reservoir.

Director Withers reminded the Board that the County of Orange will be administering Oaths of Office tomorrow at 9:30 a.m. for Supervisors Moorlach, Nelson, and Bates. He said that this week he will be attending a LAFCO meeting and a CASA conference in Palm Desert.

Director Matheis reported that she had an opportunity to participate in an ACWA Legal Affairs response on the Little Hoover Report relative to how bond funds are distributed.

Vice President Swan reported on his attendance at a WACO monthly meeting and a West Basin meeting. He also said that he met twice with the Discovery Science Center representatives and that he provided them information on IRWD's Environmental Learning Center visioning documents and also provided them with a tour of IRWD's San Joaquin Wildlife Sanctuary.

#### ADJOURNMENT

Vice President Swan adjourned the meeting to Friday, January 14, 2011 at 7:30 a.m. in the Multi-purpose Room to hold a Strategic Planning Workshop.

APPROVED and SIGNED this 24th day of January, 2011.

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President  
IRVINE RANCH WATER DISTRICT

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Secretary  
IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

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Legal Counsel - Bowie, Arneson, Wiles & Giannone



## EXHIBIT "B"

### MINUTES OF ADJOURNED REGULAR MEETING – JANUARY 14, 2011

The Adjourned Regular Meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order by President Reinhart at 7:30 a.m., January 14, 2011 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

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

Directors Absent: None

Also Present: General Manager Jones, Assistant General Manager Cook, Legal Counsel Arneson, Ms. Debby Cherney, Mr. Kevin Burton, Mr. Greg Heiertz, Mr. Dave Pedersen, Ms. Beth Beeman, Mr. Tony Mossbarger, Mr. Wayne Posey, Mr. John Hills, Ms. Janet Wells, Mr. Wayne Clark, Mr. Joe Adams, Mr. Mike McGee, Ms. Janet Yamaguchi and Sean Fitzgerald.

COMMUNICATIONS TO THE BOARD - None

### WORKSHOP

General Manager Jones reviewed the agenda, ground rules and desired outcomes of the workshop.

### DISCOVERY SCIENCE CENTER

Director of Public Affairs Beeman introduced the Discovery Science Center team. Using a PowerPoint presentation, Mr. Joe Adams, Executive Director, provided an overview of the plan, infrastructure and fund raising. Mr. Mike McGee, Vice President of Finance, provided an overview of the business plan for revenues. Vice President Swan said that he would like to make a motion to move the recommendation and that that it was with the understanding that the \$85,000 is the total of IRWD's participation for the feasibility study. He asked staff to schedule a workshop to discuss IRWD's ultimate participation. On MOTION by Swan, seconded and unanimously carried, **THE BOARD AUTHORIZED THE ADDITION OF \$85,000 TO THE FISCAL YEAR 2010-11 OPERATING BUDGET USING UNDESIGNATED OVER-ALLOCATION USE REVENUES FOR THE RETENTION OF DISCOVERY SCIENCE CENTER TO COMPLETE A DESIGN FEASIBILITY STUDY FOR THE WATER CONSERVATION GARDENS AND WATER EDUCATION PAVILION AT DISCOVERY GARDENS WHICH IS CONTINGENT UPON THE PRIOR EXECUTION BY DISCOVERY SCIENCE CENTER OF A LEASE FOR GREAT PARK SITE LOCATION AND RECEIPT OF \$3 MILLION BY DISCOVERY SCIENCE CENTER OF PROPOSITION 84 FUNDING, \$2.5 MILLION FROM THE GREAT PARK CORPORATION, \$500,000 FROM GREAT PARK CONSERVANCY, AND \$250,000 FROM SOUTHERN CALIFORNIA EDISON.**

## IRWD'S 50 ANNIVERSARY PLANNING

Using a PowerPoint presentation, Director of Public Affairs Beeman presented staff's ideas of activities and monthly events and the use of various communications outreach media to celebrate the anniversary. The Board members made suggestions for the celebration including Director Withers' suggestion that the District adopt resolutions thanking everyone who had been a part of IRWD's success over the last 50 years. Vice President Swan suggested devoting a month to each decade of accomplishments, interspersed with months commemorating the various milestones instead of each month noting different areas of achievement.

## IRWD GOALS AND OBJECTIVES

General Manager Jones reviewed the goals and objectives. The Board members made suggestions on several of the items listed.

## ELECTION OF OFFICERS

General Manager Jones acted as temporary Chair and called for nominations for President. Vice President Swan nominated himself, and Director Withers nominated Director LaMar. On MOTION, seconded, and unanimously carried, **NOMINATIONS FOR PRESIDENT WERE CLOSED**. Director Swan highlighted his involvement in a significant part of the 50 years of the District's achievements and said that he expects to serve as President approximately every five years. He expressed his concerns and attempted to determine why this was not the case. Director Swan concluded by saying he hoped to keep this dialog open. Director LaMar provided an overview of his experience, his belief that the District was the best water district and his desire to serve in a leadership capacity on the Board. Director Matheis said she supported Director Swan, and she said that the unity of the Board and sense of duty to the organization are a key strength of the organization. General Manger Jones called for a vote. Director Matheis made a motion for Director Swan for President, which was seconded by Swan, but the vote was not carried. On MOTION, seconded and carried, (4-0) (Withers, Reinhart, Matheis, LaMar voting aye, and Swan abstaining), **STEVE LAMAR WAS ELECTED PRESIDENT**.

President LaMar called for nominations for Vice President. Director Reinhart nominated Director Matheis as Vice President. There being no other nominations, the nominations were closed. On MOTION, seconded and unanimously carried, **MARY AILEEN MATHEIS WAS ELECTED VICE PRESIDENT**.

## IRWD LONG-TERM STRATEGIC PLANING EXERCISE

Under the Values statement, staff was asked to add a statement on wastewater; under Strategic Objectives, staff was asked to add a leadership objective; and under Strategic Initiatives, the Board members made suggestions for additions, deletions, and modifications.

## ADJOURNMENT

There being no further business, President LaMar adjourned the meeting.

APPROVED and SIGNED this 24th day of January, 2011.

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President, IRVINE RANCH WATER DISTRICT

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Secretary, IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

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Legal Counsel - Bowie, Arneson, Wiles & Giannone



EXHIBIT "C"

MINUTES OF REGULAR MEETING – JANUARY 17, 2011

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order by Secretary Bonkowski at 5:00 p.m., January 17, 2011 in the District Office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: None

Directors Absent: LaMar, Reinhart, Matheis, Withers, and Swan

In the absence of a quorum, Secretary Bonkowski adjourned the meeting.

APPROVED and SIGNED this 17th day of January, 2011.

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President, IRVINE RANCH WATER DISTRICT

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Secretary, IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

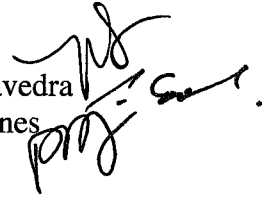
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Legal Counsel - Bowie, Arneson, Wiles and Giannone





January 24, 2011  
Prepared and  
Submitted by: N. Savedra  
Approved by: P. Jones



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

1/19/11	OCWA January Meeting
1/20/11	New Water Supply Coalition Annual Board Meeting
1/26/11	Coordination Meeting with Paul Jones re: District activities
1/27/11	ISDOC Quarterly Meeting
2/24/11	MWDOC Water Policy Forum

Mary Aileen Matheis

1/19/11	Meeting and field tour with MWDOC Board Director Ackerman
2/24/11	MWDOC Water Policy Forum

Doug Reinhart

2/24/11	MWDOC Water Policy Forum
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Peer Swan

1/27-28/11	ACWA Board of Directors' Meeting
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John Withers

2/24/11	MWDOC Water Policy Forum
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RECOMMENDATION:

RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LaMAR, MARY AILEEN MATHEIS, DOUG REINHART, PEER SWAN AND JOHN WITHERS AS DELINEATED ABOVE.

LIST OF EXHIBITS:

None

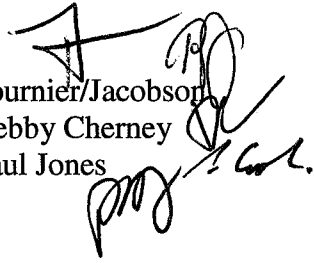


January 24, 2011

Prepared by: Fournier/Jacobson

Submitted by: Debby Cherney

Approved by: Paul Jones



## CONSENT CALENDAR

### DECEMBER 2010 FINANCIAL REPORTS

#### SUMMARY:

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

- A. The Investment Summary Report for December 2010. This Investment Summary Report is in conformity with the 2010 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 December 31, 2010, as outlined in Exhibit "B".
- C. The Summary of Wire Transfers and ACH payments in the total amount of \$14,423,437.64, as outlined in Exhibit "C".
- D. The December 2010 tabulation of Warrant Nos. 316193 through 317039, Workers' Compensation distributions, and voided checks in the total amount of \$8,574,911.74, as outlined in Exhibit "D".

#### FISCAL IMPACTS:

As of December 31, 2010, the book value of the investment portfolio was \$445,365,374 with a 0.49% rate of return and a market value of \$445,886,879. Based on the District's December 31, 2010 real estate investment rate of return of 8.70%, the District's weighted average return for the fixed income and real estate investments is 1.73%.

As of December 31, 2010, the total notional amount of the interest rate swap portfolio was \$130 million of fixed payer swaps. Cash flow in December from all swaps was a negative \$636,860 and a negative \$3,700,914 fiscal year to date. The mark-to-market value of all swaps was approximately \$99.2 million at month-end.

Wire transfers, ACH payments, and checks issued for debt service, accounts payable, payroll and water purchases for December totaled \$22,998,349.38.

#### 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 AND THE MONTHLY INTEREST RATE SWAP SUMMARY FOR DECEMBER 2010; APPROVE THE DECEMBER 2010 SUMMARY OF WIRE TRANSFERS AND ACH PAYMENTS IN THE TOTAL AMOUNT OF \$14,423,437.64; AND APPROVE THE DECEMBER 2010 WARRANTS NOS. 316193 THROUGH 317039, WORKERS' COMPENSATION DISTRIBUTIONS AND VOIDED CHECKS IN THE TOTAL AMOUNT OF \$8,574,911.74.

LIST OF EXHIBITS:

Exhibit "A" - Investment Summary Report

Exhibit "B" - Monthly Interest Rate Swap Summary

Exhibit "C" - Monthly Summary of Wire and ACH Transfers

Exhibit "D" - Tabulation of Warrants

IRVINE RANCH WARD DISTRICT  
INVESTMENT SUMMARY REPORT

Exhibit "A"

12/31/10

SHEET NO.	INTEREST PERIOD	FROM	THROUGH	NEXT RESSET	Cash	Maturity Date	Rating	INVESTMENT TYPE	ISSUER	PAR Amount	COUPON	YIELD	ETC	ORIGINAL COST	CARRY VALUE	MARKET VALUE	UNREALIZED GAIN/(LOSS)					
12/29/10	12/31/10	01/01/11	01/01/11	01/01/11				LAIF	State of California Tsy.	\$41,300,000	0.462%			\$41,300,000.00	\$41,360,352.64	60,352.64						
12/07/10		01/01/11						LAIF-JPA	State of California Tsy.	50,000,000	0.462%			\$50,000,000.00	\$50,073,066.15	73,066.15						
10/15/10		01/06/11						LAIF-2009A	State of California Tsy.	15,132,867	0.462%			\$15,132,867.34	\$15,154,981.35	22,114.01						
10/15/10		01/06/11						LAIF-2009B	State of California Tsy.	15,132,867	0.462%			\$15,132,867.34	\$15,154,981.35	22,114.01						
12/16/10		01/18/11						LAIF-BABS	State of California Tsy.	156,000,000	0.462%			\$156,000,000.00	\$156,227,966.39	227,966.39						
12/31/10								B of A Tsy. Reserves	Bank of America	3,331,797.56	0.009%			3,331,797.56	3,331,797.56							
06/08/09		01/14/11						FAMCA - Note	Fed Agricultural Mortgage Corp	9,900,000	4.875%	1.570%		10,414,800.00	9,911,440.00	9,912,870.00	1,430.00					
04/21/10		11/23/11						FRMA - Note	Fed Natl Mortgage Assoc	5,000,000	1.000%	0.841%		5,012,550.00	5,007,041.82	5,028,400.00	21,358.18					
09/22/10		06/08/12						FFCB - Note	Fed Farm Credit Bank	5,000,000	0.640%	0.640%		5,000,000.00	5,000,000.00	150.00						
09/21/10		06/13/11						FFCB - Note	Fed Farm Credit Bank	5,000,000	0.550%	0.550%		5,000,000.00	5,000,000.00	150.00						
12/16/10		02/23/11						FHLB - Note	Fed Home Loan Bank	5,000,000	0.500%	0.745%	2.710%	4,979,500.00	4,980,032.47	4,994,300.00	14,267.53					
09/17/10		03/17/11						FFCB - Note	Fed Farm Credit Bank	8,000,000	0.700%	0.700%		8,000,000.00	8,005,520.00	5,520.00						
10/25/10		10/25/12						FHLB - Note	Fed Home Loan Bank	5,000,000	0.550%	0.575%	0.750%	4,997,500.00	4,997,732.56	4,983,900.00	(13,832.56)					
11/04/10		04/26/11						FFCB - Note	Fed Farm Credit Bank	5,000,000	0.490%	0.515%	0.590%	4,997,500.00	4,997,607.34	4,987,100.00	(10,507.34)					
11/09/10		11/09/12						FFCB - Note	Fed Farm Credit Bank	5,000,000	0.500%	0.500%		5,000,000.00	4,977,600.00	(22,400.00)						
12/28/10		06/28/11						FNMA - Note	Fed Natl Mortgage Assoc	5,000,000	0.880%	0.880%		4,999,500.00	4,988,600.00	(11,400.00)						
12/28/10		03/28/11						FHLMC - Note	Fed Home Loan Mortgage Bank	5,000,000	0.900%	0.900%		5,000,000.00	4,999,502.74	2,447.26						
11/23/10		N/A						CA ST-RANS-A2	State of California	10,000,000	3.000%	1.751%		10,073,500.00	10,070,790.32	10,073,500.00	2,709.68					
09/18/08	12/29/10	01/04/11	01/05/11	01/05/11				VRDO	East Bay MUD	9,800,000	0.320%	0.320%		9,800,000.00	9,800,000.00							
12/01/10	12/29/10	01/04/11	01/05/11	01/05/11				VRDO	Chino Basin Fin	11,620,000	0.290%	0.290%		11,620,000.00	11,620,000.00							
10/09/08	12/30/10	01/05/11	01/06/11	01/06/11				VRDO	Ca Water Series C	2,000,000	0.330%	0.330%		2,000,000.00	2,000,000.00							
09/01/10	12/29/10	01/04/11	01/05/11	01/05/11				VRDO	Rancho California WrD	6,700,000	0.350%	0.350%		6,700,000.00	6,700,000.00							
08/20/09	12/29/10	01/04/11	01/05/11	01/05/11				VRDO	Rancho California WrD	3,000,000	0.300%	0.300%		3,000,000.00	3,000,000.00							
07/20/10	12/30/10	01/05/11	01/06/11	01/06/11				VRDO	Metropolitan Water	10,000,000	0.370%	0.370%		10,000,000.00	10,000,000.00							
08/16/10	12/29/10	01/04/11	01/05/11	01/05/11				VRDO	Sacramento WTR	10,000,000	0.290%	0.290%		10,000,000.00	10,000,000.00							
08/27/10	12/30/10	01/05/11	01/06/11	01/06/11				VRDO	Metropolitan Water	5,000,000	0.340%	0.340%		5,000,000.00	5,000,000.00							
08/30/10	12/30/10	01/05/11	01/06/11	01/06/11				VRDO	Orange Cnty Wr	5,800,000	0.340%	0.340%		5,800,000.00	5,800,116.00	116.00						
10/27/10	12/29/10	01/04/11	01/05/11	01/05/11				VRDO	Orange Cnty Wr	5,000,000	0.270%	0.270%		5,000,000.00	5,000,000.00							
11/18/10	12/30/10	01/05/11	01/06/11	01/06/11				VRDO	LA Waste Wr	5,000,000	0.290%	0.290%		5,000,000.00	5,000,000.00							
12/22/10	12/29/10	01/04/11	01/05/11	01/05/11				VRDO	Eastern Mun Wr Dist CA	8,000,000	0.290%	0.290%		8,000,000.00	8,000,000.00							
<b>SUB-TOTAL</b>																						
															\$436,292,382.24	\$435,781,679.49	\$436,177,301.43	\$395,621.95				
<b>RESTRICTED CASH (Swap, Collateral Deposits)</b>																						
12/01/10	12/01/10	12/31/10						Collateral Deposit	Citi-Group	\$9,583,694	0.194%			\$9,583,694.00	\$9,583,694.00							
<b>SUB-TOTAL</b>																						
															\$9,583,694.00	\$9,583,694.00						
<b>TOTAL INVESTMENTS</b>																						
															\$445,876,076.24	\$445,365,373.49	\$445,760,995.43					
<table border="0" style="width:100%"> <tr> <td style="width:15%">3,300.00</td> <td style="width:15%">(1,831,924.36)</td> <td style="width:15%">\$444,047,451.88</td> <td style="width:15%">\$391,655,000</td> <td style="width:15%">\$261,655,000</td> <td style="width:15%">\$444,047,452</td> </tr> </table>																	3,300.00	(1,831,924.36)	\$444,047,451.88	\$391,655,000	\$261,655,000	\$444,047,452
3,300.00	(1,831,924.36)	\$444,047,451.88	\$391,655,000	\$261,655,000	\$444,047,452																	

Outstanding Variable Rate Debt	Investment Portfolio	Real Estate Portfolio (3)	Weighted Avg. Return
Net Outstanding Variable Rate Debt (Less \$130 million fixed-payer swaps)			
Investment Balance:			
Investment to Variable Rate Debt Ratio:	0.49%	8.70%	1.73%
Portfolio - Average Number of Days To Maturity	0.01%	9.56%	2.21%

(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) No call Notice  
(5) Partial call

This Investment Summary Report is in conformity with the 2010 Investment Policy and provides sufficient liquidity to meet the next six months estimated expenditures.

IRVINE RANCH WATER DISTRICT

SUMMARY OF MATURITIES

12/31/10

PORTFOLIO \$445,301,226

DATE	TOTAL	%	LAIF	AGENCIES	MUNI	CAE REV NOTES	MONEY MARKET SAVINGS & SWEEP	Collateral + Deposit
1/11	\$382,301,226	85.85%	\$277,565,735	9,900,000	81,920,000		3,331,798	\$9,583,694
2/11								
3/11								
4/11								
5/11								
6/11	\$10,000,000	2.25%				10,000,000		
7/11								
8/11								
9/11								
10/11								
11/11	\$5,000,000	1.12%		5,000,000				
12/11								
<b>SUB-TOTAL</b>	<b>\$397,301,226</b>	<b>89.22%</b>	<b>\$277,565,735</b>	<b>14,900,000</b>	<b>81,920,000</b>	<b>10,000,000</b>	<b>3,331,798</b>	<b>\$9,583,694</b>
<b>13 Months - 2 YEARS</b>								
1/1/2012 - 3/31/2012								
4/1/2012 - 6/30/2012	\$10,000,000	2.25%						
7/1/2012 - 9/30/2012	\$13,000,000	2.92%						
10/1/2012 - 12/31/2012	\$25,000,000	5.61%						
<b>TOTALS</b>	<b>\$445,301,226</b>	<b>100.00%</b>	<b>\$277,565,735</b>	<b>62,900,000</b>	<b>81,920,000</b>	<b>10,000,000</b>	<b>3,331,798</b>	<b>\$9,583,694</b>
<b>% OF PORTFOLIO</b>			<b>62.33%</b>	<b>14.13%</b>	<b>18.40%</b>	<b>2.25%</b>	<b>0.75%</b>	<b>2.15%</b>

\* Return of posted collateral is dependant on interest rates.

**IRVINE RANCH WATER DISTRICT INVESTMENT SUMMARY REPORT**  
**INVESTMENT ACTIVITY**  
 Dec-10

**MATURITIES/SALES**

**PURCHASES**

DATE	SECURITY TYPE	PAR	YIELD	DATE	SECURITY TYPE	PAR	YIELD
12/1/2010	VRDO - Chino Basin 6/1/2032	\$11,620,000	0.24%	12/1/2010	VRDO - Chino Basin 6/1/2032	\$11,620,000	0.24%
12/23/2010	FNMA Note Due 12/23/10	\$4,000,000	1.07%	12/16/2010	FHLB Note Due 8/23/2012	\$5,000,000	0.75%
				12/22/2010	VRDO - Eastern Muni Wtr Dist 7/1/2020	\$8,000,000	0.31%
				12/28/2010	FHLMC Note Due 12/28/2012	\$5,000,000	0.90%
				12/28/2010	FNMA Note Due 12/28/2012	\$5,000,000	0.88%

**LAIF ACTIVITY**

12/01/10	LAIF - JPA	\$2,000,000
12/07/10	LAIF - JPA	\$2,000,000
12/09/10	LAIF	\$6,000,000
12/15/10	LAIF	(\$1,400,000)
12/16/10	LAIF - BABS	\$156,000,000
12/16/10	LAIF	\$6,300,000
12/22/10	LAIF	(\$2,000,000)
12/28/10	LAIF	(\$5,200,000)
12/29/10	LAIF	(\$1,500,000)
	Increase/(Decrease)	<u>\$163,700,000</u>

**COLLATERALIZED DEPOSIT ACTIVITY**

Balance Forward	\$15,825,351
CITIGROUP	(\$1,901,657)
MERRILL LYNCH	<u>(\$4,340,000)</u>
Balance at 12/31	<u>\$9,583,694</u>



Irvine Ranch Water District  
 Summary of Real Estate  
 12/31/2010

	ACQUISITION DATE	PROPERTY TYPE	OWNERSHIP INTEREST	ORIGINAL COST	RATE OF RETURN QUARTER ENDED Dec-10
Sycamore Canyon	Dec-92	Apartments	Fee Simple	43,550,810	10.87%
Wood Canyon Villas	Jun-91	Apartments	Limited Partner	\$ 6,000,000	7.90%
ITC (230 Commerce)	Jul-03	Office Building	Fee Simple	5,739,845	2.87%
Waterworks Business Pk.	Nov-08	Research & Dev.	Fee Simple	8,630,577	2.20%
				<u>\$ 63,921,232</u>	<u>8.70%</u>

IRVINE RANCH WATER DISTRICT  
 INVESTMENT SUMMARY REPORT  
 Joint Powers Agency - Investment Contracts

12/31/2010

Settlement Date	JPA Issue	Investment Contract	Original Cost	Current Par	Market Value 12/31/10	Market Value 09/30/10
10/25/1994	JPA - Issue #1	AIG Matched Funding Corp. 7.705% Due 2-15-14	\$ 407,878,616	\$ 306,642,500	\$ 282,375,100	\$ 282,375,100
10/25/1994	JPA - Issue #2	Federal National Mortgage Assoc. 8.18% Due 2-15-14	\$ 518,644,189	\$ 393,777,436	\$ 472,229,714	\$ 483,460,247
			<u>\$ 926,522,805</u>	<u>\$ 700,419,936</u>	<u>\$ 754,604,814</u>	<u>\$ 765,835,347</u>



Exhibit "B"

IRVINE RANCH WATER DISTRICT  
INTEREST RATE SWAP MONTHLY SUMMARY REPORT - DETAIL  
December 31, 2010

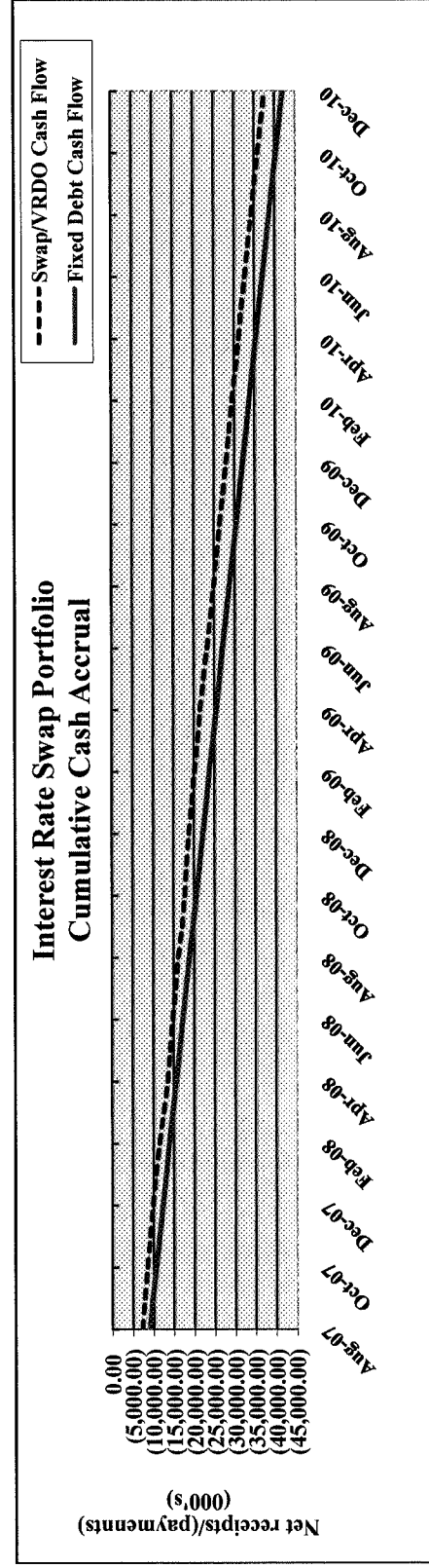
Prior Mo.	Current Mo.	12-Mo. Avg
0.26%	0.26%	0.27%

Effective Date	Maturity Date	Years to Maturity	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Cash Flow			Mark to Market Current Mark to Market	Unrealized Gain/(Loss)	Ttl Rtn to Dt Net Gain/(Loss)		
								Prior Month	Current Month	Fiscal YTD					
<b>Fixed Payer Swaps - By Effective Date</b>															
6/4/2006	6/4/2019	8.4	MIL	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (102,258)	\$ (102,229)	\$ (594,540)	\$ (3,259,112)	\$ 15,303,352	\$ (4,596,648)	\$ (7,955,760)	
6/4/2006	6/4/2019	8.4	CG	\$ 20,000,000	FXP	LIBOR	6.200%	\$ (102,258)	\$ (102,229)	\$ (594,540)	\$ (3,259,112)	\$ 15,183,264	\$ (4,816,736)	\$ (8,075,948)	
6/17/2006	6/17/2019	8.5	CG	\$ 30,000,000	FXP	LIBOR	6.140%	\$ (151,815)	\$ (151,986)	\$ (882,912)	\$ (4,817,947)	\$ 22,900,361	\$ (7,099,639)	\$ (11,917,586)	
3/10/2007	3/10/2029	18.2	MIL	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (140,128)	\$ (140,208)	\$ (814,461)	\$ (4,108,157)	\$ 23,044,127	\$ (6,955,873)	\$ (11,064,030)	
3/10/2007	3/10/2029	18.2	CG	\$ 30,000,000	FXP	LIBOR	5.687%	\$ (140,128)	\$ (140,208)	\$ (814,461)	\$ (4,108,157)	\$ 22,734,163	\$ (7,265,837)	\$ (11,373,994)	
Totals/Weighted Avgs								12.9	\$ (636,587)	\$ (636,860)	\$ (3,700,914)	\$ (19,552,486)	\$ 99,165,267	\$ (30,834,733)	\$ (50,387,219)
Total Current Year Active Swaps									\$ (636,587)	\$ (636,860)	\$ (3,700,914)	\$ (19,552,486)	\$ 99,165,267	\$ (30,834,733)	\$ (50,387,219)

Effective Date	Maturity Date	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Cash Flow			Mark to Market Current Mark to Market	Unrealized Gain/(Loss)	Ttl Rtn to Dt Net Gain/(Loss)	
							Prior Month	Current Month	Fiscal YTD				
<b>Current Fiscal Year Terminated Swaps</b>													
Total Current Year Terminated Swaps													

Effective Date	Maturity Date	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Cash Flow			Mark to Market Current Mark to Market	Unrealized Gain/(Loss)	Ttl Rtn to Dt Net Gain/(Loss)
							Prior Month	Current Month	Fiscal YTD			
<b>Current Fiscal Year Terminated Swaps</b>												
Total Current Year Terminated Swaps												

Effective Date	Maturity Date	Counter Party	Notional Amt	Type	Base Index	Fixed Rate	Cash Flow			Mark to Market Current Mark to Market	Unrealized Gain/(Loss)	Ttl Rtn to Dt Net Gain/(Loss)
							Prior Month	Current Month	Fiscal YTD			
<b>Current Fiscal Year - Total Swaps</b>												
Total Current Year Active & Terminated Swaps												



Cash Flow Comparison	
Synthetic Fixed vs. Fixed Rate Debt	Cash Flow to Date
Synthetic Fixed =	\$37,552,078
Fixed Rate =	\$41,946,667
Assumptions:	
- Fixed rate debt issued at 5.10% in Jun-06, and 4.93% in Mar-07 (estimated TE rates - Bloomberg)	
- 'Synthetic' includes swap cash flow + interest + fees to date	

## Exhibit "C"

### MONTHLY SUMMARY OF WIRE TRANSFERS AND ACH PAYMENTS

**DECEMBER  
2010**

DATE	AMOUNT	VENDOR	PURPOSE
12/1/2010	14,938.36	BANK OF AMERICA	DEBT SERVICE
12/1/2010	13,541.09	US BANK	DEBT SERVICE
12/2/2010	250.00	US BANK	LOC DRAW FEES
12/6/2010	590,018.37	CITI-GROUP	SWAP PAYMENT
12/6/2010	590,018.50	MERRILL LYNCH	SWAP PAYMENT
12/7/2010	36,126.75	LBBW	DEBT SERVICE
12/7/2010	821.53	HELABA	DEBT SERVICE
12/7/2010	4,090.19	STATE STREET	DEBT SERVICE
12/7/2010	11,125.72	BANK OF AMERICA	DEBT SERVICE
12/8/2010	738,267.93	BANK OF AMERICA	PAYROLL 12/8/10
12/8/2010	152,494.98	BANK OF AMERICA	FEDERAL TAX LIABILITY
12/8/2010	54,684.64	BANK OF AMERICA	STATE TAX LIABILITY
12/8/2010	30,082.55	OCFTCU	PAYROLL DEDUCTION
12/8/2010	1,215.00	OCCU	PAYROLL DEDUCTION
12/8/2010	296,521.64	CalPERS	HEALTH INSURANCE PREMIUM
12/9/2010	116,301.90	GREAT WEST	DEFERRED COMP A/O 12/8/10
12/9/2010	15,000.00	BARDEEN PARTNERS	OPERATING FUNDS
12/15/2010	212,294.70	CalPERS	RETIREMENT
12/15/2010	886,509.30	MWDOC	WATER PURCHASE
12/17/2010	877,044.92	CITI-GROUP	SWAP PAYMENT
12/17/2010	1,955,910.19	JR FILANC CONSTRUCTION	MWRP EXPANSION
12/17/2010	50,000.00	CHICAGO TITLE	STOCKDALE RANCH PURCHASE
12/22/2010	6,476,073.08	CHICAGO TITLE	STOCKDALE RANCH PURCHASE
12/22/2010	737,827.59	BANK OF AMERICA	PAYROLL 12/23/10
12/22/2010	153,103.28	BANK OF AMERICA	FEDERAL TAX LIABILITY
12/22/2010	53,969.69	BANK OF AMERICA	STATE TAX LIABILITY
12/22/2010	29,857.55	OCFTCU	PAYROLL DEDUCTION
12/22/2010	1,215.00	OCCU	PAYROLL DEDUCTION
12/24/2010	115,020.77	GREAT WEST	DEFERRED COMP A/O 12/23/10
12/30/2010	208,817.42	CalPERS	RETIREMENT
12/29/2010	295.00	BANK OF AMERICA	LOC DRAW FEES
	<b><u>14,423,437.64</u></b>		

Exhibit "D"

12/30/2010  
11:35:46

IRVINE RANCH WATER DISTRICT

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Page 1  
AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
ALL AMERICAN ASPHALT	12/02/10		316193	935.44
ASHFAQ ROBILA	12/02/10		316194	95.75
AVALON BAY COMMUNITIES	12/02/10		316195	771.15
AZURIN RAYMOND	12/02/10		316196	3.29
BEHDADNIA GOHAR	12/02/10		316197	27.34
BENNE RON	12/02/10		316198	31.67
BLUMENTHAL KATHY	12/02/10		316199	25.73
BROOKFIELD HOMES	12/02/10		316200	27.12
BROOKFIELD HOMES	12/02/10		316201	26.85
CALDWELL JACQUELINE	12/02/10		316202	28.97
DDR MTD MV FOOTHILL RANCH	12/02/10		316203	91.16
FERNANDEZ PEDRO	12/02/10		316204	15.22
FISH BRUCE N	12/02/10		316205	35.04
GAY ANGELA	12/02/10		316206	67.31
GENERAL MONITORS TRANSNATIONAL	12/02/10		316207	773.43
HARDINGE TARA	12/02/10		316208	16.21
HARDY AND HARPER, INC	12/02/10		316209	787.86
HEI IRVINE,LLC	12/02/10		316210	4,648.36
HIRSCH PEGGY	12/02/10		316211	22.32
HOOPER DONALD	12/02/10		316212	27.38
HUANG CHI	12/02/10		316213	589.25
IRVINE BROTHERS	12/02/10		316214	13.66
KB HOME COASTAL INC	12/02/10		316215	935.44
KONDO TAIJI	12/02/10		316216	25.95
KREMER JOHN	12/02/10		316217	14.75
LECHIEN LAURA	12/02/10		316218	21.46
LIN WENDY	12/02/10		316219	45.70
LYNCH DAWN	12/02/10		316220	10.46
MCKINLEY DARREN	12/02/10		316221	75.31
MILAN REI IV, LLC	12/02/10		316222	132.85
MURRAY ANDREW	12/02/10		316223	32.83
NESIC VESNA	12/02/10		316224	20.74
NGUYEN HUY	12/02/10		316225	35.10
NOLAN RICHARD	12/02/10		316226	35.47
PALAZZO HOMES	12/02/10		316227	948.54
SANTA MARGARITA WATER DISTRICT	12/02/10		316228	3,000.00
SOUTH COAST AIR QUALITY	12/02/10		316229	109.00
SOUTH COAST AIR QUALITY	12/02/10		316230	293.21
SOUTH COAST AIR QUALITY	12/02/10		316231	109.00
SOUTH COAST AIR QUALITY	12/02/10		316232	293.21
SOUTH COAST AIR QUALITY	12/02/10		316233	293.21
SOUTH COAST AIR QUALITY	12/02/10		316234	109.00
SOUTH COAST AIR QUALITY	12/02/10		316235	109.00
SOUTH COAST AIR QUALITY	12/02/10		316236	1,050.19
SOUTHERN CALIFORNIA GRADING	12/02/10		316237	750.97
STAR REAL ESTATE	12/02/10		316238	15.00
THIND SATWANT	12/02/10		316239	34.61
THURMAN-MARTINEZ LISA	12/02/10		316240	833.36
TUCKER SARAN	12/02/10		316241	165.20
VONKARMAN PARTNERS, LP	12/02/10		316242	117.26
WANG DANNY	12/02/10		316243	27.38
WILSON SARAH	12/02/10		316244	48.93
WOOD MEL	12/02/10		316245	358.12
WOODBURY COMMUNITY ASSN	12/02/10		316246	3,120.03
A & Y ASPHALT CONTRACTORS INC	12/02/10		316247	4,377.00
ACTION ELECTRIC CORP	12/02/10		316248	382.35
ADS LLC	12/02/10		316249	1,291.00

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
AMERICAN WATER WORKS ASSOC	12/02/10		316250	8,122.00
ARMORCAST PRODUCTS COMPANY	12/02/10		316251	12,792.00
ASSOCIATED POWER INC	12/02/10		316252	4,443.94
AT&T	12/02/10		316253	49.12
AT&T	12/02/10		316254	4,135.02
BATTERY SPECIALTIES	12/02/10		316255	521.18
BAY SECURITY	12/02/10		316256	3,438.00
BELL PIPE & SUPPLY CO	12/02/10		316257	2,826.87
BIOMERIEUX INC	12/02/10		316258	511.47
BLOOMBERG FINANCE LP	12/02/10		316259	15,795.00
BRENNTAG PACIFIC INC	12/02/10		316260	12,417.44
CALIFORNIA BARRICADE INC	12/02/10		316261	1,255.00
CDW GOVERNMENT LLC	12/02/10		316262	3,833.98
CITY CIRCUIT BREAKERS	12/02/10		316263	2,800.00
COASTAL TRAFFIC SYSTEMS, INC	12/02/10		316264	4,125.00
COMMERCE ENERGY INC	12/02/10		316265	488.34
CONEYBEARE INC	12/02/10		316266	768.24
COX COMMUNICATIONS	12/02/10		316267	173.49
DELL MARKETING LP	12/02/10		316268	67.73
DEVISE ENGINEERING INC	12/02/10		316269	3,732.43
DHANAPAL, SENTHIL	12/02/10		316270	27.68
DJ NELSON & SON POOL SERVICE	12/02/10		316271	2,251.89
DUDEK	12/02/10		316272	4,400.00
EAGLE GRAPHICS INC	12/02/10		316273	2,212.28
EAST ORANGE COUNTY WATER	12/02/10		316274	1,073.11
ENVIRONMENTAL ENGINEERING	12/02/10		316275	7,081.90
ENVIRONMENTAL EXPRESS INC	12/02/10		316276	1,493.19
ENVIRONMENTAL RESOURCE	12/02/10		316277	274.42
ENVIRONMENTAL WATER MGT	12/02/10		316278	3,700.00
ENVIRONMENTAL WATER MGT	12/02/10		316279	1,850.00
ESA PWA	12/02/10		316280	2,480.00
EVERGREEN OIL INC	12/02/10		316281	35.00
EXPRESSAIR	12/02/10		316282	129.10
FEDEX	12/02/10		316283	407.68
FEDEX NATIONAL LTL, INC	12/02/10		316284	113.78
FIERRO, SERGIO D	12/02/10		316285	3,567.00
FIRE EXTINGUISHING SAFETY	12/02/10		316286	736.06
FISERV	12/02/10		316287	8,637.60
FISHER SCIENTIFIC COMPANY LLC	12/02/10		316288	1,342.86
FRANK LA PLACA EXTERMINATING	12/02/10		316289	175.00
GOOGLE INC.	12/02/10		316290	975.84
GRAINGER	12/02/10		316291	3,802.61
HACH COMPANY	12/02/10		316292	59.95
HASLER	12/02/10		316293	386.61
HDR ENGINEERING INC.	12/02/10		316294	112,423.72
HILL BROTHERS CHEMICAL COMPANY	12/02/10		316295	9,877.84
HOME DEPOT USA INC	12/02/10		316296	498.34
HUNSAKER & ASSOCIATES IRVINE	12/02/10		316297	336.00
H2O RESOURCES ENGINEERING INC	12/02/10		316298	660.39
IBM CORPORATION	12/02/10		316299	58,329.00
ICF JONES & STOKES ASSOCIATES,	12/02/10		316300	6,608.80
II FUELS INC	12/02/10		316301	21,433.14
IRVINE PIPE & SUPPLY INC	12/02/10		316302	3,971.86
IRVINE, CITY OF	12/02/10		316303	214,693.00
IRWD-PETTY CASH CUSTODIAN	12/02/10		316304	995.85
KELLY SERVICES INC	12/02/10		316305	141.12
KENNEDY/JENKS CONSULTANTS, INC	12/02/10		316306	107,609.71

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
KWOK, SONNY	12/02/10		316307	23.91
LAGUNA BEACH COUNTY WATER	12/02/10		316308	3,519.61
MALCOLM PIRNIE INC	12/02/10		316309	49,045.16
MARVIN GARDENS LLC	12/02/10		316310	2,593.70
MATSON, ROCHELLE	12/02/10		316311	22.32
MBC APPLIED ENVIRONMENTAL	12/02/10		316312	2,000.00
MC MASTER CARR SUPPLY CO	12/02/10		316313	1,888.82
MIRPOUR, MICHAEL	12/02/10		316314	6.41
MOUSE GRAPHICS	12/02/10		316315	300.57
NEWPORT WINDOW MAINTENANCE	12/02/10		316316	2,314.00
NMG GEOTECHNICAL INC	12/02/10		316317	8,480.95
OLIN CORPORATION	12/02/10		316318	7,659.59
ON ASSIGNMENT LAB SUPPORT	12/02/10		316319	3,819.72
ORANGE COUNTY AUTO PARTS CO	12/02/10		316320	328.47
ORANGE COUNTY FIRE AUTHORITY	12/02/10		316321	266.00
PAREKH, KATEN	12/02/10		316322	39.07
PARKWAY LAWNMOWER SHOP	12/02/10		316323	413.20
PFIFFNER, DOUG	12/02/10		316324	36.60
PRAXAIR DISTRIBUTION INC	12/02/10		316325	496.50
PRINCIPAL LIFE INSURANCE	12/02/10		316326	11,358.18
PRUDENTIAL OVERALL SUPPLY	12/02/10		316327	729.40
PSB THE MARKETING SUPERSOURCE	12/02/10		316328	2,490.00
PSOMAS	12/02/10		316329	921.00
PTI SAND & GRAVEL INC	12/02/10		316330	1,685.78
RALPHS GROCERY COMPANY	12/02/10		316331	15,532.50
RBF CONSULTING	12/02/10		316332	4,168.52
REED, JAMES D	12/02/10		316333	1,936.14
ROCKHURST UNIV CONT EDU CTR	12/02/10		316334	60.00
RUTAN & TUCKER, LLP	12/02/10		316335	644.00
SANDERS PAVING INC	12/02/10		316336	5,068.00
SECURTEC DISTRICT PATROL INC	12/02/10		316337	3,500.00
SEVERN TRENT WATER	12/02/10		316338	1,446.58
SIRIUS COMPUTER SOLUTIONS, INC	12/02/10		316339	373,376.87
SOUTH ORANGE COUNTY	12/02/10		316340	22,814.83
SOUTHERN CALIFORNIA EDISON	12/02/10		316341	57,497.51
SOUTHERN COUNTIES LUBRICANTS	12/02/10		316342	76.13
SPARKLETTS	12/02/10		316343	245.84
STANTEC CONSULTING SERVICES	12/02/10		316344	10,390.00
TESTAMERICA LABORATORIES, INC	12/02/10		316345	417.15
THE GAS COMPANY	12/02/10		316346	50.00
THE PRINTERY INC	12/02/10		316347	722.19
TRAFFIC CONTROL SERVICE INC	12/02/10		316348	86.67
TRANSCAT, INC	12/02/10		316349	1,307.83
TREE OF LIFE NURSERY	12/02/10		316350	1,915.90
TRIPAC MARKETING INC	12/02/10		316351	487.18
TROPICAL PLAZA NURSERY INC	12/02/10		316352	3,321.00
TRUGREEN LANDCARE	12/02/10	12/02/10	316353	51,393.07
TUSTIN, CITY OF	12/02/10		316354	75.34
ULTRA SCIENTIFIC	12/02/10		316355	544.07
UNITED INDUSTRIES	12/02/10		316356	262.70
UNITED POWER & BATTERY CORP.	12/02/10		316357	8,494.52
UNITED RENTALS	12/02/10		316358	440.00
UNITED SITE SERVICES OF	12/02/10		316359	360.85
UTILITY SYSTEMS, SCIENCE	12/02/10		316360	1,812.50
VA CONSULTING, INC	12/02/10		316361	130.40
VERIZON CALIFORNIA INC	12/02/10		316362	236.08
VPSI INC	12/02/10		316363	7,751.00



**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
VULCAN MATERIALS COMPANY	12/02/10		316364	1,216.41
VWR INTERNATIONAL, LLC	12/02/10		316365	125.38
WALTERS WHOLESALE ELECTRIC	12/02/10		316366	915.60
WASTE MGMT OF ORANGE COUNTY	12/02/10		316367	407.88
WAXIE SANITARY SUPPLY	12/02/10		316368	3,125.04
WEBER CONSULTING	12/02/10		316369	1,294.35
WESTERN AUDIO VISUAL CORP	12/02/10		316370	3,912.04
WHITAKER, TODD	12/02/10		316371	54.04
WILLIAMS, TWYLA	12/02/10		316372	788.50
WOODRUFF, SPRADLIN & SMART APC	12/02/10		316373	255.00
YOM, JOHN	12/02/10		316374	24.23
ZEE MEDICAL SERVICE CO	12/02/10		316375	892.23
TRUGREEN LANDCARE	12/02/10		316376	31,505.92
CANDLER JEFF	12/09/10		316377	530.34
CITY OF LAKE FOREST	12/09/10		316378	138.59 ✓
CITY OF LAKE FOREST	12/09/10		316379	326.13 ✓
CLAWSON CAREN	12/09/10		316380	101.00
CROSS BRUCE	12/09/10		316381	98.46
DEERFIELD APTS	12/09/10		316382	1,636.59
DHODIA HEMAL	12/09/10		316383	34.34
EL MAR DRIVE LLC	12/09/10		316384	26.25
E2 MANAGE TECH INC	12/09/10		316385	726.62
INC SUMMERTIME	12/09/10		316386	58.20
IRVINE PROPERTY MANAGEMENT	12/09/10		316387	11.33
J GINGER MASONRY LP	12/09/10		316388	762.04
KETABCHI FARSHID	12/09/10		316389	45.38
KVALHEIM MATT	12/09/10		316390	23.23
LANG PING	12/09/10		316391	98.37
LEGER GARY	12/09/10		316392	34.65
MOLONEY CHRIS	12/09/10		316393	41.60
NGUYEN CHRISTINE	12/09/10		316394	81.58
ORANGE COUNTY SANITATION	12/09/10		316395	1,500.00 ✓
PACIFIC CITY PROPERTIES	12/09/10		316396	30.93
PERRY ROXANNE	12/09/10		316397	31.07
REDUS CA PROPERTIES, LLC	12/09/10		316398	15.00
SMITH TONY	12/09/10		316399	14.00
TIC-OFFICE PROPERTIES	12/09/10		316400	340.22
TIC-RETAIL PROPERTIES	12/09/10		316401	3,615.99
TRI POINT HOMES, INC.	12/09/10		316402	26.47
UNITED STATES POST OFFICE	12/09/10		316403	30,000.00
VAN DAELE HOMES	12/09/10		316404	35.22
VCI CONSTRUCTION	12/09/10		316405	785.34
VILLA SIENNA APTS	12/09/10		316406	160.88
VU AN	12/09/10		316407	25.56
VU SON	12/09/10		316408	15.12
ACTION ELECTRIC CORP	12/09/10		316409	287.44
ACWA HEALTH BENEFITS AUTHORITY	12/09/10		316410	29,809.78
AGILENT TECHNOLOGIES, INC.	12/09/10		316411	73.66
AM LEONARD INC	12/09/10		316412	303.43
AMERICAN MEMBRANE TECHNOLOGY	12/09/10		316413	800.00
AMERICAN MESSAGING SERVICES	12/09/10		316414	297.69
ANTHEM BLUE CROSS	12/09/10		316415	368.00
APCO GRAPHICS INC	12/09/10		316416	108.75
AT&T	12/09/10		316417	4,383.08
AYRES HOTEL AND SUITES (DBA)	12/09/10		316418	776.56
BAY SECURITY	12/09/10		316419	270.00
BILL'S SWEEPING SERVICE INC	12/09/10		316420	467.50

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
BIOMAGIC INC	12/09/10		316421	21,744.91
BOUSLOG RICK	12/09/10		316422	696.00
BOWIE, ARNESON, WILES &	12/09/10		316423	26,465.63
BRITHINEE ELECTRIC	12/09/10		316424	4,043.10
C WELLS PIPELINE MATERIALS INC	12/09/10		316425	4,730.63
CALIFORNIA BANK & TRUST	12/09/10		316426	44,975.84
CALIFORNIA BARRICADE INC	12/09/10		316427	2,165.00
CAMFIL FARR INC	12/09/10		316428	725.19
CANON FINANCIAL SERVICES INC	12/09/10		316429	8,556.04
CAPTIVE AUDIENCE MARKETING	12/09/10		316430	85.91
CARL WARREN & CO	12/09/10		316431	802.82
CH2M HILL, INC	12/09/10		316432	2,597.70
COASTAL TRAFFIC SYSTEMS, INC	12/09/10		316433	2,150.00
COLE-PARMER INSTRUMENT CO	12/09/10		316434	687.88
COMMERCIAL COATING RESOURCE	12/09/10		316435	1,600.00
COMMERCIAL DOOR OF ORANGE	12/09/10		316436	1,800.00
CONEYBEARE INC	12/09/10		316437	880.60
DATA CLEAN CORPORATION	12/09/10		316438	500.00
DATASITE INC	12/09/10		316439	3,826.00
DELL MARKETING LP	12/09/10		316440	2,359.51
DEPARTMENT OF CONSUMER AFFAIRS	12/09/10		316441	125.00
DITCH WITCH EL CAJON	12/09/10		316442	23,970.00
DRAEGER SAFETY INC	12/09/10		316443	1,666.76
DUDEK	12/09/10		316444	35,951.72
EAST ORANGE COUNTY WATER	12/09/10		316445	166.55
EISEL ENTERPRISES INC	12/09/10		316446	836.61
EMPLOYEE BENEFIT SPECIALIST,	12/09/10		316447	665.00
ENGINEERING RESOURCES	12/09/10		316448	3,000.00
ENVIRONMENTAL EXPRESS INC	12/09/10		316449	219.30
ENVIRONMENTAL WATER MGT	12/09/10		316450	5,550.00
FARRELL & ASSOCIATES	12/09/10		316452	1,264.78
FEDEX	12/09/10		316453	362.75
FIDELITY INVESTMENTS	12/09/10		316454	415.00
FIDELITY SECURITY LIFE	12/09/10		316455	5,691.08
FIGUEROA, JORGE	12/09/10		316456	870.63
FIRST CHOICE SERVICES	12/09/10		316457	1,227.62
FISHER SCIENTIFIC COMPANY LLC	12/09/10		316458	2,037.42
FLEET SOLUTIONS, LLC.	12/09/10		316459	4,166.70
FRANCHISE TAX BOARD	12/09/10		316460	175.00
FRONTLINE MANAGEMENT INC	12/09/10		316461	3,911.95
GANAHL LUMBER CO.	12/09/10		316462	210.10
GARZA INDUSTRIES, INC	12/09/10		316463	2,523.00
GATEWAY PACIFIC CONTRACTORS,	12/09/10		316464	7,983.89
GATEWAY PACIFIC CONTRACTORS,	12/09/10		316465	71,854.95
GLOBALSTAR INC	12/09/10		316466	167.47
GRAINGER	12/09/10		316467	6,667.02
HARDY & HARPER INC	12/09/10		316468	26,980.00
HARRINGTON INDUSTRIAL PLASTICS	12/09/10		316469	4,907.10
HDR ENGINEERING INC.	12/09/10		316470	142,959.35
HILL BROTHERS CHEMICAL COMPANY	12/09/10		316471	11,332.85
HOME DEPOT USA INC	12/09/10		316472	986.82
II FUELS INC	12/09/10		316473	3,481.06
INDUSTRIAL ELECTRIC MACHINERY	12/09/10		316474	1,512.96
INDUSTRIAL METAL SUPPLY CO	12/09/10		316475	106.38
INVITROGEN CORPORATION	12/09/10		316476	311.57
IRVINE PIPE & SUPPLY INC	12/09/10		316477	3,401.49
ISENBERG/O'HAREN	12/09/10		316478	6,500.00

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
JOHN G. ALEVIZOS D.O. INC.	12/09/10		316479	2,350.00
JOHN MICHAEL COVAS	12/09/10		316480	193.00
KEY EQUIPMENT FINANCE	12/09/10		316481	4,076.72
KILL-N-BUGS TERMITES AND PEST	12/09/10		316482	650.00
KLEINFELDER WEST INC	12/09/10		316483	2,642.80
LAER PEARCE & ASSOCIATES	12/09/10		316484	1,500.00
LENOVO UNITED STATES INC	12/09/10		316485	1,632.74
LEWIS OPERATING CORP	12/09/10		316486	4,850.00
LSA ASSOCIATES INC	12/09/10		316487	10,622.84
LUPISAN, ANGEL	12/09/10		316488	678.96
MARVIN GARDENS LLC	12/09/10		316489	544.42
MBC APPLIED ENVIRONMENTAL	12/09/10		316490	8,000.00
MC MASTER CARR SUPPLY CO	12/09/10		316491	5,006.11
MORROW-MEADOWS CORPORATION	12/09/10		316492	75,832.69
MOUSE GRAPHICS	12/09/10		316493	2,258.25
NALCO COMPANY	12/09/10		316494	5,738.41
NATIONAL READY MIXED CONCRETE	12/09/10		316495	888.38
OLIN CORPORATION	12/09/10		316496	27,167.70
ON ASSIGNMENT LAB SUPPORT	12/09/10		316497	3,577.88
ONESOURCE DISTRIBUTORS LLC	12/09/10		316498	906.27
ORACLE AMERICA, INC.	12/09/10		316499	645,829.00
ORDONEZ, CYNTHIA MARIE	12/09/10		316500	638.50
PACIFIC HYDROTECH CORPORATION	12/09/10		316501	102,435.14
PACIFIC HYDROTECH CORPORATION	12/09/10		316502	11,381.68
PACIFIC TECHNOLOGIES INC	12/09/10		316503	14,966.91
PALL ADVANCED SEPARATIONS	12/09/10		316504	28,125.00
PARKHOUSE TIRE INC	12/09/10		316505	8,343.08
PAULUS ENGINEERING INC	12/09/10		316506	36,377.83
PEARPOINT	12/09/10		316507	1,002.54
PERS LONG TERM CARE	12/09/10		316508	1,826.79
PINNACLE TOWERS LLC	12/09/10		316509	526.38
PRAXAIR DISTRIBUTION INC	12/09/10		316510	2,686.04
PRINCIPAL LIFE INSURANCE	12/09/10		316511	11,496.03
PRUDENTIAL OVERALL SUPPLY	12/09/10		316512	776.57
PTI SAND & GRAVEL INC	12/09/10		316513	1,832.57
QUALITY ENVIRONMENTAL	12/09/10		316514	40.84
R & S SOIL PRODUCTS INC	12/09/10		316515	848.25
R&B AUTOMATION INC	12/09/10		316516	56,009.30
RBF CONSULTING	12/09/10		316517	76,282.03
REACH EMPLOYEE ASSISTANCE INC	12/09/10		316518	803.40
REFRIGERATION SUPPLIES	12/09/10		316519	461.09
RINGCLEAR LLC	12/09/10		316520	52.36
SANTA ANA BLUE PRINT	12/09/10		316521	1,413.43
SIEMENS ENERGY INC	12/09/10		316522	2,309.85
SIEMENS ENTERPRISE	12/09/10		316523	250.00
SOUTHERN CALIFORNIA EDISON	12/09/10		316524	375,578.58
SOUTHERN CALIFORNIA SECURITY	12/09/10		316525	58.73
SOUTHWEST VALVE & EQUIPMENT	12/09/10		316526	4,412.69
SS MECHANICAL CORPORATION	12/09/10		316527	78,367.50
STATE NET	12/09/10		316528	2,190.00
STEEL UNLIMITED INC	12/09/10		316529	6,077.99
SWRCB	12/09/10		316530	63,234.00
T AND S LARSEN MAINTENANCE	12/09/10		316531	360.00
TETRA TECH, INC	12/09/10		316532	82,363.41
THE GAS COMPANY	12/09/10		316533	161.98
THE GAS COMPANY	12/09/10		316534	2,929.03
THOMPSON INDUSTRIAL SUPPLY	12/09/10		316535	444.23

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
THOMSON WEST	12/09/10		316536	1,090.80
TRAFFIC CONTROL SERVICE INC	12/09/10		316537	97.33
TROPICAL PLAZA NURSERY INC	12/09/10		316538	37,100.00
TRUGREEN LANDCARE	12/09/10		316539	32,175.92
U.S. DEPARTMENT OF EDUCATION	12/09/10		316540	794.43
US PEROXIDE, LLC	12/09/10		316541	20,076.35
VA CONSULTING, INC	12/09/10		316542	19,873.35
VARIAN INC	12/09/10		316543	38,254.92
VCI TELCOM INC	12/09/10		316544	31,615.15
VERIZON CALIFORNIA INC	12/09/10		316545	206.59
WALTERS WHOLESALE ELECTRIC	12/09/10		316546	58.36
WAXIE SANITARY SUPPLY	12/09/10		316547	1,156.21
WECK LABORATORIES INC	12/09/10		316548	120.00
WEST COAST SAFETY SUPPLY INC	12/09/10		316549	623.91
WESTERN EXTERMINATOR COMPANY	12/09/10		316550	8,721.50
WILLIAMS, TWYLA	12/09/10		316551	788.50
AST CORPORATION	12/10/10		316552	12,882.07
AYRES HOTEL AND SUITES (DBA)	12/10/10		316553	4,968.00
EDUCATIONAL CREDIT MANAGEMENT	12/10/10		316554	551.63
ORANGE COUNTY TREASURER	12/10/10		316555	264.00
SWRCB	12/10/10		316556	19,731.00
DEPARTMENT OF CONSUMER AFFAIRS	12/13/10		316557	200.00
DEPT OF FISH & GAME	12/13/10		316558	4,482.75
CAL SELECT BUILDERS INC.	12/16/10		316559	173.18
CHOI SUNG	12/16/10		316560	26.26
CITY OF ORANGE	12/16/10		316561	42,090.28
DEPT OF FISH & GAME	12/16/10		316562	2,792.25
DON WILSON BUILDERS	12/16/10		316563	83.77
FITHIAN JOHN	12/16/10		316564	310.43
FOOTHILL RANCH MAINT CORP	12/16/10		316565	1,172.38
IRVINE COMMUNITY DEVELOPMENT	12/16/10		316566	27.37
JAFARNEJAD MAJID	12/16/10		316567	75.00
KB HOMES	12/16/10		316568	15.00
KLEILE CHRISTINE	12/16/10		316569	45.96
ORANGE, COUNTY OF	12/16/10		316570	477,647.25
PHAM LYNDA	12/16/10		316571	15.94
PREECE INC	12/16/10		316572	153.46
PREECE INC	12/16/10		316573	115.87
RDJH ENTERPRISE	12/16/10		316574	134.29
SERRANO HIGHLANDS	12/16/10		316575	1,445.47
THE NEW HOME COMPANY	12/16/10		316576	82.09
UNITED STATES POST OFFICE	12/16/10		316577	185.00
WARREN JOHN W	12/16/10		316578	53.88
WATER EDUCATION FOUNDATION	12/16/10		316579	9,034.00
WILEY ANDREA	12/16/10		316580	24.65
A & Y ASPHALT CONTRACTORS INC	12/16/10		316581	7,323.00
AAF INTERNATIONAL	12/16/10		316582	816.48
AARP HEALTH CARE OPTIONS	12/16/10		316583	205.70
ACTION ELECTRIC CORP	12/16/10		316584	869.58
ADT SECURITY SERVICES INC	12/16/10		316585	2,684.95
ADVANTRA RX	12/16/10		316586	41.10
AFTON PUMPS INC	12/16/10		316587	4,132.29
ALEXANDER CONTRACT SERVICES	12/16/10		316588	93,570.95
ALPHA & OMEGA RESPIRATOR FIT	12/16/10		316589	3,276.00
AMERICAN INNOTEK INC	12/16/10		316590	947.18
APPLIED TECHNOLOGY GROUP INC	12/16/10		316591	4,189.90
AQUA BEN CORPORATION	12/16/10		316592	2,859.04

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
ARIZONA STATE UNIVERSITY	12/16/10		316593	17,634.00
ARMORCAST PRODUCTS COMPANY	12/16/10		316594	4,011.64
AST CORPORATION	12/16/10		316595	339,568.00
AT&T	12/16/10		316596	1,664.48
AT&T ADVERTISING SOLUTIONS	12/16/10		316597	448.00
AT&T TELECONFERENCE SERVICES	12/16/10		316598	467.87
ATECH ENGINEERING & MFG INC	12/16/10		316599	525.00
AYRES HOTEL AND SUITES (DBA)	12/16/10		316600	873.63
BATTERY SPECIALTIES	12/16/10		316601	3,053.45
BDC SPECIAL WASTE	12/16/10		316602	150.00
BELLEWICK COMMUNITY	12/16/10		316603	160.00
BILL'S SWEEPING SERVICE INC	12/16/10		316604	770.00
BLACK & VEATCH CORPORATION	12/16/10		316605	353,855.89
BORCHARD SURVEYING & MAPPING	12/16/10		316606	9,362.50
BOWMAN, KATELYN	12/16/10		316607	10.73
BRENNTAG PACIFIC INC	12/16/10		316608	13,506.75
C WELLS PIPELINE MATERIALS INC	12/16/10		316609	4,563.16
CAL WATER PURIFICATION	12/16/10		316610	80.00
CALIFORNIA BARRICADE INC	12/16/10		316611	9,055.11
CALIFORNIA SPECIAL DISTRICTS	12/16/10		316612	4,456.00
CALIFORNIA STATE BOARD OF	12/16/10		316613	546.02
CAMPBELL, THOMAS	12/16/10		316614	30.00
CLA-VAL COMPANY	12/16/10		316615	1,527.63
COASTAL TRAFFIC SYSTEMS, INC	12/16/10		316616	1,900.00
COMMERCE ENERGY INC	12/16/10		316617	2,322.72
COMMERCIAL DOOR OF ORANGE	12/16/10		316618	792.00
COMMON-A USERS GROUP	12/16/10		316619	495.00
CONDITION MONITORING SERVICES	12/16/10		316620	5,600.00
CONEYBEARE INC	12/16/10		316621	1,149.04
CORRPRO COMPANIES INC	12/16/10		316622	3,866.67
CR & R INCORPORATED	12/16/10		316623	49.51
CREDENTIAL CHECK CORPORATION	12/16/10		316624	214.00
CURT PRINGLE & ASSOCIATES	12/16/10		316625	6,000.00
D & G SIGNS	12/16/10		316626	320.82
DDR MTD MV FOOTHILL RANCH	12/16/10		316627	108.80
DE VAUL PAINT COMPANY	12/16/10		316628	3,654.88
DEE JASPAR & ASSOCIATES, INC.	12/16/10		316629	115,139.22
DLT&V SYSTEMS ENGINEERING INC	12/16/10		316630	23,127.55
DUROCHER, MATT	12/16/10		316631	20.50
EAGLE GRAPHICS INC	12/16/10		316632	1,007.81
EAST ORANGE COUNTY WATER	12/16/10		316633	1,018.01
EISEL ENTERPRISES INC	12/16/10		316634	482.25
ELECTRICAL SYSTEMS ENGINEERING	12/16/10		316635	6,700.00
EMEDCO	12/16/10		316636	239.79
ENVIRON INTERNATIONAL CORP.	12/16/10		316637	1,067.95
ESA PWA	12/16/10		316638	537.50
ESA PWA	12/16/10		316639	19,823.65
ESA PWA	12/16/10		316640	4,800.00
EVERGREEN OIL INC	12/16/10		316641	35.00
EXPRESSAIR	12/16/10		316642	132.50
EXTERRAN ENERGY SOLUTIONS LP	12/16/10		316643	268.22
FEDEX	12/16/10		316644	165.72
FERGUSON WATERWORKS	12/16/10		316645	13,439.00
FERGUSON, DAVID	12/16/10		316646	4,197.68
FIRST CHOICE SERVICES	12/16/10		316647	2,278.95
FISERV	12/16/10		316648	293.75
FISHER SCIENTIFIC COMPANY LLC	12/16/10		316649	6,506.08

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
FT ZIEBARTH COMPANY	12/16/10		316650	5,940.00
GALLOWAY, WESTIN	12/16/10		316651	131.02
GEMS SENSORS, INC.	12/16/10		316652	605.31
GODWIN PUMPS OF AMERICA, INC.	12/16/10		316653	5,467.37
GOLDEN STATE LABOR COMPLIANCE,	12/16/10		316654	3,071.25
GRAINGER	12/16/10		316655	3,094.65
GUIDA SURVEYING INC	12/16/10		316656	1,600.60
HACH COMPANY	12/16/10		316657	2,960.40
HAGER, NICK	12/16/10		316658	20.00
HAROLD, TIM	12/16/10		316659	41.11
HARRINGTON INDUSTRIAL PLASTICS	12/16/10		316660	763.50
HDR ENGINEERING INC.	12/16/10		316661	143,798.83
HEARTLAND BUSINESS CREDIT	12/16/10		316662	570.58
HILL BROTHERS CHEMICAL COMPANY	12/16/10		316663	1,354.73
HOME DEPOT USA INC	12/16/10		316664	539.65
HUMANA INSURANCE COMPANY	12/16/10		316665	22.30
II FUELS INC	12/16/10		316666	35,377.33
INDUSTRIAL ELECTRIC MACHINERY	12/16/10		316667	361.79
INDUSTRIAL METAL SUPPLY CO	12/16/10		316668	100.55
IRON MOUNTAIN INFORMATION	12/16/10		316669	1,526.94
IRVINE PIPE & SUPPLY INC	12/16/10		316670	2,799.24
IRVINE, CITY OF	12/16/10		316671	4,556.60
IRWD-PETTY CASH CUSTODIAN	12/16/10		316672	610.09
JBI WATER & WASTEWATER	12/16/10		316673	13,052.85
JCI JONES CHEMICALS INC	12/16/10		316674	5,005.00
JOHN G. ALEVIZOS D.O. INC.	12/16/10		316675	35.00
JOHNSTONE SUPPLY	12/16/10		316676	658.12
KENNEDY/JENKS CONSULTANTS, INC	12/16/10		316677	75,417.79
LAMAR, STEVEN	12/16/10		316678	589.43
LEATHERWOOD CONSTRUCTION INC	12/16/10		316679	55,125.00
LENOVO UNITED STATES INC	12/16/10		316680	190.53
LUSTRE-CAL NAMEPLATE	12/16/10		316681	1,237.51
LY, ROSALYN	12/16/10		316682	31.01
MAHER, DAURIE	12/16/10		316683	39.89
MARK C. DANGLER	12/16/10		316684	2,342.29
MARKET-THINK, LLC	12/16/10		316685	4,287.50
MATHEIS, MARY AILEEN	12/16/10		316686	2,332.10
MATSON, ROCHELLE	12/16/10		316687	32.79
MC MASTER CARR SUPPLY CO	12/16/10		316688	3,850.21
MCCROMETER, INC.	12/16/10		316689	1,104.73
MCR TECHNOLOGIES, INC.	12/16/10		316690	60,058.28
MERCHANTS LANDSCAPE SERVICES	12/16/10		316691	19,689.69
MOUSE GRAPHICS	12/16/10		316692	24,383.30
NATHMAN, ANN	12/16/10		316693	31.01
NATIONAL READY MIXED CONCRETE	12/16/10		316694	1,089.27
NEW WAVE COMPUTER SUPPLY LLC	12/16/10		316695	1,381.13
OCE NORTH AMERICA INC	12/16/10		316696	15,271.32
OLIN CORPORATION	12/16/10		316697	14,851.29
ON ASSIGNMENT LAB SUPPORT	12/16/10		316698	4,635.93
ONESOURCE DISTRIBUTORS LLC	12/16/10		316699	169.75
ORANGE, COUNTY OF	12/16/10		316701	280.00
ORANGE, COUNTY OF	12/16/10		316702	464.00
ORKIN INC	12/16/10		316703	495.00
PACIFIC BUILDING CARE INC	12/16/10		316704	336.00
PACIFIC COAST BOLT CORP	12/16/10		316705	2,530.07
PACIFIC HYDROTECH CORPORATION	12/16/10		316706	90,980.05
PACIFIC HYDROTECH CORPORATION	12/16/10		316707	10,108.89

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
PACIFIC PARTS & CONTROLS INC	12/16/10		316708	4,490.97
PACIFIC STRATEGIES	12/16/10		316709	2,500.00
PACIFIC TECHNOLOGIES INC	12/16/10		316710	4,582.65
PAPER DEPOT DOCUMENT	12/16/10		316711	622.00
PASMA	12/16/10		316712	75.00
PAUL E BRADLEY INC	12/16/10		316713	10,845.00
PAYNE & FEARS LLP	12/16/10		316714	1,012.50
PBS&J	12/16/10		316715	3,216.50
PERKINELMER HEALTH SCIENCES	12/16/10		316716	221.82
PINNACLE LANDSCAPE COMPANY	12/16/10		316717	5,936.76
PMK ASSOCIATES INC	12/16/10		316718	25,000.00
PONTON INDUSTRIES INC	12/16/10		316719	366.09
PRAXAIR DISTRIBUTION INC	12/16/10		316720	1,095.04
PRUDENTIAL OVERALL SUPPLY	12/16/10		316721	1,370.15
PSOMAS	12/16/10		316722	1,561.14
PTI SAND & GRAVEL INC	12/16/10		316723	2,631.11
PURE EFFECT INC	12/16/10		316724	10,675.00
RAM AIR ENGINEERING INC	12/16/10		316725	7,601.14
RBF CONSULTING	12/16/10		316726	2,678.97
RBF CONSULTING	12/16/10		316727	8,546.92
RESPONSE ENVELOPE, INC	12/16/10		316728	2,224.90
RON TURLEY ASSOCIATES INC	12/16/10		316729	2,100.00
RRM DESIGN GROUP	12/16/10		316730	7,834.69
SANTA ANA BLUE PRINT	12/16/10		316731	869.89
SANTA ANA, CITY OF	12/16/10		316732	16,362.66
SANTIAGO AQUEDUCT COMMISSION	12/16/10		316733	13,132.62
SARNA, RAMAN	12/16/10		316734	30.00
SCOTT-MARRIN, INC.	12/16/10		316735	12.00
SELF-INSURANCE PLANS	12/16/10		316736	4,984.16
SHAMROCK SUPPLY CO INC	12/16/10		316737	1,464.93
SIGMA-ALDRICH INC	12/16/10		316738	1,243.27
SIMI VALLEY LANDFILL AND	12/16/10		316739	553.50
SIRIUS COMPUTER SOLUTIONS, INC	12/16/10		316740	16,500.00
SOUTH COAST ANSWERING SERVICE	12/16/10		316741	461.52
SOUTH COAST WATER	12/16/10		316742	191.74
SOUTH COAST WATER DISTRICT	12/16/10		316743	13.42
SOUTHERN CA WATER COMMITTEE	12/16/10		316744	850.00
SOUTHERN CALIFORNIA EDISON	12/16/10		316745	30,592.98
SOUTHERN CALIFORNIA SECURITY	12/16/10		316746	52.15
SPECTRA COMPANY	12/16/10		316747	1,270.00
SS MECHANICAL CORPORATION	12/16/10		316748	138,180.37
STANDARD & POOR'S	12/16/10		316749	3,500.00
STERILIZER TECHNICAL	12/16/10		316750	835.15
SUPERMEDIA LLC	12/16/10		316751	68.25
SYNAGRO SOUTH, LLC	12/16/10		316752	17,121.44
TAYLOR, LONDON	12/16/10		316753	19.88
TESTAMERICA LABORATORIES, INC	12/16/10		316754	166.95
THE CLIMATE REGISTRY	12/16/10		316755	1,200.00
THE FURMAN GROUP INC	12/16/10		316756	10,140.00
TROPICAL PLAZA NURSERY INC	12/16/10		316757	24,687.37
TRUCPARCO	12/16/10		316758	9,996.55
TRUGREEN LANDCARE	12/16/10		316759	21,383.91
TUSTIN, CITY OF	12/16/10		316760	307.64
ULTRA SCIENTIFIC	12/16/10		316761	1,225.56
UNDERGROUND SERVICE ALERT OF	12/16/10		316762	640.50
UNITED INDUSTRIES	12/16/10		316763	1,685.34
UNITED SITE SERVICES OF	12/16/10		316764	134.92

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
UNITED STATES POST OFFICE	12/16/10		316765	76.38
US PEROXIDE, LLC	12/16/10		316766	16,782.65
USA BLUEBOOK	12/16/10		316767	847.13
VA CONSULTING, INC	12/16/10		316768	8,189.00
VULCAN MATERIALS COMPANY	12/16/10		316769	1,214.80
VWR INTERNATIONAL, LLC	12/16/10		316770	625.34
WASTE MGMT OF ORANGE COUNTY	12/16/10		316771	2,339.63
WATERLINE TECHNOLOGIES INC	12/16/10		316772	9,379.14
WELLS SUPPLY COMPANY	12/16/10		316773	1,154.93
WOLIN, GREGG	12/16/10		316774	20.72
WOODHULL, JENNA	12/16/10		316775	15.10
WORKFLOWONE	12/16/10		316776	2,319.69
ZINCATION INC	12/16/10		316777	245.24
DEVISE ENGINEERING INC	12/16/10		316778	3,620.42
SOUTH COAST AIR QUALITY	12/22/10		316779	109.00
SOUTH COAST AIR QUALITY	12/22/10		316780	879.63
AFLAC	12/22/10		316781	5,397.56
AIRGAS-WEST, INC.	12/22/10		316782	1,468.95
ANTHEM BLUE CROSS	12/22/10		316783	1,110.00
AST CORPORATION	12/22/10		316784	11,231.02
AT&T	12/22/10		316785	86.08
CH2M HILL, INC	12/22/10		316786	19,781.52
COLONIAL LIFE & ACCIDENT	12/22/10		316787	1,755.44
DEACON, AMOS R.	12/22/10		316788	1,262.00
EDUCATIONAL CREDIT MANAGEMENT	12/22/10		316789	551.63
ENVIRONMENTAL WATER MGT	12/22/10		316790	1,650.00
FEDEX	12/22/10		316791	289.40
FIDELITY INVESTMENTS	12/22/10		316792	415.00
FRANCHISE TAX BOARD	12/22/10		316793	175.00
GANAHL LUMBER CO.	12/22/10		316794	2,745.94
GATEWAY PACIFIC CONTRACTORS,	12/22/10		316795	105.54
GATEWAY PACIFIC CONTRACTORS,	12/22/10		316796	949.86
GRAINGER	12/22/10		316797	86.23
GRAYBAR ELECTRIC COMPANY	12/22/10		316798	4,485.73
HARTFORD LIFE AND ACCIDENT	12/22/10		316799	207.00
HILL BROTHERS CHEMICAL COMPANY	12/22/10		316800	8,066.16
HOME DEPOT USA INC	12/22/10		316801	271.13
IRVINE PIPE & SUPPLY INC	12/22/10		316802	4,317.14
IRVINE, CITY OF	12/22/10		316803	150.00
ISAACS TERRI	12/22/10		316804	657.00
JOHN G. ALEVIZOS D.O. INC.	12/22/10		316805	610.00
JOHN G. ALEVIZOS D.O. INC.	12/22/10		316806	875.54
LEWIS OPERATING CORP	12/22/10		316807	1,000.00
LUPISAN, ANGEL	12/22/10		316808	649.62
MARINA LANDSCAPE, INC.	12/22/10		316809	2,338.00
OLIN CORPORATION	12/22/10		316810	23,316.42
ONESOURCE DISTRIBUTORS LLC	12/22/10		316811	2,237.00
ORDONEZ, CYNTHIA MARIE	12/22/10		316812	638.50
ORRICK, HERRINGTON & SUTCLIFFE	12/22/10		316813	100,000.00
PACIFIC COAST BOLT CORP	12/22/10		316814	2,573.13
PAULUS ENGINEERING INC	12/22/10		316815	325,423.10
PERS LONG TERM CARE	12/22/10		316816	1,826.79
PRE-PAID LEGAL SERVICES INC	12/22/10		316817	1,965.62
QUALITY ENVIRONMENTAL	12/22/10		316818	811.62
RBF CONSULTING	12/22/10		316819	17,067.13
RMC WATER AND ENVIRONMENT	12/22/10		316820	3,610.00
SANTA ANA BLUE PRINT	12/22/10		316821	893.60



**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
SINCLAIR, TODD	12/22/10		316822	1,399.91
SOUTHERN CALIFORNIA EDISON	12/22/10		316823	176,293.74
STANTEC CONSULTING SERVICES	12/22/10		316824	3,644.64
STATE BOARD OF EQUALIZATION	12/22/10		316825	2,757.00
STEVEN ENTERPRISES INC	12/22/10		316826	84.27
THE GAS COMPANY	12/22/10		316827	2,542.91
THE GAS COMPANY	12/22/10		316828	346.63
U.S. DEPARTMENT OF EDUCATION	12/22/10		316829	794.43
UNITED PARCEL SERVICE INC	12/22/10		316830	438.99
UNITED SITE SERVICES OF	12/22/10		316831	360.85
UNITED WAY OF ORANGE COUNTY	12/22/10		316832	1,852.02
USDA FOREST SERVICE	12/22/10		316833	249.00
VERIZON CALIFORNIA INC	12/22/10		316834	41.93
WAXIE SANITARY SUPPLY	12/22/10		316835	2,571.46
WEST COAST SAFETY SUPPLY INC	12/22/10		316836	561.68
WILLIAMS, TWYLA	12/22/10		316837	788.50
ALL AMERICAN ASPHALT	12/30/10		316838	856.67
ASSADI MOHAMMAD	12/30/10		316839	18.16
BROOKFIELD HOMES	12/30/10		316840	10.47
CAL SELECT BUILDERS, INC	12/30/10		316841	721.64
CHUNG YEON	12/30/10		316842	31.01
DURAN TONY	12/30/10		316843	62.07
FOOTHILL BUSINESS PARK	12/30/10		316844	2,103.97
GABRIELE MACORONI COMAPNY	12/30/10		316845	40.80
GABRIELE MACORONI COMPANY	12/30/10		316846	45.17
GARCIA JEFF	12/30/10		316847	24.65
HAIGH BUILDERS	12/30/10		316848	37.64
HAIGH BUILDERS	12/30/10		316849	37.76
HALL JOHN	12/30/10		316850	26.47
HARVARD COURT APTS	12/30/10		316851	1,626.04
IJAMS RANDAL	12/30/10		316852	63.64
IRVINE OAKS REALTY HOLDING CO	12/30/10		316853	45.46
KAYE MARSHA	12/30/10		316854	24.65
KIM JANE	12/30/10		316855	10.04
KIM WILLIAM W	12/30/10		316856	88.43
KING RONALD L	12/30/10		316857	21.09
LENNAR HOMES	12/30/10		316858	276.70
MARINA LANDSCAPE INC	12/30/10		316859	978.23
MCDONOUGH TARA	12/30/10		316860	24.44
MILLER BRITTANY	12/30/10		316861	38.71
MOHAMMADI ARASH	12/30/10		316862	31.01
MULTI EMPLOYER PROPERTY TRUST	12/30/10		316863	3,565.34
MUNROE BALDWIN LLC	12/30/10		316864	222.84
MUNROE BALDWIN LLC	12/30/10		316865	101.32
NESTIE LONNELL	12/30/10		316866	26.79
NGUYEN TERESA	12/30/10		316867	41.38
OW PHILLIP	12/30/10		316868	28.29
PAULUS ENGINEERING INC	12/30/10		316869	2,114.19
PEYKOFF DANNY	12/30/10		316870	63.39
POSILOVICH ENTERPRISES	12/30/10		316871	972.33
RAO SHAILA	12/30/10		316872	33.76
REAL ESTATE XPERTS	12/30/10		316873	28.29
RJ NOBLE COMPANY	12/30/10		316874	610.70
ROBERT CLAPPER CONSTRUCTION	12/30/10		316875	981.55
SHAMES CONTRUCTION	12/30/10		316876	935.44
SHIMIZU JAMES	12/30/10		316877	52.82
SMITH KATHRYN	12/30/10		316878	29.45

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
SOUTH COAST AIR QUALITY	12/30/10		316879	293.21
SOUTH COAST AIR QUALITY	12/30/10		316880	293.21
SOUTH COAST AIR QUALITY	12/30/10		316881	109.00
SOUTH COAST AIR QUALITY	12/30/10		316882	109.00
SOUTH COAST AIR QUALITY	12/30/10		316883	109.00
TIC-IPG-COMMON	12/30/10		316884	102.51
TIC-IPG-COMMON	12/30/10		316885	54.67
VAKILIAN ZARI	12/30/10		316886	39.59
VAN DAELE HOMES	12/30/10		316887	45.07
VAN DAELE HOMES	12/30/10		316888	15.00
VAN DAELE HOMES	12/30/10		316889	15.00
VILLEGAS ZULMA	12/30/10		316890	88.94
WESTRIDGE APARTMENTS	12/30/10		316891	379.27
WILLIAM LYON HOMES	12/30/10		316892	15.00
ZIMMER CURT	12/30/10		316893	108.21
AAF INTERNATIONAL	12/30/10		316894	84.94
ABEL, JANEY	12/30/10		316895	13.21
ACTION ELECTRIC CORP	12/30/10		316896	225.33
ADS LLC	12/30/10		316897	1,291.00
AEL FINANCIAL LLC	12/30/10		316898	1,128.88
AMERICAN SOCIETY OF CIVIL	12/30/10		316899	255.00
AMERICAN WATER WORKS ASSOC	12/30/10		316900	462.00
APPLIED INDUSTRIAL	12/30/10		316901	260.26
ASSOCIATED POWER INC	12/30/10		316902	4,443.94
AT&T	12/30/10		316903	5,883.19
AT&T	12/30/10		316904	48.22
AT&T	12/30/10		316905	5,070.68
AT&T INTERNET SERVICES	12/30/10		316906	1,124.00
AT&T LONG DISTANCE	12/30/10		316907	40.28
BELL PIPE & SUPPLY CO	12/30/10		316908	110.29
BETA SYSTEMS SOFTWARE OF	12/30/10		316909	1,908.14
BETTER NEIGHBORHOODS REVITALIZ	12/30/10		316910	182.38
BIOMAGIC INC	12/30/10		316911	14,218.80
BRITHINEE ELECTRIC	12/30/10		316912	5,766.02
BUTIER ENGINEERING INC	12/30/10		316913	17,280.00
CALIFORNIA BARRICADE INC	12/30/10		316914	1,100.00
CANON BUSINESS SOLUTIONS INC	12/30/10		316915	7,239.14
CDW GOVERNMENT LLC	12/30/10		316916	10,542.93
CHARLES BORKMAN CONSULTANTS	12/30/10		316917	7,300.00
COASTAL TRAFFIC SYSTEMS, INC	12/30/10		316918	1,090.00
COMMERCE ENERGY INC	12/30/10		316919	645.83
CONEYBEARE INC	12/30/10		316920	2,754.71
COX COMMUNICATIONS	12/30/10		316921	173.49
CWEA	12/30/10		316922	76.00
DANBRU WIRE & CABLE, INC	12/30/10		316923	513.64
DATASITE INC	12/30/10		316924	7,244.00
DIRECTV INC	12/30/10		316925	83.99
DJ NELSON & SON POOL SERVICE	12/30/10		316926	2,251.89
DLI ENGINEERING CORP	12/30/10		316927	3,262.50
DOUGLAS ENVIRONMENTAL GROUP	12/30/10		316928	1,150.00
DURANCEAU CONSULTING SERVICES,	12/30/10		316929	225.00
DWYER INSTRUMENTS INC	12/30/10		316930	2,891.98
ELABRA INC	12/30/10		316931	7,150.00
ENVIRONMENTAL EXPRESS INC	12/30/10		316932	156.27
ENVIRONMENTAL WATER MGT	12/30/10		316933	2,650.00
ESA PWA	12/30/10		316934	16,815.61
FARRELL & ASSOCIATES	12/30/10		316935	89.34

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
FEDEX NATIONAL LTL, INC	12/30/10		316936	113.58
FERGUSON WATERWORKS	12/30/10		316937	70.63
FISHER SCIENTIFIC COMPANY LLC	12/30/10		316938	3,671.50
GANAHL LUMBER CO.	12/30/10		316939	943.12
GOOGLE INC.	12/30/10		316940	984.96
GRAINGER	12/30/10		316941	2,511.49
GRAYBAR ELECTRIC COMPANY	12/30/10		316942	1,840.42
HACH COMPANY	12/30/10		316943	203.39
HARMSWORTH ASSOCIATES	12/30/10		316944	7,420.00
HDR ENGINEERING INC.	12/30/10		316945	48,943.79
HELP/SYSTEMS-IL, LLC	12/30/10		316946	1,945.00
HILL BROTHERS CHEMICAL COMPANY	12/30/10		316947	6,634.66
HYDRO-SCAPE PRODUCTS INC	12/30/10		316948	8,562.22
INDUSTRIAL METAL SUPPLY CO	12/30/10		316949	50.97
IRRIGATION ASSOCIATION	12/30/10		316950	100.00
IRVINE COMMUNITY DEVELOPMENT	12/30/10		316951	51.65
IRVINE PIPE & SUPPLY INC	12/30/10		316952	681.34
IRWD-PETTY CASH CUSTODIAN	12/30/10		316953	790.53
ISLAS, ASHLEY	12/30/10		316954	16.51
JCI JONES CHEMICALS INC	12/30/10		316955	15,105.00
JOHN G. ALEVIZOS D.O. INC.	12/30/10		316956	318.86
JOHNSTONE SUPPLY	12/30/10		316957	293.50
KELLEY BLUE BOOK, INC.	12/30/10		316958	549.00
KENNEDY/JENKS CONSULTANTS, INC	12/30/10		316959	27,289.75
KNOWLES, KEITH	12/30/10		316960	33.89
LAB SAFETY SUPPLY, INC.	12/30/10		316961	397.40
LEATHERWOOD CONSTRUCTION INC	12/30/10		316962	24,575.00
MADDOCKS & COMPANY	12/30/10		316963	3,833.44
MALCOLM PIRNIE INC	12/30/10		316964	62,956.26
MATHISEN, SUSAN	12/30/10		316965	65.93
MBC APPLIED ENVIRONMENTAL	12/30/10		316966	2,000.00
MC MASTER CARR SUPPLY CO	12/30/10		316967	749.84
MOBILE MODULAR MANAGEMENT	12/30/10		316968	1,119.04
MOUSE GRAPHICS	12/30/10		316969	451.75
MUNICIPAL WATER DISTRICT	12/30/10		316970	83,456.00
NALCO COMPANY	12/30/10		316971	3,783.20
NATIONAL READY MIXED CONCRETE	12/30/10		316972	338.00
NMG GEOTECHNICAL INC	12/30/10		316973	8,063.45
NOVALYNX CORPORATION	12/30/10		316974	439.78
OBRIEN, ELLEN	12/30/10		316975	39.22
OLIN CORPORATION	12/30/10		316976	15,730.10
ON ASSIGNMENT LAB SUPPORT	12/30/10		316977	3,789.49
ONESOURCE DISTRIBUTORS LLC	12/30/10		316978	3,889.83
ORANGE, COUNTY OF	12/30/10		316979	245.00
PACIFIC TECHNOLOGIES INC	12/30/10		316980	4,275.00
PARKHOUSE TIRE INC	12/30/10		316981	3,310.76
PARMA	12/30/10		316982	100.00
PAYNE & FEARS LLP	12/30/10		316983	118.75
PENTON MEDIA	12/30/10		316984	149.00
PINNACLE LANDSCAPE COMPANY	12/30/10		316985	156.36
POLYDYNE INC	12/30/10		316986	4,186.00
POWER DESIGN	12/30/10		316987	995.00
PRAXAIR DISTRIBUTION INC	12/30/10		316988	1,015.68
PRIORITY MAILING SYSTEMS LLC	12/30/10		316989	173.74
PROCESS PUMP SALES INC	12/30/10		316990	4,074.15
PROGRESSIVE BUSINESS	12/30/10		316991	94.56
PRUDENTIAL OVERALL SUPPLY	12/30/10		316992	712.14

**IRVINE RANCH WATER DISTRICT**

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Vendor Name	Issued	Voided	Check#	Check Amount
PSB THE MARKETING SUPERSOURCE	12/30/10		316993	2,490.00
PTI SAND & GRAVEL INC	12/30/10		316994	365.05
RAM AIR ENGINEERING INC	12/30/10		316995	7,154.68
RBF CONSULTING	12/30/10		316996	164,995.15
RMC WATER AND ENVIRONMENT	12/30/10		316997	1,728.50
ROCKET SOFTWARE, INC.	12/30/10		316998	6,183.10
RRM DESIGN GROUP	12/30/10		316999	10,293.48
SAGEHORN, TIM	12/30/10		317000	75.62
SANTA ANA BLUE PRINT	12/30/10		317001	238.65
SECURTEC DISTRICT PATROL INC	12/30/10		317002	3,500.00
SEPARATION PROCESSES INC	12/30/10		317003	432.50
SIGMA-ALDRICH INC	12/30/10		317004	515.51
SIRIUS COMPUTER SOLUTIONS, INC	12/30/10		317005	731.41
SOUTHERN CALIFORNIA EDISON	12/30/10		317006	71,730.18
SOUTHERN CALIFORNIA EDISON	12/30/10		317007	59,764.88
SOUTHERN CALIFORNIA SECURITY	12/30/10		317008	83.74
SOUTHERN COUNTIES LUBRICANTS	12/30/10		317009	1,235.16
SPARKLETT'S	12/30/10		317010	162.11
SPATIAL WAVE, INC.	12/30/10		317011	15,706.35
STANTEC CONSULTING SERVICES	12/30/10		317012	8,304.60
STEVEN ENTERPRISES INC	12/30/10		317013	548.08
STORK MATERIALS TESTING AND	12/30/10		317014	500.00
SUNSET INDUSTRIAL PARTS	12/30/10		317015	91.83
SYNAGRO SOUTH, LLC	12/30/10		317016	16,076.47
TEKDRAULICS	12/30/10		317017	16,926.94
TELEDYNE LEEMAN LABS	12/30/10		317018	4,875.00
TESTAMERICA LABORATORIES, INC	12/30/10		317019	192.15
TETRA TECH, INC	12/30/10		317020	9,783.66
THE GAS COMPANY	12/30/10		317021	3,761.83
THE GAS COMPANY	12/30/10		317022	663.73
TRUGREEN LANDCARE	12/30/10		317023	1,208.00
UNITED INDUSTRIES	12/30/10		317024	75.49
URISA	12/30/10		317025	175.00
US BANK NAT'L ASSOC N.DAKOTA	12/30/10		317026	76,672.28
US PEROXIDE, LLC	12/30/10		317027	46,077.85
VA CONSULTING, INC	12/30/10		317028	6,984.90
VERIZON CALIFORNIA INC	12/30/10		317029	468.14
VERIZON WIRELESS	12/30/10		317030	12,758.58
VESTAR	12/30/10		317031	21.45
VPSI INC	12/30/10		317032	7,751.00
VWR INTERNATIONAL, LLC	12/30/10		317033	4,594.41
WALTERS WHOLESALE ELECTRIC	12/30/10		317034	624.96
WESTERN HIGHWAY PRODUCTS	12/30/10		317035	1,309.50
WETZLER CRAIG	12/30/10		317036	354.41
WHITAKER, TODD	12/30/10		317037	54.04
WIRELESS WATCHDOGS LLC	12/30/10		317038	1,272.00
WORKFLOWONE	12/30/10		317039	419.71
A/P Check Total				8,618,737.59 ✓
YORK INSURANCE SERVICES GROUP	12/07/10		9120710	2,651.71
YORK INSURANCE SERVICES GROUP	12/27/10		9122710	1,453.28
YORK INSURANCE SERVICES GROUP	12/28/10		9122810	9,096.23
Workers Compensation Total				13,201.22 ✓

12/30/2010  
11:35:46

# IRVINE RANCH WATER DISTRICT

Accounts Payable Report to Treasury  
Acct'g Period 2011/06 Ended 12/31/2010

Page 16  
AP238R

Vendor Name	Issued	Voided	Check#	Check Amount
SOTO, FRANK	7/22/10	12/07/10	312986	84.00-
ENVIRONMENTAL WATER MGT	11/11/10	12/07/10	315768	5,550.00-
TRUGREEN LANDCARE	12/02/10	12/02/10	316353	51,393.07-
		Total Voids		57,027.07- ✓
EXTERRAN ENERGY SOLUTIONS LP	12/09/10		316451	
ORANGE COUNTY SANITATION	12/16/10		316700	
		A/P Corrections/Adjustments		
		Report Total		<u>8,574,911.74</u>

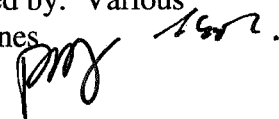
Report Includes Checks numbers from 316193 to 317039 ✓

*Reviewed by  
Jan - 07-2011*

January 24, 2010

Prepared and Submitted by: Various

Approved by: Paul Jones



## CONSENT CALENDAR

### STRATEGIC MEASURES DASHBOARDS

#### SUMMARY:

Provided as Exhibits "A", "B", "and C" are the Strategic Measures Dashboards and informational items for Board review.

#### RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE THE STRATEGIC MEASURES DASHBOARDS AND INFORMATION ITEMS.

#### EXHIBITS:

Exhibit "A" – Strategic Measures Dashboards

Exhibit "B" – Dyer Road Wellfield Status

Exhibit "C" – Reservoir Data



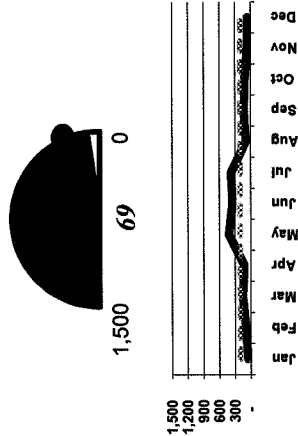
**IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES DASHBOARD**

December 2010

**Note: The more blue area displayed on the dial, the more favorable the measure.**

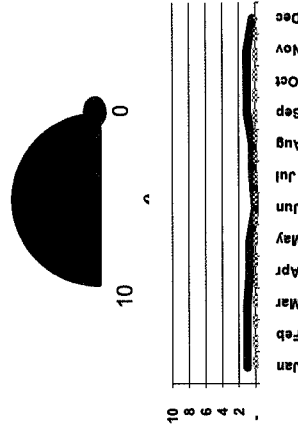
**Reliability-Potable/Nonpotable**

Target = 200 customer hours out of service this month



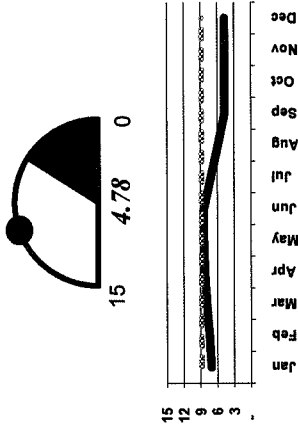
**Sewer Spills**

Target = 0 Spills this month



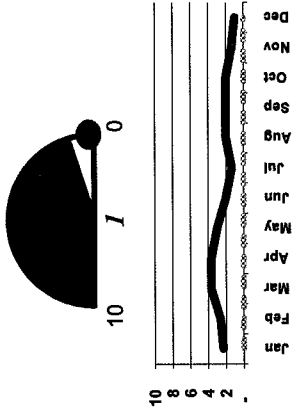
**OCSD CORF Flows**

Target = 8.80 MGD CORF flow to OCSD this month



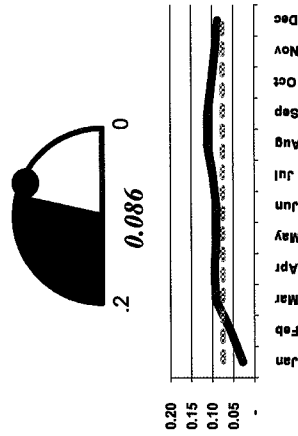
**OSHA Recordables**

Target = 0 reportable accidents this month



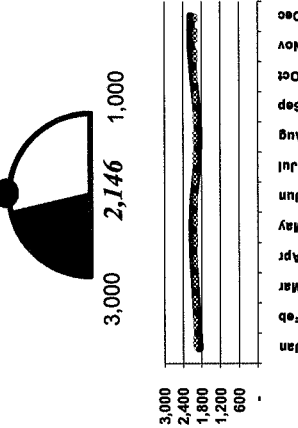
**MWRP Energy Cost per kWh**

Target = .0792 cost per kWh this month



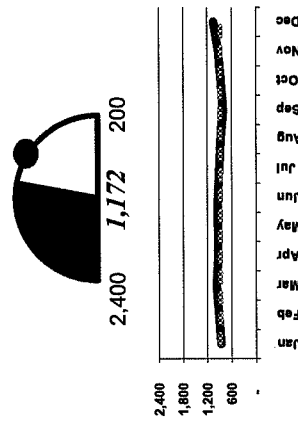
**Wastewater Cost**

Target = \$2,000/MG processed this month



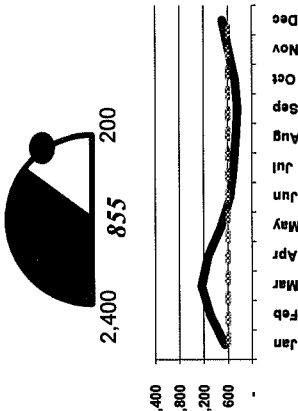
**Water System Cost--Potable**

Target = \$878/ac-ft delivered this month



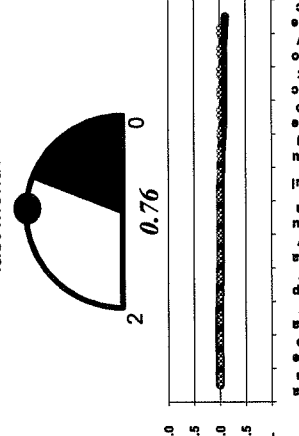
**Water System Cost--Nonpotable**

Target = \$598/ac-ft delivered this month



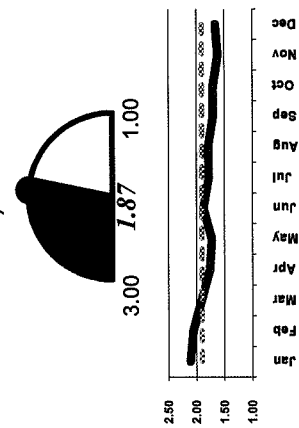
**Enterprise Return**

Target = 1.0 (net income/goal) last month



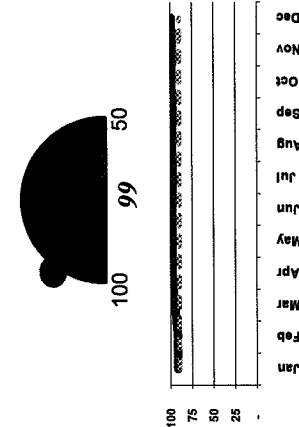
**Overhead Ratio**

Target = 1.95 (G&A expenses/direct labor) this month



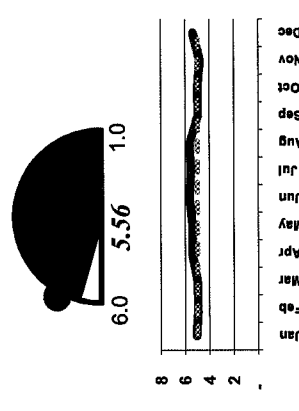
**Customer Satisfaction**

Target = 90% satisfaction this month



**Employee Satisfaction**

Target = 5.0 score this month



● Target shown on gauge  
00.00 Figure for Current Month

Target shown on trend graph  
3-month rolling average



IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Reliability-Potable/Nonpotable***

**MONTHLY STATUS REPORT**

Metric Owner: Water Ops

Definition of Measure:

The relative magnitude of system outages due to failures or scheduled maintenance for Potable and Non Potable Water.

Method:

Summation of the time any part of the system was out of service times the number of customers affected by the given outage during the month.

Data Collection

Data was derived from the CSR database for customer based reports of "no water" and from the work order database for scheduled maintenance requiring the shut down of water service during repairs.

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> January 2010
January 2010	129.40		<b>Thru:</b> December 2010
February 2010	133.80		<b>Goal:</b> 200.00
March 2010	208.50		
April 2010	26.20		
May 2010	1,026.25		
June 2010	0		
July 2010	106.10		
August 2010	184.00		
September 2010	95.80		
October 2010	57.80		
November 2010	65.83		
December 2010	69.17		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

*Sewer Spills*

**MONTHLY STATUS REPORT**

Metric Owner: Gregory Springman

Collection System Manager

Definition of Measure:

Number of sewer overflows of any quantity, regardless of cause, in IRWD's sanitary sewer collection system. This does not include spills from private sewers within IRWD's service area. IRWD has no control over private spills and is not responsible for them. However, it should be noted that IRWD will assist the County Health Care Agency in responding to and cleaning up private spills in the interest of the community.

Method:

Total number of IRWD sewer spills

Data Collection

Data is obtained from CSR's or emergency calls.

Current Issues

1. Collection Systems did not experience any sewer system overflows (SSO) this reporting period.

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> January 2010
January 2010	1.00		<i>Thru:</i> December 2010
February 2010	0		<i>Goal:</i> 0
March 2010	2.00		
April 2010	0		
May 2010	0		
June 2010	0		
July 2010	1.00		
August 2010	0		
September 2010	2.00		
October 2010	1.00		
November 2010	0		
December 2010	0		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***OCSD CORF Flows***

**MONTHLY STATUS REPORT**

Metric Owner: Richard Kelly

Plant Operations Analyst

Definition of Measure:

Actual OCSD CORF flows. CORF ownership is currently 8.8 MGD.

Method:

CORF value is calculated as the average of the four highest flow months of the current and prior three fiscal years.

Data Collection

Data collected from the Main Street flow meters is used for this measure.

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> January 2010
January 2010	7.40		<b>Thru:</b> December 2010
February 2010	8.00		<b>Goal:</b> 8.80
March 2010	8.41		
April 2010	8.42		
May 2010	8.43		
June 2010	8.43		
July 2010	4.68		
August 2010	4.68		
September 2010	4.69		
October 2010	4.68		
November 2010	4.70		
December 2010	4.78		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

## ***OSHA Recordables***

### **MONTHLY STATUS REPORT**

Metric Owner: Ken Erwin

District Safety & Security Manager

Definition of Measure:

OSHA Recordables are a monthly measure of injuries and illnesses that occurred and must be entered on the OSHA 300 (Log of Work Related Injuries and Illnesses), in conformance with OSHA requirements. This measure is standardized not only in the water/wastewater industry, but throughout industries nationwide.

Method:

OSHA Recordables = Number of OSHA Recordable cases occurring during the subject month.

Data Collection

All injuries/illnesses and near-misses are reported to the District Safety & Security Manager immediately when they occur. All are investigated and cases meeting the recordable definition are logged. This measure simply reports the number of accidents whose occurrence date is within the calendar month.

Current Issues

1. Construction Repair Manager incurred noise induced hearing loss

### **MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> January 2010
January 2010	4.00		<b>Thru:</b> December 2010
February 2010	2.00		<b>Goal:</b> 0
March 2010	5.00		
April 2010	4.00		
May 2010	0		
June 2010	2.00		
July 2010	2.00		
August 2010	2.00		
September 2010	2.00		
October 2010	2.00		
November 2010	0		
December 2010	1.00		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***MWRP Energy Cost per kWh***

**MONTHLY STATUS REPORT**

Metric Owner: Richard Kelly

Plant Operations Analyst

Definition of Measure:

Actual MWRPCost per kWh used at MWRP with new generating facility.

Method:

MWRP cost per kWh is calculated by the monthly total energy purchased from imported SCE electricity, purchased natural gas for the generators from Coral Energy, and SCG natural gas transportation charge divided by the total monthly kWh generated and imported from SCE. We then add in actual maintenance costs, including g/a.

Data Collection

Data collected from actual monthly SCE, Coral Energy and SCG Invoices. Total kWh is collected from the two generator kWh meters and SCE main electric meter.

Current Issues

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> January 2010
January 2010	.08		<i>Thru:</i> December 2010
February 2010	.09		<i>Goal:</i> .08
March 2010	.10		
April 2010	.09		
May 2010	.07		
June 2010	.11		
July 2010	.12		
August 2010	.11		
September 2010	.10		
October 2010	.09		
November 2010	.09		
December 2010	0		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Wastewater Cost***

**MONTHLY STATUS REPORT**

Metric Owner: Richard Kelly

Plant Operations Analyst

Definition of Measure:

Total cost of collection and treatment (primary, secondary, and solids disposal) of wastewater, on a unit basis (\$/million gallons) for this month.

Method:

( MWRP cost of collections(G/L #530) + MWRP cost of treatment(G/L #551,552,565) + OCSD cost(G/L #535,555) + SMWD cost(G/L #531,556) ) divided by the total sewage flows emanating from OCSD District #14 (Includes MWRP flow + OCSD flow + SMWD flow)

Data Collection

Data used for this measure are collected from the general ledger and from Orange County Sanitation District (OCSD) and Santa Margarita Water District (SMWD) staff. Costs and flows from OCSD District #7 are not included in the calculation.

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> January 2010
January 2010	1,890.00	1,997.00	<b>Thru:</b> December 2010
February 2010	2,053.00	2,019.00	<b>Goal:</b> 2,000.00
March 2010	2,086.00	2,014.00	
April 2010	2,092.00	2,017.00	
May 2010	2,096.00	2,014.00	
June 2010	1,962.00	2,017.00	
July 2010	1,797.00	1,985.00	
August 2010	1,950.00	1,984.00	
September 2010	2,128.00	2,002.00	
October 2010	2,128.00	1,998.00	
November 2010	2,166.00	2,004.00	
December 2010	2,146.00	2,000.00	

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Water System Cost--Potable***

**MONTHLY STATUS REPORT**

Metric Owner: Denise To-Nguyen

Accountant

Definition of Measure:

Total cost of potable water delivered to IRWD's customers this month, on a unit basis (\$/acre-foot). These monthly costs can vary greatly due to variation in water sales and power cost billing cycles. Thus, monthly expenses do not match up with their corresponding water sales.

Method:

Sum of all potable water costs accrued this month divided by the quantity of potable water sold this month.

Data Collection

Potable water costs collected from current month general ledger. This cost includes labor, power, distribution, and other costs. The quantity of water sold is collected from the Water Usage Variance Report, which summarizes metered water sales. Wide fluctuations in this measure may occur due to the billing delays for such expenses as electrical power (ie, bills are not paid in the same month as the water is sold).

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> January 2010
January 2010	939.15	837.56	<b>Thru:</b> December 2010
February 2010	968.43	829.05	<b>Goal:</b> 878.00
March 2010	1,021.44	820.93	
April 2010	824.78	822.90	
May 2010	988.17	839.59	
June 2010	1,018.23	870.57	
July 2010	701.23	880.40	
August 2010	906.37	814.86	
September 2010	834.75	837.90	
October 2010	857.34	868.51	
November 2010	1,109.19	862.36	
December 2010	1,172.08	878.12	

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Water System Cost--Nonpotable***

**MONTHLY STATUS REPORT**

Metric Owner: Denise To-Nguyen

Accountant

Definition of Measure:

Total cost of nonpotable water delivered to IRWD's customer this month, on a unit basis (\$/acre-foot). These monthly costs can vary greatly due to variation in water sales and power cost billing cycles. Thus, monthly expenses do not match up with their corresponding water sales.

Method:

Sum of all nonpotable water costs accrued this month divided by the quantity of nonpotable water sold this month.

Data Collection

Nonpotable water costs collected from current month general ledger. This cost includes labor, power, distribution, and other costs related to tertiary treatment and reclaimed water distribution. The quantity of water sold is collected from the Water Usage Variance Report, which summarizes metered water sales. Wide fluctuations in this measure may occur due to the billing delays for such expenses as electrical power (ie, bills are not paid in the same month as the water is sold).

Current Issues

1. None

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> January 2010
January 2010	1,052.36	975.42	<b>Thru:</b> December 2010
February 2010	1,513.67	1,025.20	<b>Goal:</b> 598.00
March 2010	1,178.32	904.71	
April 2010	577.80	788.59	
May 2010	535.78	546.32	
June 2010	510.12	604.98	
July 2010	326.47	383.34	
August 2010	376.24	397.83	
September 2010	393.78	405.18	
October 2010	508.51	473.71	
November 2010	840.22	547.10	
December 2010	854.69	597.27	



IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Enterprise Return***

**MONTHLY STATUS REPORT**

Metric Owner: Jayne George

Debt and Investment Analyst

Definition of Measure:

This is a monthly measure of performance by IRWD's various enterprise activities, including residential and commercial real estate, Strawberry Farms Golf Course, and wireless communications leases.

Method:

Enterprise Return = Actual Net Income/Budgeted Net Income x 100

Data Collection

The various enterprise activities generate revenues and expenses at different frequencies through the year. Except for the real estate projects, the enterprise projects are primarily revenue generating activities with relatively little associated expenses. The measure reflects a comparison between the actual and budgeted net income of the various projects on a monthly basis.

Current Issues

1. The December measure is well below budget at 0.76%. The leasing market continues to be weak. Although leasing has improved at the Waterworks Way Business Park, the Irvine Technology Center still has not leased out suite 290 at 4,459 sq. ft. and a portion of suite 250. Also, the wireless communication revenue is down considerably for the month.

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> January 2010
January 2010	1.01		<i>Thru:</i> December 2010
February 2010	1.03		<i>Goal:</i> 1.00
March 2010	1.01		
April 2010	.96		
May 2010	.99		
June 2010	1.01		
July 2010	.97		
August 2010	.93		
September 2010	.89		
October 2010	.98		
November 2010	.94		
December 2010	.76		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

## ***Overhead Ratio***

### MONTHLY STATUS REPORT

Metric Owner: Jessica Craig

Accountant

Definition of Measure:

Overhead Ratio is a measure of general and administrative (G&A) overhead expenses compared to direct labor expenses.

Method:

Ratio of total G&A expenses to total direct labor (including regular and overtime wages).

Data Collection

G&A expenses are summarized from the general ledger and include all costs incurred that are not directly accounted to mission-critical work (charged to g/1 #792). Direct labor expenses are the hourly staff charges accounted to mission-critical work (generally charged to expense codes #110 and #120). Benefits are considered G&A, not direct labor expenses.

Current Issues

1. The current month actual G&A rate is 1.87 which is lower than the projected rate of 1.95. The YTD G&A rate is 1.68, which brings the over applied G&A to \$2,098,372.26

### MONTHLY DATA

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<b>From:</b> January 2010
January 2010	2.33		<b>Thru:</b> December 2010
February 2010	1.84		<b>Goal:</b> 1.90
March 2010	1.55		
April 2010	1.88		
May 2010	1.75		
June 2010	1.99		
July 2010	1.59		
August 2010	1.79		
September 2010	1.73		
October 2010	1.58		
November 2010	1.54		
December 2010	1.87		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Customer Satisfaction***

**MONTHLY STATUS REPORT**

Metric Owner: Gina Jackson

Customer Service Manager

Definition of Measure:

Customer Satisfaction is measured by IRWD's Customer Satisfaction Index. The index is measured by sending surveys to a statistically-significant, random selection of customers that have called IRWD for some type of service. Services range from answering questions about water conservation or billing to repairing a sewer blockage in the street. The surveys allow the customer to rate IRWD's response to their request in eight categories. Each category is rated from 1 to 5, with 1 indicating the highest level of satisfaction. A total score of 100 indicates the highest level of satisfaction in all eight categories. The scores of all responses in the subject month are a weighted average for the monthly index figure.

Method:

Data Collection

Surveys are mailed at the end of each work week for the customer requests completed that week. The monthly index reflects the surveys received within the subject month.

Current Issues

1. Total Overall Satisfaction: 99%  
 Satisfaction: 100%  
 Timely: 99%  
 Phone: 99%  
 Field Contact: 97%

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> January 2010
January 2010	91.00		<i>Thru:</i> December 2010
February 2010	96.00		<i>Goal:</i> 90.00
March 2010	99.00		
April 2010	98.00		
May 2010	97.00		
June 2010	100.00		
July 2010	95.00		
August 2010	100.00		
September 2010	96.00		
October 2010	100.00		
November 2010	98.00		
December 2010	99.00		

IRVINE RANCH WATER DISTRICT  
STRATEGIC MEASURES

***Employee Satisfaction***

**MONTHLY STATUS REPORT**

Metric Owner: Gretchen Maswadeh

Human Resources Manager

Definition of Measure:

Level of employee satisfaction with employment at IRWD.

Method:

Average of all scores on surveys for performance evaluations presented this month

Data Collection

A survey is sent to each employee receiving a performance evaluation this month. The survey simply asks the employee to rate his/her overall employment satisfaction on a scale of 1 to 6 (1 being very dissatisfied and 6 being very satisfied). The ratings are compiled and averaged by Human Resources.

Current Issues

1. 9 surveys were returned of 27 surveys sent (33%). 8 of 9 respondents (89%) rated satisfaction as 5 or 6 on a scale of 1 to 6. In the 12 month period ending December 2010, 116 surveys have been returned of 294 surveys sent (39%). 97 of 116 respondents (84%) rated satisfaction as 5 or 6 on a scale of 1 to 6. 12 month average rating is 5.23%

**MONTHLY DATA**

<u>Month</u>	<u>Value</u>	<u>Goal</u>	<i>From:</i> January 2010
January 2010	4.25		<i>Thru:</i> December 2010
February 2010	5.57		<i>Goal:</i> 5.00
March 2010	5.15		
April 2010	5.54		
May 2010	5.50		
June 2010	5.89		
July 2010	5.23		
August 2010	5.75		
September 2010	3.86		
October 2010	5.38		
November 2010	5.13		
December 2010	5.56		

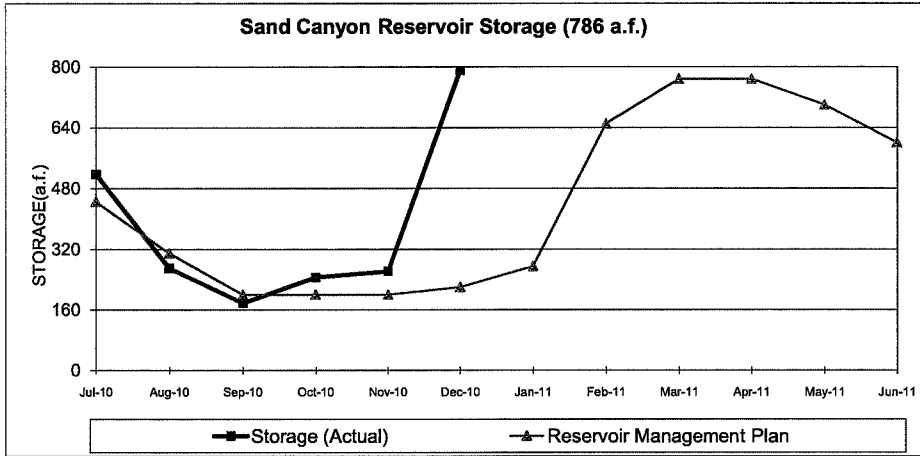


## EXHIBIT "B"

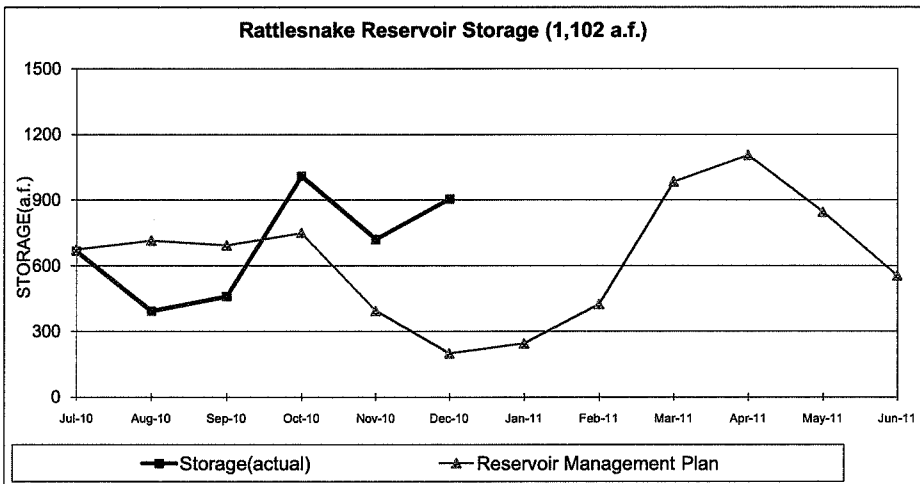
DYER ROAD WELL FIELD STATUS							Dec-2010
Well Number	Production Mo./YTD	Ref. Point Elevation	Depth to Water 12/31/2010	Water Level-MSL	Depth of Bowls	Bowl Setting-MSL	Feet of Water Above Intake
1	0.0 AF 285.8 AF	34	N/A	N/A	270	-236	N/A
			Static				
2	0.0 AF 585.0 AF	37	155	-119	270	-234	115
			pumping				
3	1.3 AF 1.8 AF	55	99	-44	215	-160	116
			Static				
4	0.0 AF 628.6 AF	38	101	-63	216	-178	115
			Static				
5	0.0 AF 563.7 AF	48	248	-200	290	-242	42
			pumping				
6	0.0 AF 175.7 AF	43	143	-100	250	-207	107
			pumping				
7	1.0 AF 386.1 AF	40	211	-171	290	-250	79
			pumping				
C-8 DATS	391.4 AF 2,111.6 AF	37	134	-97	305	-268	171
			pumping				
C-9 DATS	291.1 AF 1,587.5 AF	23	131	-108	305	-282	174
			pumping				
10	0.0 AF 1,264.5 AF	47	153	-106	250	-203	97
			pumping				
11	0.0 AF 270.5 AF	40	153	-113	300	-260	147
			pumping				
12	0.0 AF 633.1 AF	51	145	-94	300	-249	155
			Static				
13	0.0 AF 192.6 AF	40	163	-123	300	-260	137
			Static				
14	0.0 AF 369.9 AF	47	110	-63	311	-264	201
			Static				
15	0.0 AF 1,380.2 AF	44	148	-104	300	-256	152
			pumping				
16	0.0 AF 278.6 AF	47	105	-58	280	-233	175
			Static				
17	1.6 AF 1,059.1 AF	52	155	-104	250	-199	95
			pumping				
18	65.1 AF 634.7 AF	45	100	-55	300	-255	200
			Static				
Clear production:	69.0 AF for the month						
FYTD:	8,694.2 AF						
DATS production:	710.8 AF for the month						
FYTD:	4,195.1 AF						



**RESERVOIR DATA FY 10-11**



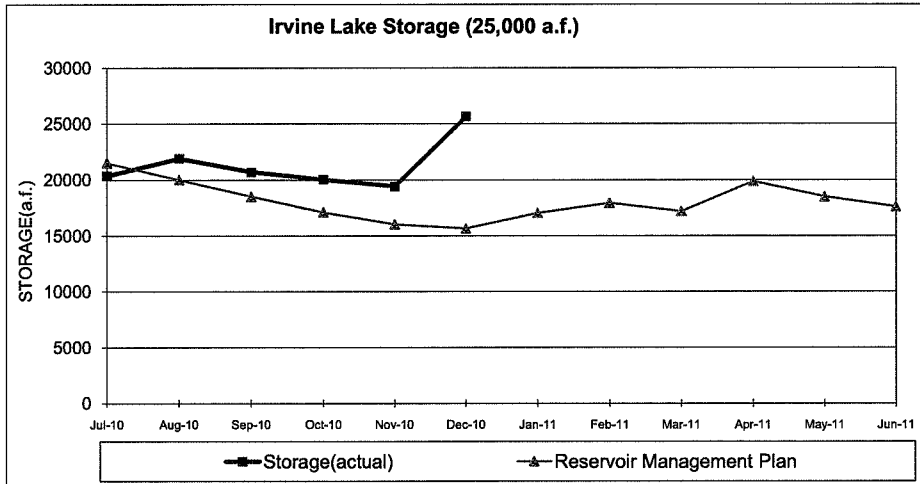
Storage will be under 200 AF by October 1 as required by Regional Board permit. Sand Canyon is currently overflowing.



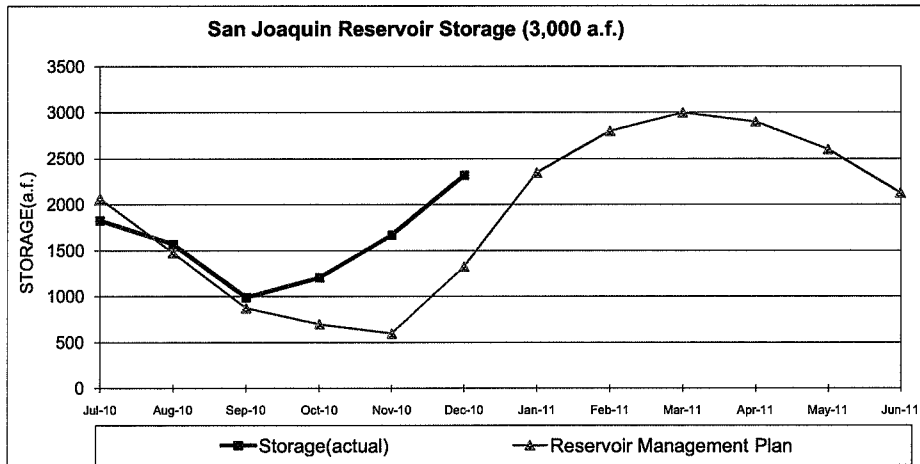
Rattlesnake storage was increased due to the rainfall events during the month of December.



RESERVOIR DATA FY 10-11



Irvine Lake is currently spilling due to December rainfall.



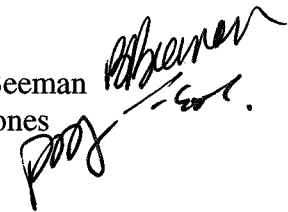
LAWRP plant to bypass all flow. Lake Forest reclaimed demand is being supplied from the East Irvine Zone B system. San Joaquin's draw down was less than planned due to early rainfall in October.

January 24, 2011

Prepared and

Submitted by: Beth Beeman

Approved by: Paul Jones



CONSENT CALENDAR

CALIFORNIA SPECIAL DISTRICTS ASSOCIATION CALL FOR NOMINATIONS

SUMMARY:

The California Special Districts Association (CSDA) is conducting a call for nominations for a Region 6 representative to its Board. Nominations must be received by February 4, 2011. To ensure continuity of representation on issues important to IRWD, staff recommends that the Board nominate Director Mary Aileen Matheis as a Region 6 representative to the CSDA Board of Directors.

BACKGROUND:

The CSDA Board of Directors is the governing body responsible for policy decisions related to CSDA's member services, legislative advocacy, education and resources. Board members are expected to attend all board meetings and participate on at least one committee. The CSDA Board members are elected from its six regions. Each region has three seats on the Board with staggered three-year terms. Candidates must be affiliated with an independent special district that is a CSDA regular member located within the region they seek to represent. Region 6, which includes Orange, Riverside, San Diego and Imperial counties, has three representatives on the CSDA board. The current Region 6 board members are Jo MacKenzie of Vista Irrigation District and Dewey Ausmus of the North County Cemetery District.

CSDA has a vacancy on their Board of Directors and is seeking nominations for candidates. CSDA's Call for Nominations is included as Exhibit "A". To ensure continuity of representation on issues important to Orange County and to IRWD, staff recommends that the Board nominate Mary Aileen Matheis as a Region 6 representative to the CSDA Board of Directors.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

None.

COMMITTEE STATUS:

This item was reviewed at the Water Resources, Policy and Communications meeting on January 13, 2011.

**RECOMMENDATION:**

**THAT THE BOARD NOMINATE MARY AILEEN MATHEIS AS A REGION 6 REPRESENTATIVE TO THE CALIFORNIA SPECIAL DISTRICTS ASSOCIATION BOARD OF DIRECTORS.**

**LIST OF EXHIBITS:**

**Exhibit “A” – CSDA Call for Nominations for Region 6 Representative**

## EXHIBIT "A"



**DATE:** December 4, 2010

**TO:** CSDA Voting Members – REGION 6

**FROM:** CSDA Elections and Bylaws Committee

**SUBJECT:** **CSDA CALL FOR NOMINATIONS – Board of Directors  
Region 6, Seat B**

CSDA is conducting a call for nominations for a Region 6, Seat B Director. We have been informed that the current Director for Region 6, Seat B (Arlene Schafer, Costa Mesa Sanitary District) will not be serving on the CSDA Board for the remainder of the 2011-2013 term.

The leadership of CSDA is elected from its six geographical regions. Each of the six regions has three seats on the Board with staggered 3-year terms. Candidates must be affiliated with an independent special district that is a CSDA regular member located within the geographic region that they seek to represent. (See attached Region Map)

The CSDA Board of Directors is the governing body responsible for all policy decisions related to CSDA's member services, legislative advocacy, education and resources. The Board of Directors is crucial to the operation of the Association and to the representation of the common interests of all California's special districts before the Legislature and the State Administration.

**Commitment:** Serving on the Board requires one's interest in the issues confronting special districts statewide. A board member is expected to attend all board meetings held every other month at CSDA's office in Sacramento. Besides serving on the Board, each Board Member is expected to participate on at least one committee, which usually meets 3-4 times a year in Sacramento. CSDA reimburses directors for their related expenses for Board and Committee meetings as outlined in Board Policy. In addition, all Board Members are expected to attend CSDA's two annual events: Special Districts Legislative Days (held in the spring) and the Annual Conference (held in the fall) as part of their obligation to the CSDA membership; expenses for these two events are not reimbursed by CSDA, even if a board meeting or committee meeting is held in conjunction with the event.

**Nomination Procedures:** Any regular member Independent Special District is eligible to nominate one person, a board member or managerial employee (as defined by that district's Board of Directors), for election to the CSDA Board of Directors. **A copy of the member district's resolution or minute action and a letter of experience or resume from the nominee must accompany the enclosed nomination form. The deadline**

**for receiving nominations is February 4, 2011.** Nominations and supporting documentation may be mailed or faxed.

Nominated candidates will then be interviewed by the Region's existing directors and the successful candidate will be appointed by vote of the CSDA Board.

If you have any questions, please contact Charlotte Lowe at 877-924-CSDA or [charlottel@cnda.net](mailto:charlottel@cnda.net)

CALIFORNIA SPECIAL DISTRICTS ASSOCIATION  
BOARD OF DIRECTORS

**NOMINATION FORM**

PLEASE BE SURE THE CANDIDATE'S PHONE NUMBER IS ONE WHERE WE CAN REACH THE CANDIDATE

Name of Candidate: \_\_\_\_\_

District: \_\_\_\_\_

Mailing  
Address: \_\_\_\_\_

\_\_\_\_\_

Region: \_\_\_\_\_ (see attached map)

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Nominated by (optional): \_\_\_\_\_

Return this form, resume/letter of experience from nominee, and a Board resolution/minute action supporting the candidate by fax or mail to:

CSDA  
Attn: Charlotte Lowe  
1112 I Street, Suite 200  
Sacramento, CA 95814  
(916) 442-7887/(916) 442-7889 fax

***DEADLINE FOR RECEIVING NOMINATIONS – February 4, 2011***



# CSDA Regions



## Board of Directors by Region

### Region 1

Mark Bryant, *Garberville Sanitary District*  
 Phil Schoefer, *Western Shasta RCD*  
 Alan Schoenstein, *McCloud CSD*

### Region 3

Stanley Caldwell, *Mt. View Sanitary District*  
 James Kohnen, *Alameda County Mosquito AD*  
 Sherry Sterrett, *Pleasant Hill RPD*

### Region 5

Jim Acosta, *Saticoy Sanitary District*  
 Jack Curtis, *Ojai Valley Sanitary District*  
 John Fox, *Goleta Sanitary District*

### Region 2

Noelle Mattock, *El Dorado Hills CSD*  
 Ginger Root, *Tuxedo Country Club FPD*  
 Pete Kampa, *Tuolumne Utilities District*

### Region 4

Adrienne (Ann) Mathews, *Kern County Water Agency*  
 Tim Unruh, *Kern County Cemetery District No. 1*  
 Vacant

### Region 6

Dewey Ausmus, *North County Cemetery District*  
 Jo MacKenzie, *Vista Irrigation District*  
 Arlene Schafer, *Costa Mesa Sanitary District*

January 24, 2011  
Prepared by: R. Joshi/R. Mori  
Submitted by: K. Burton  
Approved by: Paul Jones

OB  
RJS  
PKM  
K.B.  
P.J.

## CONSENT CALENDAR

### BAKER WATER TREATMENT PLANT DESIGN VARIANCE NO. 3

#### SUMMARY:

Staff recommends that the Board authorize the General Manager to execute Variance No. 3, in the amount of \$95,370, with RBF Consulting (RBF) for the design of the Baker Water Treatment Plant (WTP) project. The variance proposal includes additional design tasks that were identified through the development of the final design that were not included in RBF's original contract scope of work.

#### BACKGROUND:

The Baker WTP project is currently in the final design phase and is at the 60 percent design completion level. Through the development and execution of the project, staff has identified additional design tasks that were not included in RBF's original contract scope of work including additional hydraulic surge analysis, acoustical consulting services, potholing of existing utilities, and preparation of the project Storm Water Pollution Prevention Plan (SWPPP) and the project Water Quality Management Plan (WQMP). These items are required to comply with county and regional storm water regulations.

#### Hydraulic Surge Analysis:

In order to obtain approval from the Metropolitan Water District of Southern California (MWD) for the "pump-in" of Baker product water to the Allen McColloch Pipeline (AMP), RBF and Flow Science have performed extensive hydraulic simulations to model anticipated hydraulic conditions and their associated impacts on the AMP during operation of the Baker WTP. After presenting the results of the hydraulic modeling to MWD, MWD requested the completion of four additional simulations not originally included in the scope of work. RBF's proposed scope of work provides for the completion of these additional simulations, preparation of an updated summary report and additional coordination with MWD.

A comprehensive hydraulic and surge analysis is also required for the proposed Trabuco Canyon Water District (TCWD) raw water pump station. The analysis will update the existing raw water conveyance system model to include the TCWD pump station, establish the hydraulic gradient for the 16-inch delivery pipeline from the Baker WTP to TCWD's Dimension plant and perform hydraulic simulations associated with the varying flow rates to the Dimension plant. The additional analysis will provide the necessary information to design the appropriate surge protection measures for this facility.



Acoustical Consulting Services:

Minimizing the impact of operational noise emanating from the plant site to the adjacent residential community is a significant priority to the design team. Operational noise was also the most commonly expressed concern by the residents who attended a public scoping meeting during the CEQA process. In order to quantify, assess and mitigate the anticipated operational noise associated with the facilities, staff requested RBF to conduct an extensive analysis of ambient noise levels at the site, to model future noise levels anticipated with the operation of the plant and to develop recommendations and mitigation measures that can be incorporated into the design to minimize the operational noise associated with the facilities. RBF proposes to perform these services through a subcontract with Wieland Acoustics.

Potholing of Existing Utilities:

Potholing services are needed to ensure accuracy of the plant yard piping design. Multiple existing critical underground utilities exist onsite including the AMP, the Baker pipeline, the raw water pipe from the Baker Pipeline to TCWD's Dimension Plant, electrical duct banks and communication conduits. RBF has developed a scope of work to pothole existing utilities at all major crossings and planned connections at both the Baker site and the raw water pump station site near Peters Canyon reservoir. RBF proposes to perform these services through a subcontract with Kana Pipeline.

SWPPP and WQMP Development:

RBF has determined that the Baker project will require development of a Risk Level 2 SWPPP and a WQMP requiring implementation of extensive best management practices (BMPs) and increased requirements for monitoring and reporting. As a result, staff recommends that the SWPPP and WQMP be prepared during the design phase by a certified consultant rather than during the construction phase by the contractor. The SWPPP and WQMP would then be included in the construction bid documents, which would allow the contractor to accurately bid the effort needed to comply with the requirements of both plans.

Design Variance No. 3:

RBF submitted Variance No. 3 in the amount of \$95,370 for additional engineering design services as described above. RBF's variance proposal is included as Exhibit "A". The proposed variance amount includes a \$22,930 deductive credit for tasks that were included in RBF's original scope of work, but were not performed as they were later deemed unnecessary during the final design phase.

Staff recommends Board approval of Variance No. 3 to RBF's agreement in the amount of \$95,370 as summarized in Exhibit "B". The variance was approved by the Baker Project Committee on January 13, 2011.

FISCAL IMPACTS:

Project 11218 is included in the FY 2010-11 Capital Budget. The existing budget and Expenditure Authorization are sufficient to fund Variance No. 3.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA) and an Environmental Impact Report is being prepared in conformance with California Code of Regulations Title 14, Chapter 3, Article 7.

COMMITTEE STATUS:

This item was reviewed at the Engineering and Operations Committee on January 18, 2011.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 3, IN THE AMOUNT OF \$95,370, WITH RBF CONSULTING FOR THE BAKER WATER TREATMENT PLANT, PROJECT 11218.

LIST OF EXHIBITS:

Exhibit "A" – RBF Consulting Variance No. 3 Proposal  
Exhibit "B" – Professional Services Variance



# EXHIBIT "A"



January 10, 2011

JN 10-106232

Mr. Richard Mori  
**IRVINE RANCH WATER DISTRICT**  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Subject:** Baker Water Treatment Plant – Variance No. 3 - Scope and Budget for Surge Analysis, Acoustical Consulting Services, Potholing of Existing Utilities, and preparation of a Stormwater Pollution Prevention Plan and Water Quality Management Plan.

Dear Rich:

RBF Consulting has grouped the recently identified additional scope items not covered under the initial Project for your consideration and approval.

- Surge Analysis
- Acoustical Consulting Services
- Potholing of Existing Utilities
- Storm Water Pollution Prevention Plan
- Water Quality Management Plan

For your consideration a background regarding each scope item is provided, followed by a list of tasks and budget estimate (as attachment).

## **BACKGROUND**

Provided is background regarding each scope item:

### Item 1 - MWD Surge Analysis

On June 16th, 2010 a meeting was held with Metropolitan Water District (MWD), Flow Science, IRWD and RBF. At the meeting Flow Science presented its surge analysis for the Raw Water and Product Water Pump Stations. During the meeting MWD staff requested back-up information and additional simulations (runs). The requests made by MWD were memorialized in meeting minutes. Action Items No. 1, 2, 3, 5 and 7 in the meeting minutes encompass the additional work requested by MWD to be completed by Flow Science.

### Item 2 - TCWD PS Surge Analysis

To complete the design of the TCWD PS surge analysis must be completed considering the planned operational scenarios and varying flow rates of the Dimension WTP. The analysis will provide necessary information to verify and size a considered hydropneumatic tank downstream of the pump station.

### Item 3 - Acoustical Consulting Services

RBF and IRWD have been in discussion about the need for acoustic analysis. RBF and Wieland Acoustics have developed a comprehensive scope to analyze existing noise levels, model future, and develop recommendations to be implemented into design to limit noise generated on-site.

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 ■ P.O. Box 57057, Irvine, CA 92619-7057 ■ 949.472.3505 ■ Fax 949.472.8373

Offices located throughout California, Arizona & Nevada ■ [www.RBF.com](http://www.RBF.com)

#### Item 4 – SWPPP and WQMP

A SWPPP must be prepared for a construction permit at the Baker site. The Project requires a Level 2 SWPPP. Due to increased requirements for Risk Level 2 SWPPPs and agency responsibility, it is advised that the SWPPP be prepared in advance of construction (i.e. by consultant, instead of contractor).

A WQMP must be prepared and provided to the City of Lake Forest since the Project lead to an increase in impervious area above 5,000 square feet. RBF would prepare the Water Quality Management Plan for the Baker WTP. The recommendations from the WQMP will be implemented in final design of site drainage.

#### Item 5 - Potholing of Existing Utilities

All existing utility crossing proposed need to be potholed in support of design of Baker WTP. RBF has contacted pothole subconsultants and provides a scope and fee for consideration.

### **SCOPE OF WORK**

A description of the scope of work is provided for each item additional scope item:

#### **Item 1 - MWD Surge Analysis**

Task 1.1 - Flow Science and RBF will address Action Items No. 1, 2, 3, 5 and 7 from the meeting minutes (Attachment A) per the June 16, 2010 meeting with MWD. A description of each Action Item is provided.

*Action Item No. 1* – Flow Science is to provide MWD with a summary of the demands of the AMP used in the model.

*Action Item No. 2* – Flow Science to run Case 6 (Summer Demands, OC-88 off, OC-88A on, power trip) and Case 9 (Winter Demands, OC-88 on, OC-88A off, power trip).

*Action Item No. 3* – Flow Science to run winter conditions (high head) and OC-88 flow of 100 cfs with current surge protection, and then provide MWD summary of adequacy or impact to the PWPS.

*Action Item No. 5* – Flow Science to run analysis for rapid ball valve closure at the Product Water Pump Station under winter conditions.

*Action Item No. 7* – Flow Science to confirm if controlled venting air release / vacuum valves are necessary on the Santiago Lateral.

Addressing Items 2, 3 and 5 will require four additional model simulations not covered under the original scope of work. Flow Science will update the reports and attend one additional meeting with MWD.

Task 1.2 - RBF will review the results of additional simulations, review the revised reports before going to MWD, and attend one additional meeting with MWD.

## **Item 2 - TCWD Pump Station Surge Analysis**

Task 2.1 – Flow Science to update the existing raw water conveyance system model to include the TCWD Pump Station, establish the HGL for the 16-inch TCWD pipeline, and perform simulations of power failure and start-up of the TCWD PS, Raw Water Pump Station and Dimension Treatment Plant.

Task 2.2 – Prepare a detailed summary report with results from analysis and recommendations to for safe operation of the TCWD 16-inch pipeline system.

Task 2.3 – RBF Consulting support services and review of report from Flow Science.

## **Item 3 - Acoustic Consulting Services**

Task 3.1 – See Attachment C for the proposed scope of service from Wieland Acoustics.

Task 3.2 – RBF Consulting support services and review of report from Wieland Acoustics.

## **Item 4 – Water Quality Management Plan**

Task 4.1 - A SWPPP must be prepared for a construction permit at the Baker site. The Baker site near Serrano Creek is a Risk Level 2 project. Thus, the SWPPP will must address:

- Enhanced minimum BMPs for housekeeping, erosion and sediment control, material management, waste management
- Storm event runoff monitoring (minimum of 3 turbidity and 3 pH samples, each day of each rain event) for pH and turbidity from all discharge points to demonstrate compliance with Numeric Action Levels
- Compliance reporting via SMARTS database (publicly accessible, highly visible)
- Storm event and baseline site inspections
- Annual reporting

In additional a Risk Level 2 SWPPP must include:

- SWPPP must be developed by a Qualified SWPPP Developer (must have a PE/CPESC/CPSWQ/RLA/RG/other certification as required by the permit).
- The SWPPP must be implemented by a Qualified SWPPP Practitioner
- Increased cost to project to comply with the items above; typical estimated cost increase: 100-200% increase over typical SWPPP implementation.
- Ultimate responsibility for compliance falls on project owner, whether or not the contractor is assigned SWPPP responsibility (IRWD is permit holder). Risk Level 2 projects will generally receive increased attention from regulators, and potentially even more specific attention for this project since it is directly adjacent to the receiving water.

Task 4.2 – RBF will prepare the Water Quality Management Plan for the Baker WTP. The WQMP analysis will include review of the current drainage, leading into identification of all site design, source control and treatment control best management practices and recommendations for design. The findings of the analysis will be documented and incorporated into the WQMP report.

Task 4.2 – RBF will provide the WQMP to the City of Lake Forest and hold one meeting with City staff to receive comments.

### **Item 5 - Potholing of Existing Utilities**

Task 5.1 - RBF will coordinate, and its sub-consultant complete, potholing at a total of 52 existing utility crossings / planned connections. The potholes planned cover Baker WTP site, NRW / Serrano Creek Trail, and Raw Water Pump Station utility verifications. A general scope for the potholing is provided as Attachment D.

Task 5.2 – RBF will survey the surface markers / target set to confirm the locations of each utility.

### **Budget**

RBF has totaled the budget for Items 1 to 5, and included a discount for scope items no longer to be completed from the original scope. The resulting requested budget is \$95,370 for the rendering of services described herein. See Attachment E for a breakdown of the budget estimate.

### **ATTACHMENTS**

Attachment A – Scope from Flow Science per MWD requested analysis.

Attachment B – Scope from Flow Science for TCWD PS analysis.

Attachment C – Scope from Wieland Acoustics.

Attachment D – General Scope from pothole sub-consultant.

Attachment E – Budget Estimate

We appreciate the opportunity to provide these additional services to IRWD for the Baker WTP project. Should you require additional information or have any questions, please do not hesitate to contact me at 949.855.3616.

Sincerely,



Cindy Miller, P. E.  
Vice President  
Water Resources

**Flow Science Incorporated**

723 E. Green St., Pasadena, CA 91101  
 (626) 304-1134 • FAX (626) 304-9427



January 5, 2011

RBF Consulting  
 14725 Alton Parkway  
 Irvine, California 92618-2027

Attention: Cindy Miller, P.E.  
 Vice President

Subject: Irvine Ranch Water District  
 Baker WTP RWPS and PWPS Action Items  
 Additional Pressure Surge Analysis  
 FSI 081044

Dear Ms. Miller:

This letter responds to your request for a Scope of Work to address the comments to our reports for the Baker Raw and Treated Water Pump Stations as contained in the Meeting Minutes from the meeting held on June 16, 2010 at MWD.

<i>Action Item</i>	<i>Due By Date</i>	<i>Description</i>
#1	7/9/10	Flow Science to provide MWD with a summary of the demands off the AMP used in the model.
#2	7/14/10	Flow Science to run to Case 6 and 9 (per MWD) for the PWPS surge analysis.
#3	7/14/10	Flow Science to run winter conditions (high head) and OC-88 flow of 100 cfs with current surge protection, and then communicate to MWD the adequacy or impact to surge protection for the PWPS under the case.
#5	7/14/10	Flow Science to run analysis for ball valve rapid closure at PWPS under winter conditions.
#7	7/9/10	Flow Science to confirm if controlled venting air release / vacuum valves are necessary on the Santiago Lateral.

As shown in the Action Items table, Flow Science has been requested to address items 1, 2, 3, 5, and 7. Items 2, 3, and 5 will require an additional four model simulations that were not included the original Scope of Work.





Cindy Miller, P.E./RBF  
January 5, 2011  
Page 2 of 2

If you have any questions or need more information, please do not hesitate to contact me.  
We look forward to working with you on this project.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Scott Foster". The signature is fluid and cursive, with a large, prominent initial "R" and a long, sweeping underline.

R. Scott Foster, P.E.  
Vice President

**Flow Science Incorporated**

723 E. Green St., Pasadena, CA 91101

(626) 304-1134 • FAX (626) 304-9427



January 5, 2011

RBF Consulting  
14725 Alton Parkway  
Irvine, California 92618-2027

Attention: Cindy Miller, P.E.  
Vice President

Subject: Irvine Ranch Water District  
Baker Water Treatment Plant - Trabuco Canyon Water District Pump Station  
Proposal Pressure Surge Analysis  
FSI 081044.1

Dear Ms. Miller:

This letter responds to your request for a proposal to perform a pressure surge analysis to determine the effects the operation of the Trabuco Canyon Water District Pump Station (TCWD PS) will have on IRWD's Baker Water Treatment Plant (WTP) Raw Water Conveyance System and the pump station's associated 16-inch diameter transmission main.

A previous surge analysis report, dated May 18, 2010, was completed on the Baker WTP Raw Water Conveyance System. In this analysis, the TCWD PS was modeled as a 6 cfs demand off the Baker Pipeline immediately upstream of the Baker WTP. It was determined that a surge tank on the suction side of the RWPS or a surge relief valve at the end of the Irvine Lake Pipeline could be installed to protect the system from minor adverse pressure transients. For this analysis, it will be assumed that one of these surge protection options is installed.

From the information provided, it is our understanding that the TCWD PS, which is located in the Baker WTP, will have the capacity to deliver approximately 6 cfs from the Baker Pipeline through a 16-inch diameter and approximately 6000 ft long transmission main to a water treatment plant. At the water treatment plant, the flow will discharge through butterfly valves to sand filters. According to RBF, the butterfly valves will open and close rapidly during backwash of the filters. It is our understanding that a 2000 gallon hydropneumatic tank will be installed upstream of the butterfly valves to mitigate pressure surges created by the rapid opening and closing of the butterfly valves. Pump power failure of the RWPS will also need to be performed with the TCWD PS since the RWPS is hydraulically linked to the TCWD PS.

Based on the above and our previous experience with this project, we see the following Scope of Work as necessary to complete the analysis of this system.



Cindy Miller, P.E./RBF  
January 5, 2011  
Page 2 of 2

**SCOPE OF WORK**

- Task 1 - Update the existing model of the Baker WTP Raw Water Conveyance System to include the TCWD PS, its associated piping, and hydropneumatic tank.
- Task 2 - Establish initial non-transient hydraulic grade line elevations for the operation of the TCWD PS.
- Task 3 - Perform simulations for simultaneous and individual power failure and start up of the TCWD PS and RWPS.
- Task 4 - Review the results of the analysis and, if deemed necessary, recommend surge protection measures to eliminate possible adverse surges created by the power failure and start up of the TCWD PS and RWPS.
- Task 5 - Prepare a detailed technical memorandum describing the results of the analysis and recommendations for the safe operation of this system.

We estimate that we can complete the above Scope of Work in 20 working days upon receipt of an amendment to the current contract and notice to proceed along with new pump station details (i.e. pump curves, valving, etc.), and transmission main materials type. Upon completion of the final design, we will review the plans and specifications as they pertain to surge protection to insure conformity to our recommendations.

If you have any questions or need more information, please do not hesitate to contact me. We look forward to continuing our work with you on this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Tina T Kuah". The signature is fluid and cursive, with the first name "Tina" being more prominent.

Tina T Kuah, P.E.  
Project Engineer



**WIELAND  
ACOUSTICS**  
noise & vibration consultants

WIELAND ACOUSTICS, INC.  
1371 Warner Avenue, Suite A  
Tustin, CA 92780  
Tel: 949.474.1222

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www.wielandacoustics.com

January 5, 2011

Proposal File P2135-10

Ms. Cindy Miller  
RBF Consulting  
14725 Alton Parkway  
Irvine, CA 92618

Subject: Proposed Acoustical Consulting Services for the Baker Water Treatment Plant in  
Lake Forest, CA

Dear Ms. Miller:

We are pleased to propose the following scope of work, terms and conditions to provide acoustical consulting services for the above-mentioned project.

## 1 Scope of Work

1. We will obtain and review all available plans and documents pertaining to the project. Such plans and documents include, but are not limited to, site plans, grading plans, mechanical plans, architectural drawings, and topographical maps of the study area.
2. We will perform an inspection of the project site to identify its location and geometry relative to nearby sensitive properties.
3. We will obtain measurements at seven locations adjacent to the project site to identify the existing ambient noise levels. To the extent possible, the measurements will be obtained over a continuous 7-day period. Where such measurements are not possible or feasible, short-term measurements will be obtained on a random schedule over a 7-day period as appropriate to characterize the existing ambient noise environment.
4. We will obtain 1/3-octave band noise measurements of any existing equipment items at the plant that will remain after the proposed improvements have been completed.
5. We will compile and inventory the relevant mechanical characteristics of the equipment to be used at the project site by reviewing the architectural and mechanical drawings, and equipment specifications.
6. We will establish the sound power levels of each equipment item to be used at the project site by examination of the manufacturer's data or analysis of the equipment specifications.



7. We will establish the sound power levels of each equipment item to be used at the project site by examination of the manufacturer's data or analysis of the equipment specifications.
8. We will work with Client to develop a typical scenario for operational activities that will occur at the project site.
9. We will construct a 3-D computer model to analyze the noise levels that will be experienced at the nearby sensitive properties during typical operational activities once the project has been completed.
10. We will assess the impact of the operational noise levels relative to the City of Lake Forest's noise standards.
11. If significant impacts are assessed, we will investigate and analyze alternative mitigation measures (e.g., building design, enclosures, baffles, barriers, lagging, silencers, etc.) that can be used to reduce the operational noise to acceptable levels.
12. Based on the findings of Task 10, above, we will provide recommendations for the most viable noise control measures. This will include identifying specific hardware items such as panels, enclosure design requirements, noise barrier requirements, etc.
13. We will prepare a draft report of findings that identifies the noise standards, estimated noise levels, impacts, and recommendations, and submit it to Client for review and comment.
14. We will prepare a final report in which Client's comments and concerns are addressed.
15. We will prepare for and attend two meetings to support the project.

## 2 Schedule

Barring inclement weather conditions, it is anticipated that the ambient noise measurements and field work will be completed within two weeks of your authorization to proceed. Barring unforeseen circumstances beyond our control, it is anticipated that a draft report of findings will be provided within six weeks of your authorization to proceed. However, because of the tight schedule for drawing submittal, we will work closely with you throughout the study period to notify you prior to our report submittal of any mitigation measures that may be required so that they can be incorporated into your drawings as early as possible.

## 3 Exclusions

It is expressly understood by Client that the following are specifically excluded from Consultant's scope of services under this Agreement, and Consultant shall not be held liable for the design, specification, recommendations associated with, implementation or provision of:

1. Revisions to the project that require re-analysis.



2. Analysis of and mitigation measures for vibration levels from the equipment at the plant. It will be the responsibility of others to ensure that all rotating equipment installed at the site is mechanically balanced.
3. Analysis of and mitigation measures for noise and vibration levels associated with construction of the project.
4. Compliance of the project design with any noise and/or vibration standard or applicable guideline, including the OSHA guidelines, other than the local standards expressly included in the Scope of Work.
5. Subsequent review of architectural drawings/construction documents to verify inclusion of the acoustical recommendations.
6. Onsite construction inspection.
7. Construction noise and vibration monitoring.
8. Post-construction monitoring.

## **4 Terms and Conditions**

### **4.1 Responsibility for Implementation**

Consultant shall not be responsible for construction means, methods, schedules, procedures and sequences selected by Client nor for the Client's safety precautions or programs in connection with implementation of Consultant's recommendations. These rights and responsibilities are solely those of the Client in accordance with its contract documents. Consultant shall not be responsible for any acts or omissions of the Client, its subcontractors, any entity performing any portions of the work, or any agents or employees of any of them. Consultant does not guarantee the performance of Client and shall not be responsible for Client's failure to perform its work in accordance with the contract documents or any applicable laws, codes, rules or regulations.

### **4.2 Indemnification**

Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Consultant, its officers, directors, employees and subconsultants (collectively, "Consultant") against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising out of or in any way connected with the services performed under this Agreement, except for Consultant's negligence or willful misconduct.

### **4.3 Limitation of Liability**

To the maximum extent permitted by law, Client agrees to limit Consultant's liability for Client's damages to the sum of \$50,000, or Consultant's fees, whichever is greater. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.



#### **4.4 Waiver of Consequential Damages**

Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither Client nor Consultant, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation or any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty.

#### **4.5 Third Party Beneficiary**

Nothing contained herein shall create a contractual relationship with or a cause of action in favor of a third party against either Client or Consultant. Consultant's services under this Agreement are being performed solely for Client's benefit, and no other party or entity shall have any claims against Consultant because of this Agreement or the performance or nonperformance of services hereunder.

### **5 General Provisions**

1. All tasks will be completed in a professional manner according to standard practice.
2. Any alteration or deviation from the proposed tasks involving extra costs will be executed only upon Authorization and will become an extra charge over and above the proposed fee.
3. All agreements are contingent upon strikes, accidents, or delays beyond our control.
4. The work effort authorized as a result of this proposal is valid for 6 (six) months.

### **6 Termination**

Either party may terminate this Agreement with ten (10) days written notice. In the event of termination, Client shall pay Consultant for all services rendered and all reimbursable costs incurred by Consultant up to the date of termination, in accordance with the payment provisions of this Agreement.

### **7 Mediation**

In the event of a dispute arising out of or relating to this Agreement or the services to be rendered hereunder, Client and Consultant agree to attempt to resolve such disputes, prior to instigating formal litigation or arbitration, as follows: (1) the parties agree to attempt to resolve such disputes through direct negotiations between the appropriate representatives of each party; (2) if such

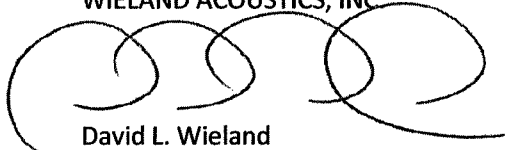


negotiations are not fully successful, the parties agree to attempt to resolve any remaining dispute by formal non-binding mediation.

We appreciate the opportunity to provide you with our proposal for acoustical consulting services, and look forward to working with you. If you have any questions please feel free to call us at 949.474.1222.

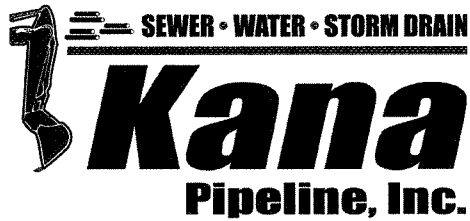
Sincerely,

WIELAND ACOUSTICS, INC



David L. Wieland  
Principal Consultant





Job #:

**Contract terms and conditions, scope of work**

*Kana Pipeline Inc.*, scope of work shall include or provide the following:

General:

1. All personnel, equipment and supplies required to perform utility designation and locating, using vacuum excavation methods (or other approved methods).
2. Assistance in securing all necessary plans, reports, or other data as requested by the client.
3. Provide the client, upon execution of the contract, **certificates of insurance**.
4. Secure all **permits** necessary, from all jurisdictional authorities, to designate and locate subsurface utilities.  
**Permits paid for by Kana Pipeline shall be passed through on a cost plus 15% basis.**
5. Comply with all local, state and federal requirements regarding the safe excavation of subsurface utilities.
6. Provide **traffic control** for streets with speed limits up to **35 MPH**. All traffic control in high density or high speed areas, those over 35 MPH, shall be provided as an additional line item.
7. **Start project within 72 hours**; after issuance of an approved permit, or after given authorization to proceed on a project without permitting requirements, barring any unforeseen circumstance beyond our control.
8. **Adverse pavement or soil conditions** may exist. If the surface material is thicker than eight (8) inches, a change order may apply. Soils with a high content of large rocks, greater than three (3) inches in size, may result in a change order. We will notify you, within 24 hours of discovery, of any condition likely to result in a change order.
9. **Target utilities deeper than twelve (12) feet may be subject to a change order**. A fee of \$75.00, for every foot of depth beyond twelve feet, may be required. Notification to the client will occur within 24 hours of the discovery of target facilities beyond 12 feet deep.

10. **Provide the client with a report about each pothole/target**, to include the following information:
  - Surface material** type & thickness
  - Width** of the target facility
  - Elevation**, relative to the surface, of each target facility
  - What the facility is made of**, when such a material is recognizable
  - Picture** of the area excavated
  - Picture** of the exposed target facility (when available)
11. Install a **surface marker** over the center of the target facility. All measurements taken will be taken to this marker. The surface marker may be any one of the following items or any combination thereof:
  - Hub marker** (nail with ribbon)
  - Stakes**, wooden or metal
  - Whiskers/ stake chasers**
  - Paint**
12. Mark each pothole location with the following information:
  - Pothole number**
  - Depth** to top of facility
  - Type of facility** (telco, tv, water, gas, electric, sewer)
  - Orientation of facility** (east, west, north, south)
12. Leave the job site in a clean and safe condition.
13. **Guaranteed restoration of pavement**, within the limits of the pothole, for **2 years**. When the pothole is located in areas other than the roadway, the area shall be restored as nearly as possible to the original condition. All potholes shall be pneumatically tamped to meet or exceed all relevant standards. All holes will be backfilled using either native material or sand, unless otherwise stated in the proposal.
14. **Kana Pipeline Inc.** guarantees the accuracy and completeness of its services. If any errors or omissions are found to be the fault of Kana Pipeline, Kana will correct such errors or omissions at their own expense.

**The Client shall include or provide the following:**

1. Full size, **scaled drawings** in a hardcopy or electronic format.
2. **Provide access** to all areas of the project site where potholing is required.
3. **Provide Preliminary Lien information.**
4. **Provide contact information** to all relevant project participants:
  - Survey Crew
  - Project Manager
  - Other trades with whom coordination is required
  - All others with whom the client would like us to coordinate our activities
5. **Provide pothole locations** to include survey marking of the desired pothole locations.

**Kana Pipeline Inc., Shall not provide, or be liable, for the following, unless otherwise specified in our proposal:**

1. **Removal or treatment of contaminated or hazardous materials** encountered on the job site.
2. **The digging through of any structural material that may have been placed around the target facility**, such as slurry or concrete. In the event a target facility is encased in concrete or slurry, the width, top, and bottom limits of the slurry or concrete will be determined. Additional holes are sometimes required to determine the width and depth of large slurry encasements, all extra holes will be billed at the rate established in the proposal.
3. **Locating of non-conductive** utilities such as those made of ACP, RCP, PVC, PE, fiber optic or any other non-conductive target material.
4. **Any pothole that the facility owner has decided that vacuum excavation equipment may not be used on.** California law allows facility owners to prohibit the use of power driven equipment over their facilities. Kana Pipeline Inc. shall not be held responsible for any target which the facility owner will not allow us to use our vacuums on.
5. **Kana Pipeline Inc. will not be held accountable for the location of any particular pothole**, as the locations are provided by the client. If the client chooses not to provide survey of the pothole locations, prior to excavation, then the pothole locations determined by Kana shall be considered sufficient.
6. **The preparation or purchase of any pollution control program, manual or other type of document associated with pollution control.**
7. **USA mark removal.** Many cities have begun requiring contractors to remove all USA markings after they complete their work. Not all cities have such requirements, and as such we cannot always determine which cities do and do not have such requirements. We cannot be held responsible for services that we did not know were going to be required by the permitting agency, unless disclosure of such requirements has been provided prior to our proposal.

**Project Specific Notes:**

ATTACHMENT E

IRVINE RANCH WATER DISTRICT  
BAKER WATER TREATMENT PLANT

Task Description	Hours				Fee		
	Project Manager	Senior Engineer	Engineer	Total	Subtotal	Direct	Total
<b>ITEM 1 - MWD SURGE ANALYSIS</b>							
1.1 Surge Analysis and Report Update					\$ -	\$ 7,500	\$ 7,500
1.2 RBF Coordination, Review and Meeting		4	6		\$ 1,600		\$ 1,600
<b>SUBTOTAL (MWD SURGE ANALYSIS)</b>	0	4	6	10	\$ 1,600	\$ 7,500	\$ 9,100
<b>ITEM 2 - TOWDPS SURGE ANALYSIS</b>							
2.1 Model and Scenario Setup, Surge Analysis					\$ -	\$ 8,000	\$ 8,000
2.2 Summary Report					\$ -	\$ 9,000	\$ 9,000
2.3 RBF Coordination, Review and Meeting		4	6		\$ 1,600		\$ 1,600
<b>SUBTOTAL (MWD SURGE ANALYSIS)</b>	0	4	6	10	\$ 1,600	\$ 17,000	\$ 18,600
<b>ITEM 3 - ACOUSTICAL CONSULTING SERVICES</b>							
3.1 Acoustical Monitoring, Analysis and Report					\$ -	\$ 24,000	\$ 24,000
3.2 RBF Coordination, Review and Meeting	2	2	10		\$ 2,200		\$ 2,200
<b>SUBTOTAL (MWD SURGE ANALYSIS)</b>	2	2	10	14	\$ 2,200	\$ 24,000	\$ 26,200
<b>ITEM 4 - SWPPP AND WQMP</b>							
4.1 Storm Water Pollution Prevention Plan (Risk Level 2)		6	70		\$ 10,940		\$ 10,900
4.2 Water Quality Management Plan Analysis and Report		4	60		\$ 9,160		\$ 9,200
4.3 Coordination and Meeting with City of Lake Forest	2		10		\$ 1,820		\$ 1,800
<b>SUBTOTAL (MWD SURGE ANALYSIS)</b>	2	4	70	76	\$ 21,920	\$ -	\$ 21,900
<b>ITEM 5 - POTHOLING OF EXISTING UTILITIES</b>							
5.1 Potholing of Existing Utilities	0	2	10		\$ 1,780	\$ 36,400	\$ 38,200
5.2 Survey of Pothole Control			6		\$ 840	\$ 3,460	\$ 4,300
<b>SUBTOTAL (MWD SURGE ANALYSIS)</b>	0	2	16	18	\$ 2,620	\$ 39,860	\$ 42,500
<b>SUBTOTAL (ITEMS 1-5)</b>	4	14	92	110	\$ 29,940	\$ 88,360	\$ 118,300
<b>DEDUCTIONS</b>							
6.4 Seismic Evaluation					\$ 6,000	-	\$ 6,000
8.4 Constructability Review					\$ 16,930	-	\$ 16,930
<b>SUBTOTAL (DEDUCTIONS)</b>					\$ 22,930	\$ -	\$ 22,930
					<b>TOTAL (FEE) \$ 95,370</b>		



## EXHIBIT "B"

### IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

**Purpose.** This procedure shall be used to identify, estimate, and report variances to the scope of work in professional services agreements between IRWD and a consulting engineer or other type of consultant. A variance may be initiated by either IRWD's Project Manager or by the Engineer/Consultant.

**Variance.** The Variance shall be used to identify all changes to the original scope of work, budget, and schedule for any study, design, or construction phases services.

**Engineer/Consultant Initiates Variance.** If a Variance is initiated by the Engineer/Consultant, the Engineer/Consultant shall prepare the Variance including the Description of Variance, the Engineering & Management Cost Impact, the Schedule Impact, and the Required Approval Determination sections. The Engineer/Consultant shall then sign the Variance and submit it to the IRWD Project Manager for action.

**IRWD Initiates Variance.** If a Variance is initiated by IRWD's Project Manager, the IRWD Project Manager shall complete the Description of Variance and fill-in the Total Original Contract amount and Previous Variances amount (if any). The Variance shall then be given to the Engineer/Consultant to complete the Cost Impact, the Schedule Impact, and the Required Approval Determination sections. The Engineer/Consultant shall then sign the Variance and submit it to the IRWD Project Manager for action.

**Variance Processing.** Once a Variance is signed and submitted by the Engineer/Consultant, the IRWD Project Manager shall:

1. Enter the Variance's details onto a Variance Register for the project,
2. Review, sign, and date the Variance, and
3. Obtain appropriate approvals.

**Notice to Proceed.** Work covered by a Variance may proceed upon signing by the department Director. A copy of the Variance, signed by the Director, shall be the Engineer's/Consultant's Notice to Proceed with the required work.

**Contractual Authorization.** Work covered by a Variance which has been signed by the Director may require final approval from the General Manager, Committee, or Board based upon the requirements of the Procurement Policy. These approvals may be obtained after the Engineer/Consultant has been given a copy of the Variance signed by the Director (the Engineer's/Consultant's Notice to Proceed). The IRWD Project Manager shall promptly thereafter prepare a memo to the General Manager, Committee and/or Board agenda items(s) for approvals as required. Once the Variance is properly approved, it modifies the existing Engineer's/Consultant's agreement.

**Financial Authorization.** An approved Variance may require any of the following:

1. A Capital Budget increase,
2. A new Expenditure Authorization,
3. An extension to an existing Purchase Order, and/or
4. A new Purchase Order.

It is the IRWD Project Manager's responsibility to process the necessary paperwork to grant the required financial authorization.

**IRVINE RANCH WATER DISTRICT  
PROFESSIONAL SERVICES VARIANCE**

Project Title: Baker Water Treatment Plant File No.: \_\_\_\_\_  
 Date: January 10, 2011  
 Variance No.: 3  
 Project Purchase Order No.: \_\_\_\_\_ Project No.: PR 11218

Originator:  IRWD  ENGINEER/CONSULTANT  Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*):

Variance No. 3 includes surge analysis, acoustic consulting services, potholing, and studies related to permanent and construction related stormwater pollution prevention (SWPPP and WQMP).

Engineering & Management Cost Impact:

Classification	Man Hours	Billing Rate	Labor \$	Direct Costs \$	Subcon. \$	Total \$
Tasks 1 – 5 (See attached scope and fee)	-	-	-	29,940	88,360	118,300
Deduction (Seismic Eval, Const. Review)						- 22,930
<b>Total \$ =</b>						<b>95,370</b>

Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
1,2	Surge Analysis	March 2011	0 days	March 2011
3	Acoustic Analysis	March 2011	0 days	March 2011
4	Potholing	March 2011	0 days	March 2011
5	Storm Water (SWPPP, WQMP)	March 2011	0 days	March 2011

Required Approval Determination:

Total Original Contract	\$4,047,164	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.
Previous Variances \$	<u>390,974</u>	<input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.
This Variance \$	<u>95,370</u>	<input checked="" type="checkbox"/> Board: Single Variance greater than \$60,000.
Total Sum of Variances	\$ <u>486,344</u>	<input type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
New Contract Amount	\$4,533,508	
Percentage of Total Variances to Original Contract	<u>12%</u>	

ENGINEER/CONSULTANT: RBF / Carollo

IRVINE RANCH WATER DISTRICT

Cindy Miller   
Project Engineer/Manager

01/10/2011  
Date

  
Department Director

1-11-11  
Date

Engineer's/Consultant's Management

01/10/2011  
Date

General Manager/Comm./Board

Date





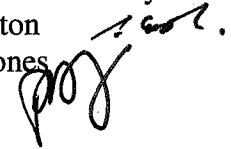


January 24, 2011

Prepared by: A. Arant/S. Malloy

Submitted by: K. Burton

Approved by: Paul Jones



CONSENT CALENDAR

MICHELSON WATER RECYCLING PLANT CLARIFIER FLIGHTS AND  
DRIVES REPLACEMENT - FINAL ACCEPTANCE

SUMMARY:

S. S. Mechanical Corporation has completed replacement of the Michelson Water Recycling Plant primary and secondary clarifier flight and drives equipment, and demolition of Groundwater Well No. 10. The project has received final inspection and acceptance of construction is recommended.

BACKGROUND:

Four drive units for the primary clarifiers and nine drive units for the secondary clarifiers were over 40 and 10 years old respectively, and frequently malfunctioned. The flight equipment in the secondary clarifiers (Nos. 2, 4, 6 and 8) were over 20 years old and experienced failures. Groundwater Well No. 10 once protected the Spent Backwash Tank from hydraulic lift. With removal of the Spent Backwash Tank as part of the MWRP Phase 2 Expansion, Groundwater Well No. 10 was no longer needed. In August 2010, S. S. Mechanical was awarded a contract to replace the drive units and flights at the primary and secondary clarifiers. Skimmers and sludge boxes were also replaced in four secondary clarifiers.

Project Title:	Michelson Water Recycling Plant Clarifier Flights and Drives Replacement
Project No.:	20784
Design Engineer:	IRWD Staff
Contractor:	S. S. Mechanical Corporation
Original Contract Cost:	\$ 91,500.00
Final Contract Cost:	\$100,907.50
Original Contract Days:	120
Final Contract Days:	120
Total Budget:	\$182,600
Total Project Cost:	\$107,887
Final Change Order Approved On:	December 30, 2010

**FISCAL IMPACTS:**

Project 20784 is included in the FY 2010-11 Capital Budget. The current budget and Expenditure Authorization are sufficient to fund the project construction.

**ENVIRONMENTAL COMPLIANCE:**

This activity is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations Title 14, Chapter 3, Section 15302 (c) which provides exclusion for replacement of existing systems and minor repair of public facilities. Additionally, this activity is exempt from CEQA as authorized under the California Code of Regulations, Title 14, Chapter 3 Section 15301 (i), which provides exclusion for the demolition and removal of individual small structures.

**COMMITTEE STATUS:**

This item was not reviewed by a Committee.

**RECOMMENDATION:**

THAT THE BOARD ACCEPT CONSTRUCTION OF THE MICHELSON WATER RECYCLING PLANT CLARIFIER FLIGHTS AND DRIVES REPLACEMENT, PROJECT 20784; AUTHORIZE THE GENERAL MANAGER TO FILE A NOTICE OF COMPLETION; AND AUTHORIZE THE RELEASE OF RETENTION 35 DAYS AFTER THE FILING OF THE NOTICE OF COMPLETION.

**LIST OF EXHIBITS:**

None.

January 24, 2011

Prepared by: A. Arant/S. Malloy

Submitted by: K. Burton

Approved by: Paul Jones

CONSENT CALENDAR

SAN JOAQUIN MARSH CAMPUS PERIMETER WALL IMPROVEMENT  
FINAL ACCEPTANCE

SUMMARY:

Gateway Pacific Contractors, Inc. has completed construction of a perimeter wall around the San Joaquin Marsh Campus. The project has received final inspection and acceptance of construction is recommended.

BACKGROUND:

A perimeter wall consisting of split face block with removable floodwall access sections was constructed around the San Joaquin Marsh Campus (SJMC) to provide flood protection should the San Diego Creek Channel experience minor splashing or overflow during a 15 to 20 year storm event. The removable floodwall access sections can be erected at the vehicular opening at the main SJMC entrance and at the westerly side of the SJMC. A Location Map is included as Exhibit "A".

Project Title:	San Joaquin Marsh Campus Perimeter Wall Improvement
Project No.	20542, 30542
Design Engineer:	VA Consulting
Contractor:	Gateway Pacific Contractors, Inc.
Original Contract Cost:	\$ 393,091.00
Final Contract Cost:	\$ 451,243.44
Original Contract Days:	139
Final Contract Days:	200
Total Budget:	\$5,546,200
Total Project Cost (Est.):	\$ 508,000
Final Change Order Approved On:	January 12, 2011

FISCAL IMPACTS:

Projects 20542 and 30542 are included in the FY 2010-11 Capital Budget. The current budgets and Expenditure Authorizations are sufficient to fund the project construction.

ENVIRONMENTAL COMPLIANCE:

The Michelson Water Reclamation Plant (MWRP) Capacity Expansion Project is subject to the California Environmental Quality Act (CEDQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, and Environmental Impact Report (EIR), SCH # 2005051174, was certified by IRWD, the lead agency in February 2006. San Joaquin Marsh Campus Perimeter Wall Improvements were incorporated into the MWRP Capacity Expansion Project. Environmental review of tasks associated with the addition of the San Joaquin Marsh Campus Perimeter Wall to the MWRP Capacity Expansion Project was addressed in Addendum No. 1 which was adopted by the Board in March of 2008. In August of 2009 the Board adopted Addendum No. 2 which addressed design modifications to the San Joaquin Marsh Campus Perimeter Wall.

COMMITTEE STATUS:

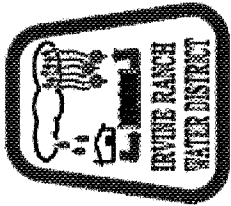
This item was not reviewed by a Committee.

RECOMMENDED MOTION:

THAT THE BOARD ACCEPT CONSTRUCTION OF THE SAN JOAQUIN MARSH CAMPUS PERIMETER WALL IMPROVEMENTS, PROJECTS 20542 and 30542; AUTHORIZE THE GENERAL MANAGER TO FILE A NOTICE OF COMPLETION; AND AUTHORIZE THE RELEASE OF RETENTION 35 DAYS AFTER THE FILING OF THE NOTICE OF COMPLETION.

LIST OF EXHIBITS:

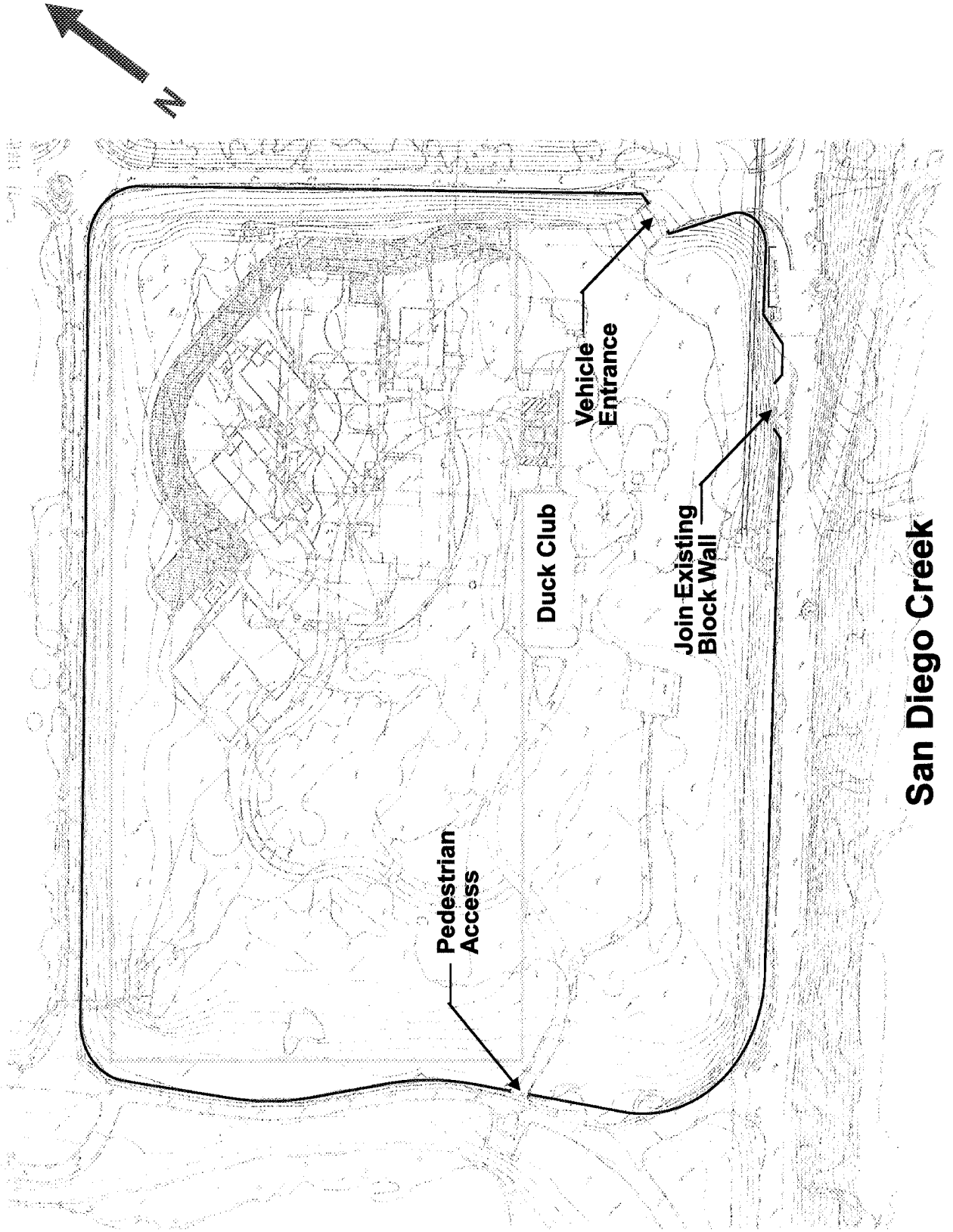
Exhibit "A" – Location Map



Irvine Ranch Water District

# San Joaquin Marsh Campus Wall

Exhibit "A"



San Diego Creek



January 24, 2010  
Prepared by: D. Lochridge  
Submitted by: David Pedersen *[Signature]*  
Approved by: Paul Jones

CONSENT CALENDAR

HVAC CONTROL SYSTEM REPLACEMENT AT  
SAND CANYON AND OPERATIONS CENTER  
FINAL ACCEPTANCE

SUMMARY:

The existing obsolete control systems at both the Sand Canyon and Operations Center Buildings were replaced with a new automation and control network system. The new system is designed to save operational and energy costs. This project has received final inspection and acceptance of this project is recommended.

BACKGROUND:

Project Title:	HVAC Control System Replacement at Sand Canyon and Operations Center
Project Nos.:	11074, 21074, 31074, 10611, 20611 and 30611
Design Engineer:	Engineering Resources
Contractor:	Ram Air Engineering
Original Contract Cost:	\$235,300
Final Contract Cost:	\$569,121
Original Contract Days:	120 Days
Final Contract Days:	325 Days
Total Budget:	\$625,900
Total Project Cost (Est.):	\$569,121
Final Change Order Approved On:	October 10, 2010



FISCAL IMPACTS:

Projects 11074, 21074, 31074, 10611, 20611 and 30611 were included in the FY 2009-10 Capital Budget. The existing budgets and Expenditure Authorizations were sufficient.

ENVIRONMENTAL COMPLIANCE:

This activity is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Regulations, Title 14, Chapter 3, Section 15301.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD ACCEPT THE CONSTRUCTION OF THE HVAC CONTROL SYSTEM REPLACEMENT AT SAND CANYON AND THE OPERATONS CENTER, PROJECTS 11074, 21074, 31074, 10611, 20611 AND 30611; AND AUTHORIZE FILING OF A NOTICE OF COMPLETION; AND AUTHORIZE THE PAYMENT OF THE RETENTION 35 DAYS AFTER THE DATE OF RECORDING THE NOTICE OF COMPLETION.

LIST OF EXHIBITS:

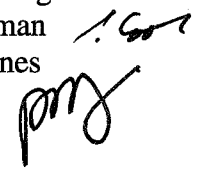
None.

January 24, 2010

Prepared by: K. McLaughlin

Submitted by: B. Beeman

Approved by: Paul Jones



## CONSENT CALENDAR

### 2011 STATE LEGISLATIVE UPDATE

#### SUMMARY:

This report provides an update on state legislation of interest to IRWD including IRWD-sponsored legislation. As legislation develops, staff will provide updates and recommendations to the Board as appropriate. A copy of the 2011 State Legislative Matrix is attached as Exhibit "A."

#### BACKGROUND:

The 2011-12 Legislature reconvened on January 3 for the first year of a two year session. The last day for bills to be submitted to the Office of the Legislative Counsel is January 21 and the bill introduction deadline is February 18. Policy committee deadlines are in early May.

#### State Budget Update:

Governor Brown released his proposed budget to the legislature on January 10, 2011. With the current FY 2011-2012 budget deficit estimated to be approximately \$26 billion and the Governor citing a budget fix as his top priority, budget negotiations are expected to dominate the beginning of the legislative session. The Governor's proposal calls for \$12.5 billion in cuts, shifting of specified state responsibilities to local government, and a 5 year extension of current taxes and fees to be approved by the voters in June. Spending reductions include cuts to the Medi-Cal, Welfare-to-Work, and Department of Developmental Services program, University of California and California State University, and state operations including state employee compensation. Of note, is a proposed \$12.8 million general fund reduction for the State Water Resources Control Board and corresponding increase in the Waste Discharge Permit Fund and Water Rights fund and proposed statutory changes to authorize the State Board to assess fees for basin planning activities. The local government reforms include eliminating redevelopment agencies and redirecting redevelopment funding to cities, counties, school districts and non-enterprise special districts. Other reforms include suspending and deferring payment on specified local mandates; suspending Williamson Act open space subvention funding; and deferring specified state payments to local governments. Staff will provide updates to the Board as negotiations continue.

#### IRWD-Sponsored Legislation:

##### *Sewer Improvements Financing:*

Staff met with the Senate and Assembly Local Government Committee consultants in December to discuss legislative approaches for the financing of on-site improvements needed to convert from septic systems to community sewer systems. The consultants agreed that given the ongoing concerns with Fannie Mae and Freddie Mac and the current Property Assessed Clean Energy (PACE) programs, a reintroduction of a contractual assessment approach is not likely to be

successful. The consultants were supportive of the goals of AB 2182 and agree that there is a statewide need for some type of tax lien authority for on-site sewer improvements. Staff presented the IRWD proposal to expand the procedures in current law for financing conversions in abatement situations to allow for use in “pre-abatement” situations. The Senate consultants suggested pairing the “pre-abatement” approach with authority to use Mello-Roos districts for on-site sewer improvements. Staff also met with Assembly Member Huffman’s staff to discuss his intentions for introducing a bill similar to AB 2182. His staff was very interested in IRWD’s alternative approach. Staff will continue working with the Local Government Committee Consultants and Assembly Member Huffman’s Office to determine the most viable approach to sewer financing legislation in 2011. Additionally, Assembly Member Solorio’s office submitted IRWD’s initial proposed language to the Legislative Counsel’s Office to begin the process of introduction. This does not obligate Solorio to author the bill.

Other 2011 Legislative Introduction:

*AB 19 (Fong) – Sub-metering Multi-Family Residences:*

AB 19 (Fong), sponsored by the Sierra Club, is a reintroduction of AB 1975 (Fong) from 2010 related to meters and sub-meters in multi-family residences. AB 19 would require water purveyors who provide water service to multi-family residences to adopt a general policy to require the installation of meters or sub-meters. The bill clarifies that the owner of the property, rather than the water purveyor, is responsible for the installation, maintenance and reading of sub-meters. Further, the bill requires the Department of Housing and Community Development to develop building standards for the installation of water meters and sub-meters in newly constructed multi-family dwellings.

AB 1975 was held in the Senate Appropriations Committee in 2010, largely due to unresolved tenants’ rights issues. The Author has reintroduced the bill as a starting point for further negotiations on this issue. While there is wide agreement that meters and sub-meters are an effective way to encourage water use efficiency in multi-family buildings, discussions continue around the logistics of installation and billing.

*AB 54 (Solorio) – Drinking Water:*

Assembly Member Solorio introduced AB 54 in response to water quality concerns in the Diamond Park Mutual Water Company service area in Santa Ana. Founded in 1930, DPMWC is a small, private water system that serves approximately 90 properties in the Valley Adams neighborhood. DPWMC is currently plagued by high nitrates in the water, frequent water system leaks and equipment failure, and financial, technical and operational challenges. In May of 2010, the California Department of Public Health and DPMWC residents initiated a request that the City of Santa Ana provide water service to the area. AB 54 attempts to address these types of situations by giving the Local Agency Formation Commission broader powers in the process of consolidating mutual water companies and would authorize the commission to include a review of whether the available drinking water sources comply with safe drinking water standards in municipal service reviews. AB 54 also includes amendments related to Safe Drinking Water Revolving fund eligibility.

*SB 34 (Simitian) – Public Goods Charge:*

SB 34 (Simitian) is a spot bill related to a public goods charge for water. The bill declares the intent of the Legislature to enact legislation to develop a fee-based system to pay for costs associated with the updating and modernizing of California's water infrastructure. Further, the bill states that the fees should pay for the noncapital costs needed to meet the co-equal goals of reliable water supply and ecosystem protection and restoration. SB 34 is expected to be the vehicle for the public goods charge for water recommended in the UC Berkeley policy report, *Implementing a Public Goods Charge for Water*, commissioned by the Water Energy Team of the Climate Action Team (WETCAT).

*SB 46 (Correa) – Public Compensation Disclosure Legislation:*

SB 46 (Correa), related to public compensation disclosure, is a reintroduction of SB 501 which was introduced by the Senator and held in the Senate at the end of the 2010 session. SB 46 would establish requirements and enforcement authority for the reporting of public employee compensation. As introduced, SB 46 only requires reporting for elected or appointed officials and the chief administrative officers such as a special district's general manager. SB 46 allows for individual filers to report or for a local government entity to compile the information and report on behalf of all the required filers within that entity. Finally, SB 46 requires local entities that maintain a website to post compensation information and written adopted policies related to expense reimbursements on that website.

Public compensation transparency and disclosure issues are expected to remain a top priority during the 2011 legislative session. There will likely be several bills introduced on these topics and many amendments to SB 46 (Correa). Staff will continue to work closely with the California Special Districts Association to review and provide input on these bills.

*SB 52 (Simitian) – Sacramento Regional County Sanitation District*

SB 52 (Simitian) would make \$50 million in previously authorized bond funding available to the Department of Water Resources to provide financial assistance to the Sacramento Regional County Sanitation District to offset the rate increases associated with the costs of capital improvements to the District's regional sewage treatment plant. These improvements are necessary to meet the District's new waste discharge requirements in the National Pollutant Discharge Elimination System Permit adopted by the Regional Board in December 2010. These new requirements were adopted in an effort to reduce the amount of ammonia discharged into the Sacramento-San Joaquin Delta. IRWD submitted a letter to the Regional Board urging adoption of the new discharge standards for the protection of water quality in the Delta.

**FISCAL IMPACTS:**

Not applicable.

**ENVIRONMENTAL COMPLIANCE:**

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the Water Resources, Policy and Communications meeting on January 13, 2011.

RECOMMENDATION:

THAT THE BOARD RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit "A" – 2011 IRWD Legislative Matrix

**EXHIBIT "A"**

**IRWD 2011 LEGISLATIVE MATRIX  
December 29, 2010**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effects</b>	<b>Status</b>
<b><u>AB 19</u> Fong (D)</b>	Building Standards: Water Meters: Multiunit Structures		Requires a water purveyor that provides water service to a multiunit residential structure or mixed-use residential and commercial structure to require the installation of a water meter or a submeter. Requires the Department of Housing and Community Development to develop and submit to the commission building standards that require the installation of water meters or submeters in individual dwelling units within a newly constructed multiunit residential structure.	12/06/2010 - INTRODUCED.
<b><u>AB 23</u> Smyth (R)</b>	Local Agency Meetings: Prohibition		Amends the Ralph M. Brown Act which requires each legislative body of a local agency to provide the time and place for holding regular meetings. Prohibits the members of a legislative body, during a meeting of that legislative body, from convening simultaneous or serial order meetings of any other legislative body for which the members of the convened legislative body constitute at least a quorum.	12/06/2010 - INTRODUCED.
<b><u>AB 54</u> Solorio (D)</b>	Drinking Water		Allows the Department of Public Health to issue a letter of no prejudice to a public water system that is a lead applicant for a project that may be funded by the Safe Drinking Water Revolving Fund, makes expenditures related to the project reimbursable in specified circumstances. Authorizes a local agency formation commission to review and approve or disapprove the consolidation of territory within a mutual water company into the jurisdiction of a city as a special district that operates a water system.	12/06/2010 - INTRODUCED.
<b><u>SB 27</u> Simitian (D)</b>	Public Retirement: Final Compensation: Computation		Provides for public employee and teacher retirement. Provides that member and employer contributions credited to the Defined Benefit Supplemental Program would include remuneration earnable within a 5-year period in excess of 125% of that member's compensation earnable in the year prior to that 5-year period.	12/06/2010 - INTRODUCED.

January 24, 2011

Prepared by: B. Beeman

Submitted by: B. Beeman

Approved by: Paul Jones

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## CONSENT CALENDAR

### 2011 SELECTION OF FEDERAL LOBBYIST

#### SUMMARY:

The purpose of this item is to authorize a lobbyist professional services contract for the District for advocacy of federal funding for selected District projects. Staff recommends approval of a 24-month contract with The Furman Group (Furman) for \$10,000 per month plus expenses for a total of \$276,000. A copy of The Furman Group proposal is attached as Exhibit "A."

#### BACKGROUND:

The Furman Group proposes to continue their work to secure an authorization in the Water Resources Development Act for the Syphon Reservoir Recycled Water Storage Project. The Furman Group's scope of work is summarized as follows:

- Ensure that Syphon Reservoir continues to be included on the Environment and Public Works Committee list of projects in the Water Resources Development Act;
- Obtain an authorization of the Syphon Reservoir Recycled Water Storage Project through the Army Corps of Engineers Section 219, Environmental Infrastructure Program; and
- Authorize the federal government to appropriate up to \$45 million, at 75 percent (75%) cost share, for the project.

In the coming months, The Furman Group will be working closely with Senator Feinstein, Congressman Calvert and their staff members to ensure that the Syphon Reservoir Project is one of their top priorities for the Water Resources and Development Act. Furman will coordinate closely with these offices to make sure that the request submitted by Senator Feinstein in 2010 will remain a priority for her in the 112<sup>th</sup> Congress. Furman will be working to ensure that the professional staff members of the Senate Environment and Public Works Committee and the House Transportation and Infrastructure Committee are both committed to the Project. Additionally, Furman will be working with the Army Corp of Engineers at the Area, Regional and Headquarters levels to facilitate the authorization of the Syphon Reservoir Recycled Water Storage Project. They will also be laying the groundwork for having the Project included in the Fiscal Year 2013 Budget request next year.

Mr. Hal Furman will be at the meeting of the IRWD Board on January 24, 2011 to update the Board on the recent changes at the Federal level and to discuss issues he will be addressing in the coming months.

The current contract with The Furman Group expired on December 31, 2010 and was for a 24-month period, paid out on a monthly basis at \$10,000, plus reimbursable expenses. Staff proposes that the District authorize a professional services agreement for a 24-month period with The Furman Group for \$10,000 per month plus direct reimbursable expenses not to exceed \$276,000.

**FISCAL IMPACTS:**

The cost of this contract will be included in the Syphon Reservoir capital project.

**ENVIRONMENTAL COMPLIANCE:**

Not applicable.

**COMMITTEE STATUS:**

This item was reviewed at the Water Resources, Policy and Communications meeting on January 13, 2011.

**RECOMMENDATION:**

THAT THE BOARD APPROVE A 24-MONTH CONTRACT WITH THE FURMAN GROUP FOR \$10,000 PER MONTH PLUS REIMBURSABLE DIRECT EXPENSES NOT TO EXCEED \$276,000.

**LIST OF EXHIBITS:**

Exhibit "A" – Proposal for Professional Services for The Furman Group





December 20, 2010

Mr. Paul D. Jones II  
General Manager  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, California 92619-7000

Dear Paul:

I am writing to propose an extension of our existing consulting Memorandum of Agreement ("MOA") with the Irvine Ranch Water District ("IRWD") for an additional two years to continue our work in seeking federal authorization for the Syphon Reservoir Recycled Water Storage Project through the Water Resources Development Act ("WRDA").

### **BACKGROUND**

As you know, several years ago we developed legislation that authorized the Bureau of Reclamation to participate in the design, planning, and construction of projects to naturally treat impaired surface water, reclaim and reuse impaired groundwater and provide brine disposal within the San Diego Creek Watershed. The legislation authorized the Bureau to contribute up to twenty five percent of the total costs of these projects. The legislation was introduced by Senator Feinstein as S. 649 in the United States Senate. A companion measure was introduced in the House of Representatives by former Rep. Chris Cox as H.R. 1598. H.R. 1598 passed both the House and Senate and was signed into law by President Bush as PL 108-233 on May 28, 2004.

The Furman Group was successful in helping to secure an initial appropriation of \$492,000 for the project in fiscal year 2008, and an additional \$916,000 in FY 2009. And in February of 2009 with the passage of the American Recovery and Reinvestment Act, the Administration directed the remaining authorized funds (over \$18 million) to the projects.

Since that time we have focused on authorizing the Syphon Reservoir Recycled Water Storage Project through the Army Corps of Engineers Section 219, Environmental Infrastructure program. This would authorize the federal government to appropriate up to \$45 million (seventy five percent cost share) for the project. In May of 2010 the Senate began accepting Member project requests for the reauthorization of WRDA, and after a rather lengthy selection process by which over 2000 project requests were reviewed and

vettted by Senator Feinstein and her staff, she chose the Syphon Reservoir Project as one of only thirty five projects to submit for consideration to the Environment and Public Works Committee ("EPW"). Since that time the EPW Committee has held hearings on the reauthorization of the WRDA bill and begun the process of selecting projects worthy of inclusion in the bill. Although a WRDA bill has yet to be formally introduced in the current Congress, the EPW Committee has informed us that the list of projects will remain eligible for consideration in the 112<sup>th</sup> Congress, which begins work on January 5<sup>th</sup>, 2011.

### ***2011 STRATEGY AND SCOPE OF WORK***

Our main goal in 2011 will be to continue to work to secure an authorization in the Water Resources Development Act for the Syphon Reservoir Recycled Water Storage Project. In the coming months, we will be working closely with Senator Feinstein, Congressman Calvert and their staffs to ensure that the Irvine project is one of their top priorities for inclusion in WRDA. We will coordinate closely with their offices to make sure that the request that has been submitted by Senator Feinstein will remain a priority for her in the 112<sup>th</sup> Congress. At the same time, we will be working to ensure that the professional staffs of the Environment and Public Works Committee in the Senate, and the House Transportation and Infrastructure Committee are both committed to the project. We will need to collectively do everything we can to guarantee their strong support for the project and this will require at least one visit by IRWD Board members and senior staff to Washington, D.C.

In addition to our work with Congress, we will be working with the Army Corp of Engineers at the Area, Regional, and Headquarters levels to facilitate the authorization of the Syphon Reservoir Recycled Water Storage Project. At the same time we will be laying the groundwork for having the project included in the FY 2013 Budget request next year.

### ***TERM, FEES AND EXPENSES***

The Furman Group's standard policy is to enter into representational contracts with its clients for the duration of an entire Congress. As you are aware, The Furman Group's annual retainers are based, in part, upon the time that we estimate the representation will require on the part of our professionals, the difficulty of the projects in comparison to other projects, and such intangibles as the amount of political capital that will be necessary for the firm to expend to accomplish the client's goals. As a result, we are proposing to extend our agreement for the period January 1, 2011 through December 31, 2012 at the current retainer of \$120,000 per year plus out-of-pocket expenses directly attributable to our representation of IRWD.

***CONCLUSION***

Once again, thank you for providing us with the opportunity to present you with this proposal. We look forward to continuing our work on behalf of the Irvine Ranch Water District.

Sincerely,

A handwritten signature in black ink, appearing to read "Hal Furman", written in a cursive style.

HAROLD W. FURMAN II

CC: Beth Beeman



January 24, 2011

Prepared by: R. Sundberg/M. Cortez

Submitted by: K. Burton

Approved by: Paul Jones



## CONSENT CALENDAR

### PLANNING AREA 40 PHASE I BUDGET ADDITION, EXPENDITURE AUTHORIZATIONS AND SUPPLEMENTAL REIMBURSEMENT AGREEMENT

#### SUMMARY:

Irvine Community Development Company (ICDC) is resuming development of Planning Area 40 (PA 40) Phase I which includes the construction of streets, storm drains, domestic water, sewer, and recycled water improvements. As part of the project, ICDC will construct the Irvine Ranch Water District (IRWD) capital facilities under a Supplemental Reimbursement Agreement. The IRWD capital facilities include 2,700 feet of 12-inch diameter domestic water pipeline, 1,600 feet of 12-inch diameter trunk sewer and 4,500 feet of 6-inch diameter recycled water pipeline. Staff recommends that the Board:

- Authorize the addition of Project 11563 for \$229,900, Project 21563 for \$231,000, and Project 31563 for \$194,700 to the Fiscal Year (FY) 2010-11 Capital Budget;
- Approve Expenditure Authorizations for Project 11563 for \$229,900, Project 21563 for \$231,000, and Project 31563 for \$194,700; and
- Authorize the General Manager to execute a Supplemental Reimbursement Agreement with ICDC for Design and Construction of Capital Facilities within the PA 40, Phase I Development.

#### BACKGROUND:

IRWD and ICDC have had a Reimbursement Agreement (RA) for construction of IRWD capital facilities in place since May 1997. Under this RA, a Supplemental Reimbursement Agreement serves to define the improvements to be designed and constructed within a specific Planning Area as well as the estimated reimbursable costs.

ICDC is moving forward with the Phase I construction of the PA 40 Cypress Village development. PA 40 is bounded by Trabuco Road to the north, the Great Park to the east, the I-5 to the south, and Jeffrey Road to the west; the PA 40 Site Map is provided as Exhibit "A". The Phase I construction will concentrate on the backbone facilities within the streets of Bay Tree, Nightmist and Roosevelt. The required IRWD domestic water, sewer, and recycled water capital facilities are documented in the 90% draft of the PA 40 Sub-Area Master Plan, as prepared by Stantec in November 2010 and shown in the capital system maps, which are provided as Exhibit "B".

The capital facilities will consist of approximately 2,700 feet of 12-inch diameter domestic water pipeline, 1,600 feet of 12-inch diameter trunk sewer, and 4,500 feet of 6-inch diameter recycled water pipeline. The design and construction of the IRWD facilities will be performed under an ICDC contract through the terms of a Supplemental Reimbursement Agreement between IRWD and ICDC. The Supplemental Reimbursement Agreement, attached as Exhibit "C", has been reviewed by IRWD's legal counsel.

Consent Calendar: Planning Area 40 Phase I – Budget Addition, Expenditure Authorization and Supplemental Reimbursement Agreement

January 24, 2011

Page 2

ICDC retained Stantec to prepare all of the PA 40 Phase I improvement plans. This included mass grading, storm drains, first flush basins (future NTS), streets, underground utilities, and the aforementioned IRWD capital facilities. ICDC received bids from eight contractors on December 2, 2010 for the PA 40 Phase I improvements. FYDAQ was the lowest bidder for the IRWD facilities with a bid amount of \$403,657.97 as shown in Exhibit “D”. In addition, ICDC has received consultant proposals for construction surveying and geotechnical soils testing during construction in the respective amounts of \$9,500 and \$4,400. Staff has reviewed the consultant proposals and the construction bids and found the amounts to be acceptable.

A summary of the costs under this Supplemental Reimbursement Agreement is shown below.

Design Engineering (Stantec)	\$ 45,500.00
Construction (FYDAQ)	\$403,657.97
Construction Survey	\$ 9,500.00
Construction Soil Testing	\$ 4,972.00
ICDC Administration Fee (1%)	<u>\$ 4,200.00</u>
	\$467,829.97

FISCAL IMPACTS:

Funding for IRWD’s capital facilities will require the addition of Projects 11563, 21563 and 31563 to the FY 2010-11 Capital Budget and approval of Expenditure Authorizations in the amounts shown in the table below and in Exhibit “E”.

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
11563	\$-0-	\$229,900	\$229,900	\$-0-	\$229,900	\$229,900
21563	\$-0-	\$231,000	\$231,000	\$-0-	\$231,000	\$231,000
31563	\$-0-	\$194,700	\$194,700	\$-0-	\$194,700	\$194,700
<b>TOTAL</b>	<b>\$-0-</b>	<b>\$655,600</b>	<b>\$655,600</b>	<b>\$-0-</b>	<b>\$655,600</b>	<b>\$655,600</b>

The above funding provides for the reimbursement costs to ICDC for the design and construction of IRWD capital facilities, staff time, and consultant construction management support.

ENVIRONMENTAL COMPLIANCE:

The construction of the capital facilities for Planning Area 40 is subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, Environmental Impact Report SCH #2000071014 was certified by the City of Irvine, the lead agency for this project, on February 29, 2008.

Consent Calendar: Planning Area 40 Phase I – Budget Addition, Expenditure Authorization and Supplemental Reimbursement Agreement

January 24, 2011

Page 3

COMMITTEE STATUS:

This item was reviewed at the Engineering and Operations Committee on January 18, 2011.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE ADDITION OF PROJECT 11563 FOR \$229,900, PROJECT 21563 FOR \$231,000, AND PROJECT 31563 FOR \$194,700 TO THE FY 2010-11 CAPITAL BUDGET; APPROVE EXPENDITURE AUTHORIZATIONS FOR PROJECT 11563 FOR \$229,900, PROJECT 21563 FOR \$231,000, AND PROJECT 31563 FOR \$194,700; AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE A SUPPLEMENTAL REIMBURSEMENT AGREEMENT WITH THE IRVINE COMMUNITY DEVELOPMENT COMPANY FOR THE DESIGN AND CONSTRUCTION OF THE IRWD FACILITIES WITHIN PLANNING AREA 40 PHASE I - CYPRESS VILLAGE, PROJECTS 11563, 21563 AND 31563.

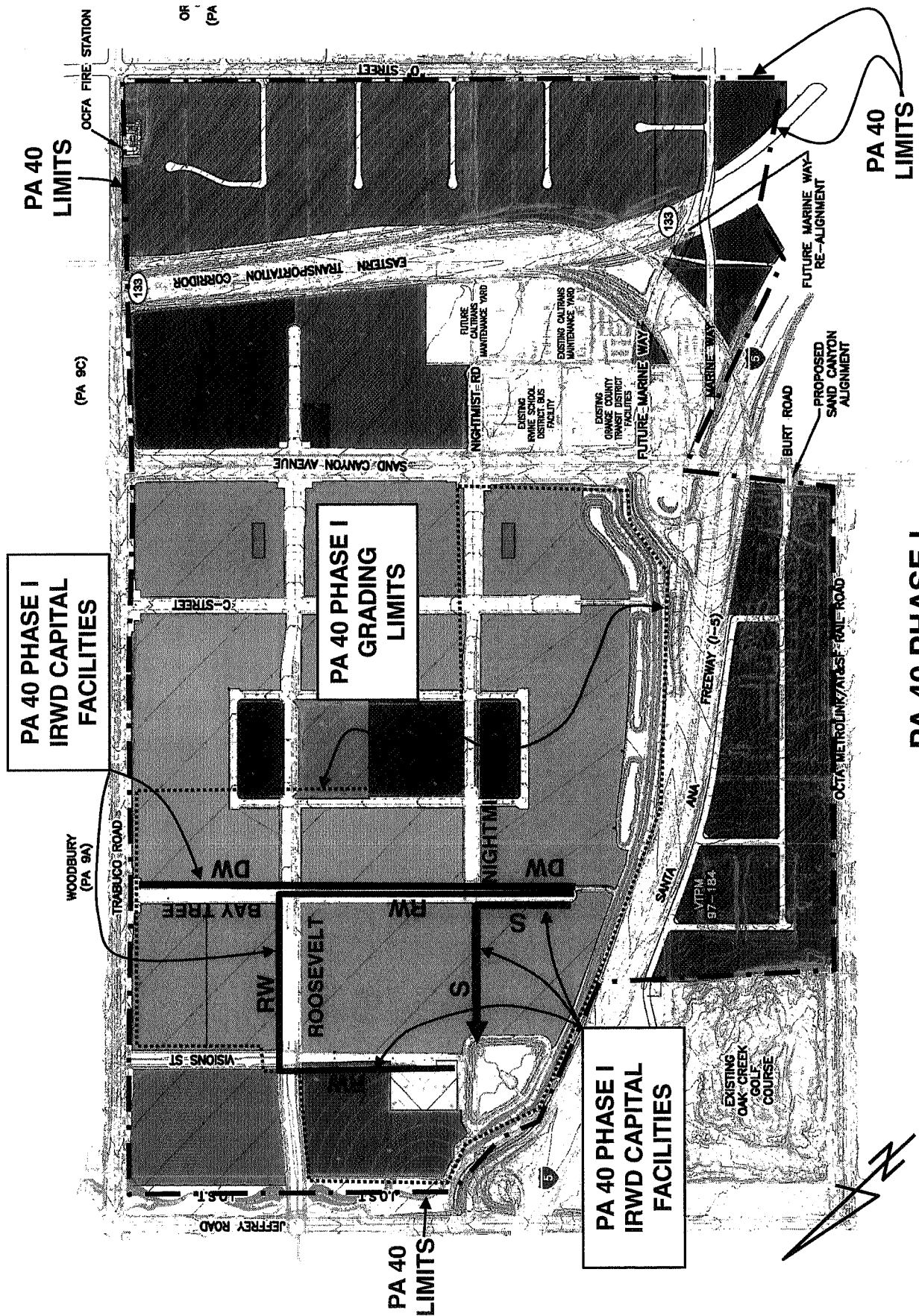
LIST OF EXHIBITS:

- Exhibit "A" – Planning Area 40 Map
- Exhibit "B" – Capital System Maps
- Exhibit "C" – Supplemental Reimbursement Agreement
- Exhibit "D" – Bid Summary for Construction of IRWD Capital Facilities
- Exhibit "E" – Expenditure Authorizations





# Exhibit "A"



## PA 40 PHASE I IRWD CAPITAL FACILITIES



# Exhibit "B"

FIGURE 3-4

DOMESTIC WATER SYSTEM FACILITIES

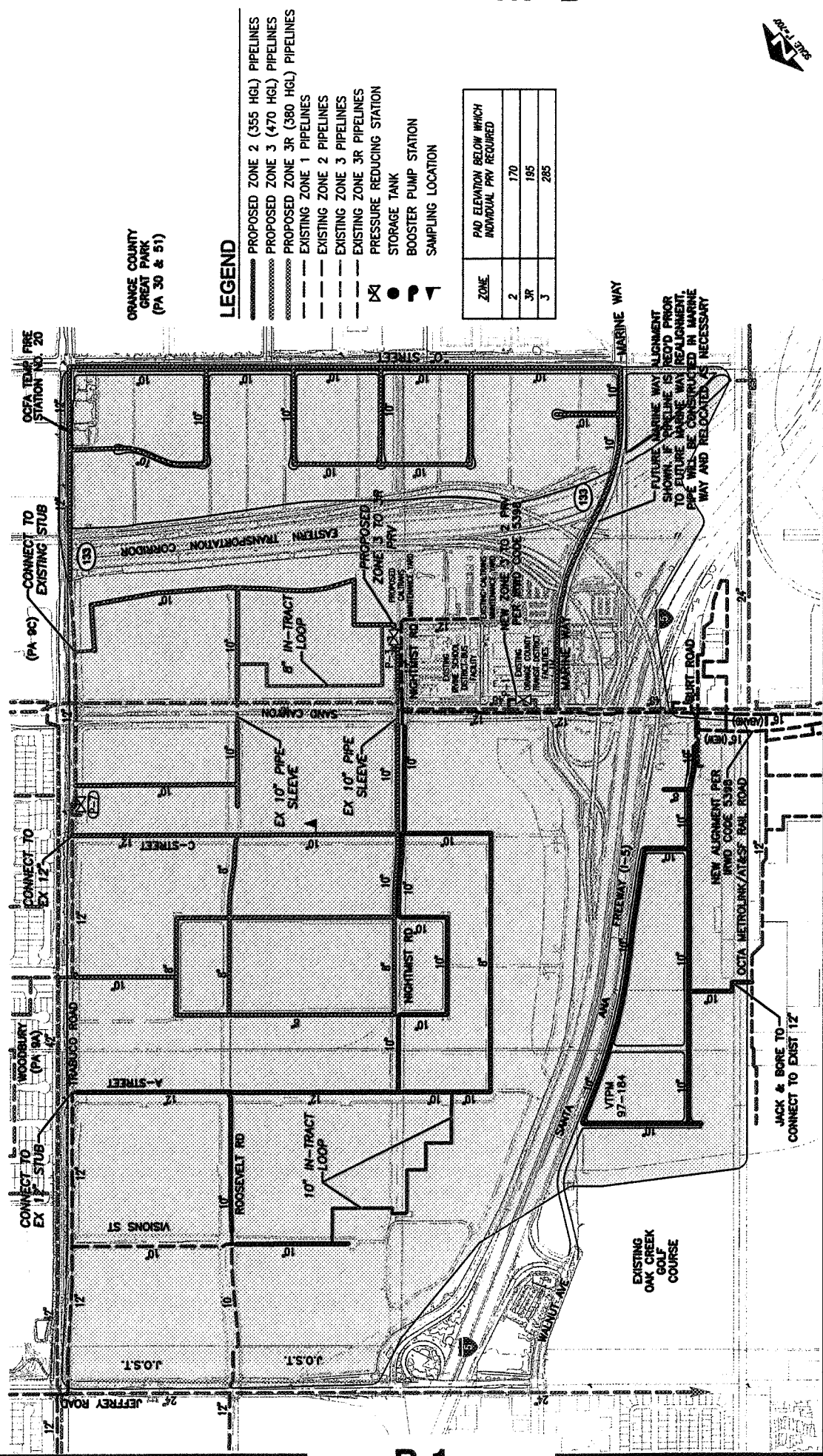
PLANNING AREA 10 SAMP

PREPARED FOR THE  
PRIME WARDEN  
WATER DISTRICT



19 Technology Oaks, Irvine, CA 92618 Phone 949.252.6242 Fax 949.252.6168  
www.pwwd.com

Stantec



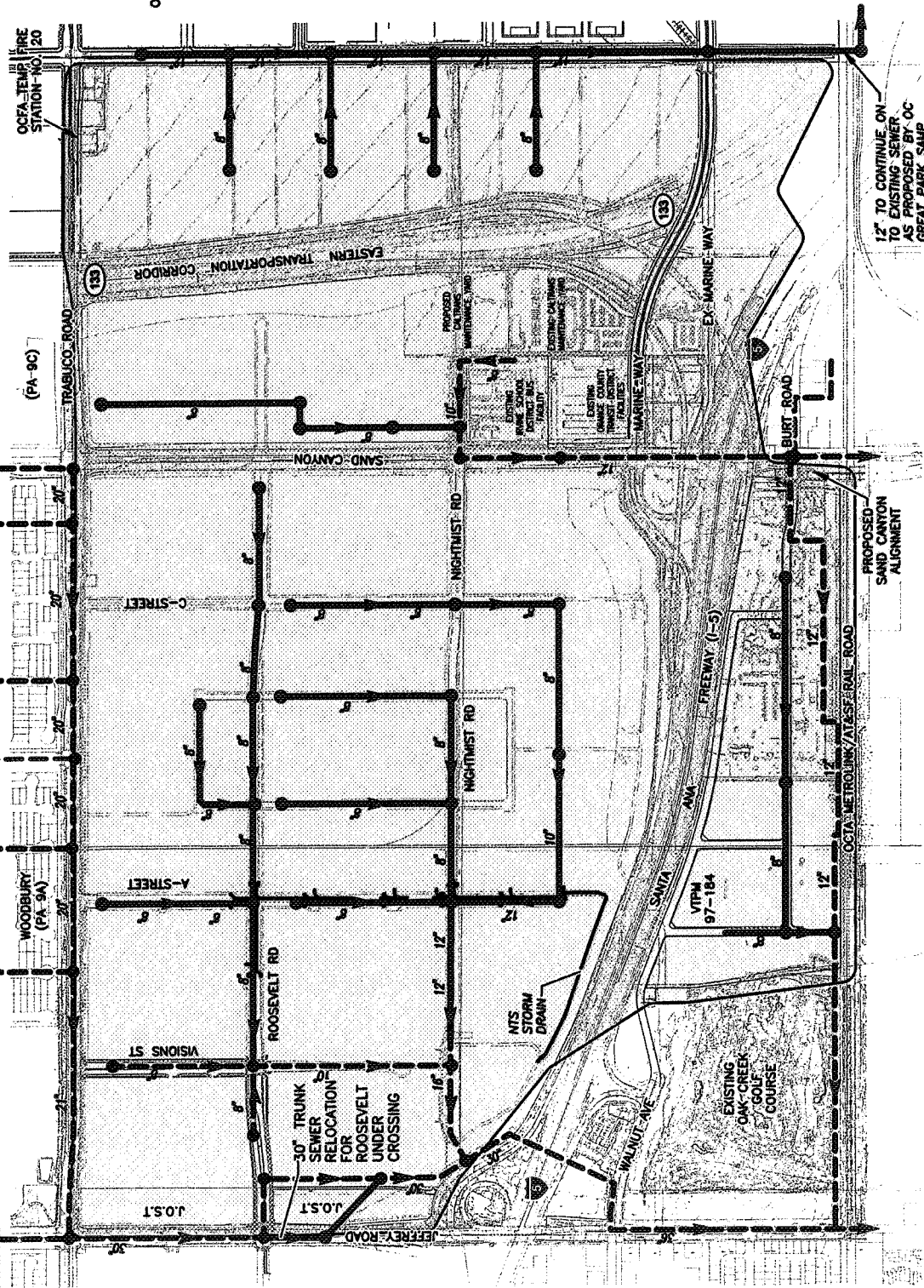
ORANGE COUNTY GREAT PARK (PA 30 & 51)

## LEGEND

- PROPOSED ZONE 2 (355 HGL) PIPELINES
- - - PROPOSED ZONE 3 (470 HGL) PIPELINES
- ..... EXISTING ZONE 3R (380 HGL) PIPELINES
- ..... EXISTING ZONE 1 PIPELINES
- ..... EXISTING ZONE 2 PIPELINES
- ..... EXISTING ZONE 3 PIPELINES
- ⊠ STORAGE TANK
- BOOSTER PUMP STATION
- ▽ SAMPLING LOCATION

ZONE	RD ELEVATION BELOW WHICH INDIVIDUAL PPM REQUIRED
2	170
3R	195
3	285

B-1



ORANGE COUNTY  
GREAT PARK

**LEGEND**

- PROPOSED SEWER ALIGNMENT
- - - EXISTING SEWER ALIGNMENT

NOTE: ALL PIPES ARE 8' UNLESS OTHERWISE NOTED.



FIGURE  
4-1

SEWER COLLECTION  
SYSTEM FACILITIES

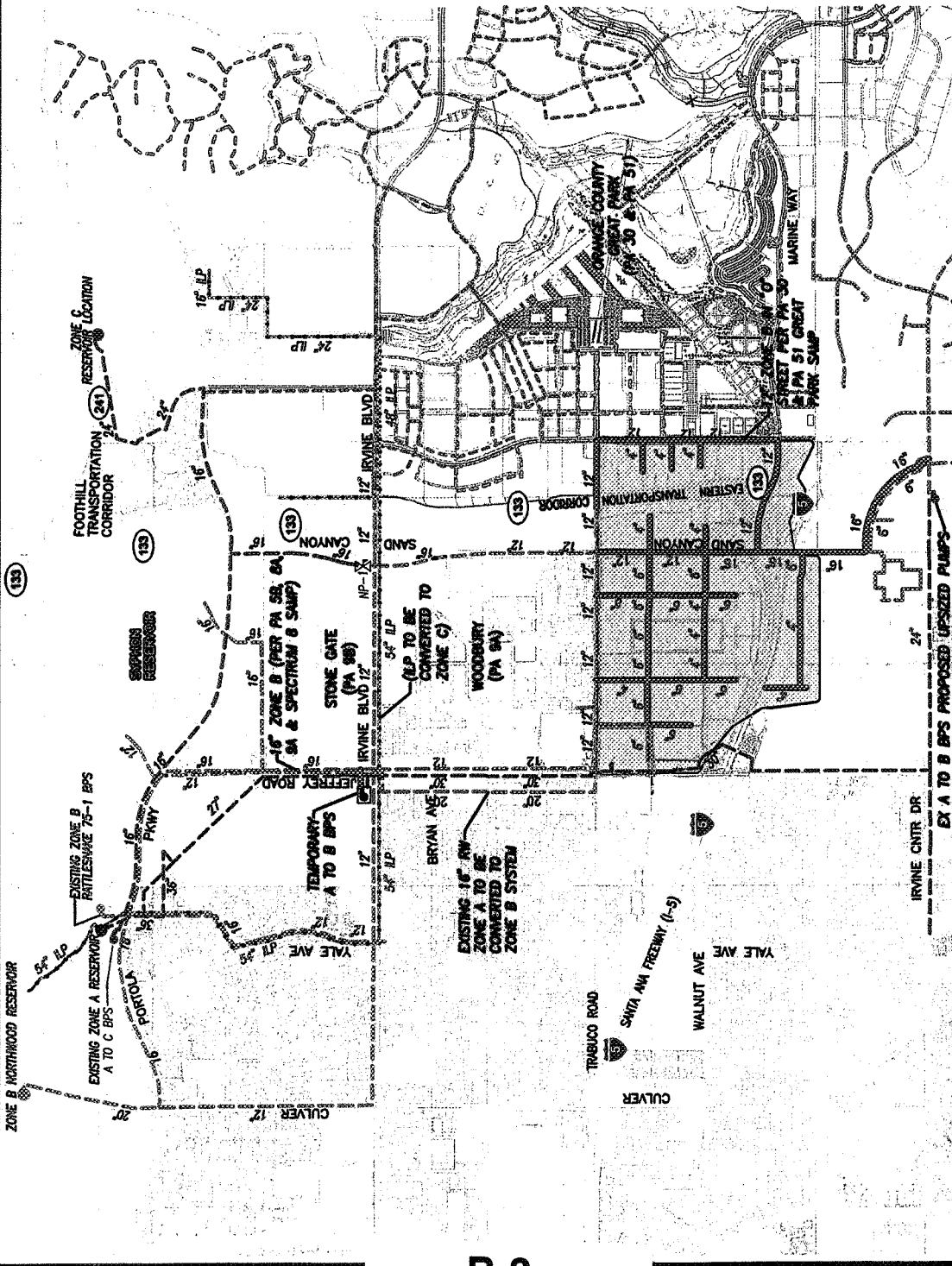
PLANNING AREA 30 SAMP



19 Technology Drive, Irvine, CA 92618 Phone 949.261.2400 Fax 949.261.2188 www.irwd.com

**Stantec**

B-2



**LEGEND**

- PROPOSED ZONE B (460 HGL) PIPELINES
- EXISTING ZONE A
- EXISTING ZONE B
- EXISTING ZONE C
- EXISTING ILP (TO BE CONVERTED TO ZONE C)
- PROPOSED ZONE B BY OTHERS
- PROPOSED ZONE C BY OTHERS
- PROPOSED ZONE D BY OTHERS
- PRESSURE REDUCING STATION
- STORAGE TANK
- BOOSTER PUMP STATION

**B-3**

DRAWING: v:\projects\2040478900\dwg\pwnk008.dwg PLOTTED: 11/3/2010 8:32



**Stantec**

19 Technology Drive, Irvine, CA 92618 Phone 949.252.2400 Fax 949.252.4100 www.stantec.com



IRVINE WATER DISTRICT  
IRVINE BRANCH  
WATER DISTRICT

PLANNING AND DESIGN 40 SAMP

REGIONAL NON-POTABLE  
WATER SYSTEM FACILITIES

FIGURE  
5-3



# Exhibit "C"

Exhibit "A"  
to  
Reimbursement Agreement

## SUPPLEMENTAL REIMBURSEMENT AGREEMENT

BY AND BETWEEN

IRVINE RANCH WATER DISTRICT

AND

THE IRVINE COMPANY

This SUPPLEMENTAL REIMBURSEMENT AGREEMENT ("Agreement") is entered into as of this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between Irvine Ranch Water District, a California water district formed and existing pursuant to the California Water District Law of the state of California ("IRWD"), and The Irvine Company ("TIC"). All capitalized terms used herein and not otherwise defined shall have the meanings given such terms in the Reimbursement Agreement.

WHEREAS, IRWD and TIC have previously entered into that certain Reimbursement Agreement dated May 21, 1997 ("Reimbursement Agreement") respecting construction of Capital Facilities; and

WHEREAS, said Reimbursement Agreement made reference to the fact that certain supplemental agreements would be entered into by the parties regarding construction of Capital Facilities and reimbursement therefor consistent with the provisions of said Reimbursement Agreement; and

WHEREAS, the parties now wish to enter this Agreement regarding the construction of Capital Facilities described below, subject to all of the terms of the Reimbursement Agreement, except as provided herein.

NOW, THEREFORE, the parties hereto, in consideration of the mutual promises and covenants hereinafter set forth, do agree as follows:

1. Except as provided herein, the parties hereby incorporate by reference all of the terms and conditions of the Reimbursement Agreement into this Agreement.

2. The name of the Project to which this Agreement pertains is:  
PA40 Phase I Backbone Facilities, a portion of VTTM 17277 (Code 5470).  
The Project is depicted on Exhibit 1 attached to this Agreement.

3. The Capital Facilities to be constructed pursuant to this Agreement are as follows: [describe type, diameter, approximate linear footage, etc; include any detailed drawing as Exhibit 3 if needed]

Approximately 2,700 linear feet of 12-inch diameter domestic water main and approximately 1,600 linear feet of 12-inch diameter trunk sewer, and of approximately 4,500 linear feet of 6-inch diameter recycled water mains. The Capital Facilities  **do** /  **do not** [check appropriate box] include any facilities that are a part of the Michelson/ Los Alisos Reclamation Plants Upgrades and Distribution System Expansion Project identified in the Agreement No. 61719 2003 LRP Local Resources Program Agreement, entered into as of June 13, 2005, by and between IRWD and the Metropolitan Water District of Southern California (the "MWD Local Project").

4. The total costs for the Capital Facilities shall include, but not be limited to, the actual costs for construction, surveying, compaction testing, permits, construction bonds, legal fees and an administration fee equal to one percent (1%) of the actual cost of construction (all such actual costs are collectively referred to as the "Costs"). The estimated amount of the Costs is \$525,000.

5. The following special terms apply to the construction of the Capital Facilities under this Agreement and supersede the provisions of the original Reimbursement Agreement referenced above: "None."

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6. In accordance with Section 10 of the Reimbursement Agreement, TIC is executing concurrently herewith an Assignment Agreement in the form of Exhibit 2, to be effective upon the Effective Date specified in the Assignment Agreement.

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

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



shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability.”

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

IRVINE RANCH WATER DISTRICT

THE IRVINE COMPANY

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

By: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Title: \_\_\_\_\_



Exhibit "2"  
to  
Supplemental Reimbursement Agreement

Assignment Agreement

This ASSIGNMENT AGREEMENT is made as of \_\_\_\_\_, 20\_\_\_\_, by and between THE IRVINE COMPANY, a corporation, dba Irvine Industrial Company ("Assignor"), to IRVINE RANCH WATER DISTRICT, a California water district formed and existing pursuant to the California Water District Law of the State of California ("Assignee") based upon the following recitals:

A. Assignor has previously (or will, prior to the Effective Date hereof, have) entered into that certain Construction Contract relating to the Project and Capital Facilities identified in Schedule A hereto (the "Construction Contract").

B. Assignee desires to acquire (I) Assignor's right, title and interest in and to the Capital Facilities constructed under the Construction Contract, and (II) the warranty rights of Assignor as to the Capital Facilities under the Construction Contract, and Assignor desires to assign such rights to Assignee.

NOW, THEREFORE, in consideration of the foregoing, the covenants and agreements contained herein and other valuable consideration, receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. ASSIGNMENT. Effective upon the date specified in Section 2 hereof (the "Effective Date"), Assignor assigns and transfers to Assignee all of Assignor's right, title, claim and interest in and to (a) the Capital Facilities constructed pursuant to the Construction Contract, and (b) the warranties and guarantees of contractor as to the Capital Facilities constructed pursuant to the Construction Contract. This Assignment is made by Assignor pursuant to the provisions of Section 10, entitled "Assignment of Interest", contained in that certain Reimbursement Agreement between Assignor and Assignee dated as of May 21, 1997.

2. EFFECTIVE DATE. The Effective Date shall be the date of the filing of the Notice of Completion for the Construction Contract unless a different date is inserted in the following space: \_\_\_\_\_

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

IN WITNESS WHEREOF, Assignor has executed this Assignment Agreement as of the date first above written.

ASSIGNOR:

THE IRVINE COMPANY, a corporation,  
dba Irvine Industrial Company

By: \_\_\_\_\_

Title: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Schedule A  
to  
Assignment Agreement

This Schedule A to Assignment Agreement relates to the assignment of certain matters pursuant to the Supplemental Reimbursement Agreement between Assignor and Assignee dated \_\_\_\_\_ (“Supplemental Reimbursement Agreement”).

Insert name of Project from Section 2 of Supplemental Reimbursement Agreement:  
Agreement: \_\_\_\_\_  
\_\_\_\_\_

Insert description of Capital Facilities from Section 3 of Supplemental Reimbursement Agreement: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contractor's Name: \_\_\_\_\_

License No. \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Contact Person: \_\_\_\_\_

# EXHIBIT "D"

**BID SUMMARY**  
**Planning Area 40**  
**Phase 1 - Backbone Street Improvements**  
**Wet Utilities - Contract "B2"**  
**IRWD Capital Facilities**

ENGINEER'S ESTIMATE  
**STANTEC**

LOW BIDDER  
**FYDAQ**

**TASK PC ID: LD-0040.ST.22.cn01**

**Comments**

- Signed Addendum Nos. 1 and 2
- Corporate Seal (if applicable)
- Correct Signatures (Page V-3)
- Bid Totals Correctly
- List of SubContractors
- Equipment/Material Source Information
- Contractors Rates
- 10% Bid Bond
- Construction Schedule
- Non-Collusion Certificate
- Contractor Prequalified

X  
X  
X  
X  
X  
X  
X  
X  
X  
X  
X

Not Included

DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
<b>DELETABLE ITEMS - IRWD CAPITAL IMPROVEMENTS (LD) - VTTM 17277</b>						
The following Deletable Items may or may not be part of the contract						
<b>GENERAL</b>						
MOBILIZATION (NTE EXCEED 2% OF CONTRACT PRICE SECTIONS H-J)	1	LS	9,899.10	9,899.10	3,000.00	3,000.00
DEVELOP CONSTRUCTION WATER (SECTIONS H-J)	1	LS	10,000.00	10,000.00	1,200.00	1,200.00
TRAFFIC CONTROL (SECTIONS H-J)	1	LS	5,000.00	5,000.00	0.00	0.00
<b>CAPITAL DOMESTIC WATER</b>						
INSTALL 12" C-900 PVC CL 200 PER IRWD STD W-17	2,503	LF	40.00	100,120.00	37.72	94,413.16
INSTALL 12"x10" D.I. REDUCING TEE (FE X FE)	4	EA	1,000.00	4,000.00	0.00	0.00
INSTALL 12" X 10" D.I. REDUCING CROSS (FE X FE)	1	EA	1,000.00	1,000.00	0.00	0.00
FURNISH 12" BFV (FE X FE) CLASS 150	10	EA	1,000.00	10,000.00	2,425.00	24,250.00
INSTALL 12" BFV (FE X FE) CLASS 150	10	EA	500.00	5,000.00	0.00	0.00
INSTALL 12"-22.5" D.I. BEND	2	EA	1,000.00	2,000.00	0.00	0.00
INSTALL 12" D.I. ADAPTOR (FE X M.J)	9	EA	1,000.00	9,000.00	0.00	0.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	2,184.07	2,184.07
INSTALL 12" BLIND FLANGE	1	EA	1,000.00	1,000.00	0.00	0.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	2,747.68	5,495.36
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	7	EA	500.00	3,500.00	0.00	0.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	1,000.00	4,000.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	1	EA	1,000.00	1,000.00	1,500.00	1,500.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	0.00	0.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	275.00	275.00
<b>CAPITAL RECYCLED WATER</b>						
INSTALL 6" AWWA C-900 PVC PURPLE PIPE, CL 200 PER IRWD STD. W-17	4,480	LF	25.00	112,000.00	19.76	88,524.80
FURNISH 6" BFV D.I. FE X FE CLASS 150	11	EA	750.00	8,250.00	1,733.20	19,065.20
INSTALL 6" BFV D.I. FE X FE CLASS 150	11	EA	500.00	5,500.00	0.00	0.00
INSTALL 6" CROSS D.I. (FE X FE)	1	EA	1,000.00	1,000.00	0.00	0.00
INSTALL 6" X 4" D.I. REDUCING TEE (FE X FE)	5	EA	1,000.00	5,000.00	0.00	0.00
INSTALL 6" D.I. ADAPTOR (FE X PO)	14	EA	1,000.00	14,000.00	0.00	0.00
INSTALL 6"-90° D.I. BEND (FE X PO)	1	EA	1,000.00	1,000.00	0.00	0.00
INSTALL 6"-45° D.I. BEND	2	EA	1,000.00	2,000.00	0.00	0.00
INSTALL 6"-22.5° D.I. BEND	4	EA	1,000.00	4,000.00	0.00	0.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	2,158.99	2,158.99
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	14	EA	500.00	7,000.00	0.00	0.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	1,000.00	4,000.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	3	EA	1,000.00	3,000.00	1,500.00	4,500.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	2,747.68	5,495.36
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	0.00	0.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	275.00	275.00
<b>CAPITAL SANITARY SEWER</b>						
INSTALL 12" AWWA C-900 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	1,594	LF	40.00	63,760.00	45.06	71,825.64
INSTALL 16" AWWA C-905 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	5	LF	65.00	325.00	156.53	782.65
INSTALL 72" DIA. MANHOLE PER IRWD STD S-1	1	EA	7,500.00	7,500.00	14,162.71	14,162.71
INSTALL 60" DIA. MANHOLE PER IRWD STD S-1	7	EA	6,000.00	42,000.00	7,801.37	54,609.59
INSTALL T-LOCK PVC LINER OR RAVEN COATING PER IRWD STANDARDS AND REQUIREMENTS	4	EA	1,000.00	4,000.00	0.00	0.00
INSTALL CLEANOUT PER IRWD STD. S-3 AND S-5	1	EA	2,000.00	2,000.00	830.52	830.52
ADJUST SEWER MANHOLES TO GRADE (AC BASE COURSE)	1	LS	5,000.00	5,000.00	0.00	0.00
ADJUST SEWER MANHOLES TO GRADE (AC FINISH COURSE)	1	LS	5,000.00	5,000.00	300.00	300.00
<b>PAYMENT AND PERFORMANCE BONDS</b>						
PAYMENT AND PERFORMANCE BONDS (SECTIONS G-J)	1	LS	5,198.54	5,198.54	809.92	809.92
<b>TOTAL IRWD CAPITAL IMPROVEMENTS (SECTIONS G-K)</b>				<b>525,052.64</b>		<b>403,657.97</b>

**BID SUMMARY**  
**Planning Area 40**  
**Phase 1 - Backbone Street Improvements**  
**Wet Utilities - Contract "B2"**  
**IRWD Capital Facilities**

**TASK PC ID: LD-0040.ST.22.cn01**

ENGINEER'S ESTIMATE  
**STANTEC**

2ND BIDDER  
**L&S**

3RD BIDDER  
**KANA**

Comments

Comments

DID NOT CHECK AS  
 BIDDER WAS NOT LOW

- Signed Addendum Nos. 1 and 2
- Corporate Seal (if applicable)
- Correct Signatures (Page V-3)
- Bid Totals Correctly
- List of SubContractors
- Equipment/Material Source Information
- Contractors Rates
- 10% Bid Bond
- Construction Schedule
- Non-Collusion Certificate
- Contractor Prequalified

DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
<b>DELETABLE ITEMS - IRWD CAPITAL IMPROVEMENTS (LD) - VTTM 17277</b>								
The following Deletable Items may or may not be part of the contract								
<b>GENERAL</b>								
MOBILIZATION (NTE EXCEED 2% OF CONTRACT PRICE SECTIONS H-J)	1	LS	9,899.10	9,899.10	9,600.00	9,600.00	7,560.00	7,560.00
DEVELOP CONSTRUCTION WATER (SECTIONS H-J)	1	LS	10,000.00	10,000.00	2,200.00	2,200.00	1,575.00	1,575.00
TRAFFIC CONTROL (SECTIONS H-J)	1	LS	5,000.00	5,000.00	2,100.00	2,100.00	1,100.00	1,100.00
<b>CAPITAL DOMESTIC WATER</b>								
INSTALL 12" C-900 PVC CL 200 PER IRWD STD W-17	2,503	LF	40.00	100,120.00	40.00	100,120.00	34.00	85,102.00
INSTALL 12"x10" D.I. REDUCING TEE (FE X FE)	4	EA	1,000.00	4,000.00	750.00	3,000.00	874.00	3,496.00
INSTALL 12"x 10" D.I. REDUCING CROSS (FE X FE)	1	EA	1,000.00	1,000.00	850.00	850.00	928.00	928.00
FURNISH 12" BFV (FE X FE) CLASS 150	10	EA	1,000.00	10,000.00	2,350.00	23,500.00	2,055.00	20,550.00
INSTALL 12" BFV (FE X FE) CLASS 150	10	EA	500.00	5,000.00	245.00	2,450.00	155.00	1,550.00
INSTALL 12"-22.5" D.I. BEND	2	EA	1,000.00	2,000.00	450.00	900.00	359.00	718.00
INSTALL 12" D.I. ADAPTOR (FE X MJ)	9	EA	1,000.00	9,000.00	370.00	3,330.00	536.00	4,824.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	5,450.00	5,450.00	5,570.00	5,570.00
INSTALL 12" BLIND FLANGE	1	EA	1,000.00	1,000.00	190.00	190.00	288.00	288.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	4,300.00	8,600.00	4,098.00	8,196.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	7	EA	500.00	3,500.00	125.00	875.00	213.00	1,491.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	3,200.00	12,800.00	1,494.00	5,976.00
REMOVE TEMPORARY FLUSH-OUT AND CONNECT TO EXISTING	1	EA	1,000.00	1,000.00	2,350.00	2,350.00	396.00	396.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	4,125.00	4,125.00	3,437.00	3,437.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	3,300.00	3,300.00	3,624.00	3,624.00
<b>CAPITAL RECYCLED WATER</b>								
INSTALL 6" AWWA C-900 PURPLE PIPE, CL 200 PER IRWD STD. W-17	4,480	LF	25.00	112,000.00	20.00	89,600.00	20.00	89,600.00
FURNISH 6" BFV D.I. FE X FE CLASS 150	11	EA	750.00	8,250.00	1,375.00	15,125.00	1,239.00	13,629.00
INSTALL 6" BFV D.I. FE X FE CLASS 150	11	EA	500.00	5,500.00	90.00	990.00	155.00	1,705.00
INSTALL 6" CROSS D.I. (FE X FE)	1	EA	1,000.00	1,000.00	275.00	275.00	555.00	555.00
INSTALL 6" X 4" D.I. REDUCING TEE (FE X FE)	5	EA	1,000.00	5,000.00	200.00	1,000.00	299.00	1,495.00
INSTALL 6" D.I. ADAPTOR (FE X PO)	14	EA	1,000.00	14,000.00	165.00	2,310.00	307.00	4,298.00
INSTALL 6"-90" D.I. BEND (FE X PO)	1	EA	1,000.00	1,000.00	120.00	120.00	319.00	319.00
INSTALL 6"-45" D.I. BEND	2	EA	1,000.00	2,000.00	110.00	220.00	240.00	480.00
INSTALL 6"-22.5" D.I. BEND	4	EA	1,000.00	4,000.00	100.00	400.00	234.00	936.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	5,300.00	5,300.00	5,550.00	5,550.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	14	EA	500.00	7,000.00	105.00	1,470.00	196.00	2,744.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	3,200.00	12,800.00	1,318.00	5,272.00
REMOVE TEMPORARY FLUSH-OUT AND CONNECT TO EXISTING	3	EA	1,000.00	3,000.00	2,350.00	7,050.00	857.00	2,571.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	4,300.00	8,600.00	4,060.00	8,120.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	4,500.00	4,500.00	3,437.00	3,437.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	3,600.00	3,600.00	3,624.00	3,624.00
<b>CAPITAL SANITARY SEWER</b>								
INSTALL 12" AWWA C-900 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	1,594	LF	40.00	63,760.00	77.00	122,738.00	88.00	140,272.00
INSTALL 16" AWWA C-905 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	5	LF	65.00	325.00	250.00	1,250.00	989.00	4,945.00
INSTALL 72" DIA. MANHOLE PER IRWD STD S-1	1	EA	7,500.00	7,500.00	10,300.00	10,300.00	13,181.00	13,181.00
INSTALL 60" DIA. MANHOLE PER IRWD STD S-1	7	EA	6,000.00	42,000.00	5,750.00	40,250.00	8,946.00	62,622.00
INSTALL T-LOCK PVC LINER OR RAVEN COATING PER IRWD STANDARDS AND REQUIREMENTS	4	EA	1,000.00	4,000.00	4,800.00	19,200.00	4,840.00	19,360.00
INSTALL CLEANOUT PER IRWD STD. S-3 AND S-5	1	EA	2,000.00	2,000.00	640.00	640.00	859.00	859.00
ADJUST SEWER MANHOLES TO GRADE (AC BASE COURSE)	1	LS	5,000.00	5,000.00	3,200.00	3,200.00	3,107.00	3,107.00
ADJUST SEWER MANHOLES TO GRADE (AC FINISH COURSE)	1	LS	5,000.00	5,000.00	2,800.00	2,800.00	3,107.00	3,107.00
<b>PAYMENT AND PERFORMANCE BONDS</b>								
PAYMENT AND PERFORMANCE BONDS (SECTIONS G-J)	1	LS	5,198.54	5,198.54	10,500.00	10,500.00	7,245.00	7,245.00
<b>TOTAL IRWD CAPITAL IMPROVEMENTS (SECTIONS G-K)</b>				<b>525,052.64</b>		<b>549,978.00</b>		<b>555,414.00</b>

**BID SUMMARY**  
**Planning Area 40**  
**Phase 1 - Backbone Street Improvements**  
**Wet Utilities - Contract "B2"**  
**IRWD Capital Facilities**

**TASK PC ID: LD-0040\_ST.22.cn01**

ENGINEER'S ESTIMATE	4TH BIDDER	5TH BIDDER
STANTEC	LEATHERWOOD	BOUDREAU

- Signed Addendum Nos. 1 and 2
- Corporate Seal (if applicable)
- Correct Signatures (Page V-3)
- Bid Totals Correctly
- List of SubContractors
- Equipment/Material Source Information
- Contractors Rates
- 10% Bid Bond
- Construction Schedule
- Non-Collusion Certificate
- Contractor Prequalified

<u>Comments</u>	<u>Comments</u>
DID NOT CHECK AS BIDDER WAS NOT LOW	DID NOT CHECK AS BIDDER WAS NOT LOW

DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
<b>DELETABLE ITEMS - IRWD CAPITAL IMPROVEMENTS (LD) - VTTM 17277</b>								
The following Deletable Items may or may not be part of the contract								
<b>GENERAL</b>								
MOBILIZATION (NTE EXCEED 2% OF CONTRACT PRICE SECTIONS H-J)	1	LS	9,899.10	9,899.10	12,000.00	12,000.00	12,000.00	12,000.00
DEVELOP CONSTRUCTION WATER (SECTIONS H-J)	1	LS	10,000.00	10,000.00	1,000.00	1,000.00	1,550.00	1,550.00
TRAFFIC CONTROL (SECTIONS H-J)	1	LS	5,000.00	5,000.00	1,000.00	1,000.00	4,500.00	4,500.00
<b>CAPITAL DOMESTIC WATER</b>								
INSTALL 12" C-900 PVC CL 200 PER IRWD STD W-17	2,503	LF	40.00	100,120.00	45.00	112,635.00	38.00	95,114.00
INSTALL 12"x10" D.I. REDUCING TEE (FE X FE)	4	EA	1,000.00	4,000.00	580.00	2,320.00	670.00	2,680.00
INSTALL 12" X 10" D.I. REDUCING CROSS (FE X FE)	1	EA	1,000.00	1,000.00	625.00	625.00	830.00	830.00
FURNISH 12" BFV (FE X FE) CLASS 150	10	EA	1,000.00	10,000.00	2,650.00	26,500.00	1,900.00	19,000.00
INSTALL 12" BFV (FE X FE) CLASS 150	10	EA	500.00	5,000.00	300.00	3,000.00	250.00	2,500.00
INSTALL 12"-22.5" D.I. BEND	2	EA	1,000.00	2,000.00	200.00	400.00	330.00	660.00
INSTALL 12" D.I. ADAPTOR (FE X MJ)	9	EA	1,000.00	9,000.00	400.00	3,600.00	450.00	4,050.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	7,750.00	7,750.00	6,700.00	6,700.00
INSTALL 12" BLIND FLANGE	1	EA	1,000.00	1,000.00	300.00	300.00	310.00	310.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	6,800.00	13,600.00	5,000.00	10,000.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	7	EA	500.00	3,500.00	200.00	1,400.00	55.00	385.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	1,650.00	6,600.00	3,400.00	13,600.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	1	EA	1,000.00	1,000.00	2,700.00	2,700.00	2,400.00	2,400.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	3,850.00	3,850.00	4,700.00	4,700.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	3,850.00	3,850.00	4,700.00	4,700.00
<b>CAPITAL RECYCLED WATER</b>								
INSTALL 6" AWWA C-900 PVC PURPLE PIPE. CL 200 PER IRWD STD. W-17	4,480	LF	25.00	112,000.00	25.00	112,000.00	23.00	103,040.00
FURNISH 6" BFV D.I. FE X FE CLASS 150	11	EA	750.00	8,250.00	1,450.00	15,950.00	1,300.00	14,300.00
INSTALL 6" BFV D.I. FE X FE CLASS 150	11	EA	500.00	5,500.00	150.00	1,650.00	125.00	1,375.00
INSTALL 6" CROSS D.I. (FE X FE)	1	EA	1,000.00	1,000.00	210.00	210.00	400.00	400.00
INSTALL 6" X 4" D.I. REDUCING TEE (FE X FE)	5	EA	1,000.00	5,000.00	75.00	375.00	270.00	1,350.00
INSTALL 6" D.I. ADAPTOR (FE X PO)	14	EA	1,000.00	14,000.00	80.00	1,120.00	160.00	2,240.00
INSTALL 6"-90° D.I. BEND (FE X PO)	1	EA	1,000.00	1,000.00	90.00	90.00	210.00	210.00
INSTALL 6"-45° D.I. BEND	2	EA	1,000.00	2,000.00	135.00	270.00	290.00	580.00
INSTALL 6"-22.5° D.I. BEND	4	EA	1,000.00	4,000.00	65.00	260.00	190.00	760.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	8,250.00	8,250.00	6,000.00	6,000.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	14	EA	500.00	7,000.00	200.00	2,800.00	55.00	770.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	1,250.00	5,000.00	900.00	3,600.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	3	EA	1,000.00	3,000.00	2,400.00	7,200.00	1,700.00	5,100.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	6,500.00	13,000.00	4,800.00	9,600.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	4,200.00	4,200.00	5,000.00	5,000.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	4,200.00	4,200.00	5,000.00	5,000.00
<b>CAPITAL SANITARY SEWER</b>								
INSTALL 12" AWWA C-900 PVC SEWER PIPE. CL 200 PER IRWD STD. S-6	1,594	LF	40.00	63,760.00	90.00	143,460.00	124.00	197,656.00
INSTALL 16" AWWA C-905 PVC SEWER PIPE. CL 200 PER IRWD STD. S-6	5	LF	65.00	325.00	200.00	1,000.00	500.00	2,500.00
INSTALL 72" DIA. MANHOLE PER IRWD STD S-1	1	EA	7,500.00	7,500.00	9,600.00	9,600.00	10,300.00	10,300.00
INSTALL 60" DIA. MANHOLE PER IRWD STD S-1	7	EA	6,000.00	42,000.00	5,500.00	38,500.00	7,000.00	49,000.00
INSTALL T-LOCK PVC LINER OR RAVEN COATING PER IRWD STANDARDS AND REQUIREMENTS	4	EA	1,000.00	4,000.00	4,400.00	17,600.00	4,300.00	17,200.00
INSTALL CLEANOUT PER IRWD STD. S-3 AND S-5	1	EA	2,000.00	2,000.00	1,550.00	1,550.00	3,700.00	3,700.00
ADJUST SEWER MANHOLES TO GRADE (AC BASE COURSE)	1	LS	5,000.00	5,000.00	4,000.00	4,000.00	4,000.00	4,000.00
ADJUST SEWER MANHOLES TO GRADE (AC FINISH COURSE)	1	LS	5,000.00	5,000.00	4,000.00	4,000.00	4,000.00	4,000.00
<b>PAYMENT AND PERFORMANCE BONDS</b>								
PAYMENT AND PERFORMANCE BONDS (SECTIONS G-J)	1	LS	5,198.54	5,198.54	11,200.00	11,200.00	9,950.00	9,950.00
<b>TOTAL IRWD CAPITAL IMPROVEMENTS (SECTIONS G-K)</b>				<b>525,052.64</b>		<b>610,615.00</b>		<b>643,310.00</b>

**BID SUMMARY**  
**Planning Area 40**  
**Phase 1 - Backbone Street Improvements**  
**Wet Utilities - Contract "B2"**  
**IRWD Capital Facilities**

**TASK PC ID: LD-0040.ST.22.cn01**

ENGINEER'S ESTIMATE	6TH BIDDER	7TH BIDDER
STANTEC	KENNEDY	GRIFFITH

Signed Addendum Nos. 1 and 2  
Corporate Seal (if applicable)  
Correct Signatures (Page V-3)  
Bid Totals Correctly  
List of SubContractors  
Equipment/Material Source Information  
Contractors Rates  
10% Bid Bond  
Construction Schedule  
Non-Collusion Certificate  
Contractor Prequalified

**Comments**  
DID NOT CHECK AS  
BIDDER WAS NOT LOW

DESCRIPTION	QTY	UNIT	ENGINEER'S ESTIMATE		6TH BIDDER		7TH BIDDER	
			UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
<b>DELETABLE ITEMS - IRWD CAPITAL IMPROVEMENTS (LD) - VTTM 17277</b>								
The following Deletable Items may or may not be part of the contract								
<b>GENERAL</b>								
MOBILIZATION (NTE EXCEED 2% OF CONTRACT PRICE SECTIONS H-J)	1	LS	9,899.10	9,899.10	3,000.00	3,000.00	16,500.00	16,500.00
DEVELOP CONSTRUCTION WATER (SECTIONS H-J)	1	LS	10,000.00	10,000.00	2,000.00	2,000.00	5,000.00	5,000.00
TRAFFIC CONTROL (SECTIONS H-J)	1	LS	5,000.00	5,000.00	500.00	500.00	5,000.00	5,000.00
<b>CAPITAL DOMESTIC WATER</b>								
INSTALL 12" C-900 PVC CL 200 PER IRWD STD W-17	2,503	LF	40.00	100,120.00	50.00	125,150.00	49.40	123,648.20
INSTALL 12"x10" D.I. REDUCING TEE (FE X FE)	4	EA	1,000.00	4,000.00	575.00	2,300.00	960.00	3,840.00
INSTALL 12" X 10" D.I. REDUCING CROSS (FE X FE)	1	EA	1,000.00	1,000.00	625.00	625.00	990.00	990.00
FURNISH 12" BFV (FE X FE) CLASS 150	10	EA	1,000.00	10,000.00	1,580.00	15,800.00	2,670.00	26,700.00
INSTALL 12" BFV (FE X FE) CLASS 150	10	EA	500.00	5,000.00	175.00	1,750.00	645.00	6,450.00
INSTALL 12"-22.5" D.I. BEND	2	EA	1,000.00	2,000.00	290.00	580.00	200.00	400.00
INSTALL 12" D.I. ADAPTOR (FE X MJ)	9	EA	1,000.00	9,000.00	195.00	1,755.00	390.00	3,510.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	2,800.00	2,800.00	11,410.00	11,410.00
INSTALL 12" BLIND FLANGE	1	EA	1,000.00	1,000.00	120.00	120.00	385.00	385.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	2,900.00	5,800.00	6,620.00	13,240.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	7	EA	500.00	3,500.00	150.00	1,050.00	490.00	3,430.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	750.00	3,000.00	2,070.00	8,280.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	1	EA	1,000.00	1,000.00	2,500.00	2,500.00	1,430.00	1,430.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	4,000.00	4,000.00	1,400.00	1,400.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	5,000.00	5,000.00	1,500.00	1,500.00
<b>CAPITAL RECYCLED WATER</b>								
INSTALL 6" AWWA C-900 PVC PURPLE PIPE. CL 200 PER IRWD STD. W-17	4,480	LF	25.00	112,000.00	35.50	159,040.00	37.50	168,000.00
FURNISH 6" BFV D.I. FE X FE CLASS 150	11	EA	750.00	8,250.00	1,020.00	11,220.00	1,310.00	14,410.00
INSTALL 6" BFV D.I. FE X FE CLASS 150	11	EA	500.00	5,500.00	175.00	1,925.00	475.00	5,225.00
INSTALL 6" CROSS D.I. (FE X FE)	1	EA	1,000.00	1,000.00	225.00	225.00	605.00	605.00
INSTALL 6" X 4" D.I. REDUCING TEE (FE X FE)	5	EA	1,000.00	5,000.00	130.00	650.00	465.00	2,325.00
INSTALL 6" D.I. ADAPTOR (FE X PO)	14	EA	1,000.00	14,000.00	75.00	1,050.00	76.00	1,064.00
INSTALL 6"-90" D.I. BEND (FE X PO)	1	EA	1,000.00	1,000.00	120.00	120.00	85.00	85.00
INSTALL 6"-45" D.I. BEND	2	EA	1,000.00	2,000.00	130.00	260.00	66.00	132.00
INSTALL 6"-22.5" D.I. BEND	4	EA	1,000.00	4,000.00	125.00	500.00	58.50	234.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	2,800.00	2,800.00	8,360.00	8,360.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	14	EA	500.00	7,000.00	150.00	2,100.00	1,760.00	24,640.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	600.00	2,400.00	3,350.00	13,400.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	3	EA	1,000.00	3,000.00	2,200.00	6,600.00	1,020.00	3,060.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	2,900.00	5,800.00	10,360.00	20,720.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	4,400.00	4,400.00	1,500.00	1,500.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	5,500.00	5,500.00	1,700.00	1,700.00
<b>CAPITAL SANITARY SEWER</b>								
INSTALL 12" AWWA C-900 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	1,594	LF	40.00	63,760.00	121.00	192,874.00	133.30	212,480.20
INSTALL 16" AWWA C-905 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	5	LF	65.00	325.00	125.00	625.00	440.00	2,200.00
INSTALL 72" DIA. MANHOLE PER IRWD STD S-1	1	EA	7,500.00	7,500.00	10,500.00	10,500.00	10,240.00	10,240.00
INSTALL 60" DIA. MANHOLE PER IRWD STD S-1	7	EA	6,000.00	42,000.00	5,500.00	38,500.00	7,220.00	50,540.00
INSTALL T-LOCK PVC LINER OR RAVEN COATING PER IRWD STANDARDS AND REQUIREMENTS	4	EA	1,000.00	4,000.00	4,800.00	19,200.00	10,680.00	42,720.00
INSTALL CLEANOUT PER IRWD STD. S-3 AND S-5	1	EA	2,000.00	2,000.00	575.00	575.00	2,400.00	2,400.00
ADJUST SEWER MANHOLES TO GRADE (AC BASE COURSE)	1	LS	5,000.00	5,000.00	400.00	400.00	2,930.00	2,930.00
ADJUST SEWER MANHOLES TO GRADE (AC FINISH COURSE)	1	LS	5,000.00	5,000.00	4,000.00	4,000.00	6,600.00	6,600.00
<b>PAYMENT AND PERFORMANCE BONDS</b>								
PAYMENT AND PERFORMANCE BONDS (SECTIONS G-J)	1	LS	5,198.54	5,198.54	9,700.00	9,700.00	8,000.00	8,000.00
<b>TOTAL IRWD CAPITAL IMPROVEMENTS (SECTIONS G-K)</b>				<b>525,052.64</b>		<b>658,694.00</b>		<b>836,683.40</b>



**BID SUMMARY**  
**Planning Area 40**  
**Phase 1 - Backbone Street Improvements**  
**Wet Utilities - Contract "B2"**  
**IRWD Capital Facilities**

**TASK PC ID: LD-0040.ST.22.cn01**

ENGINEER'S ESTIMATE	8TH BIDDER
STANTEC	KEC
	PAULUS-NO SHOW CLEARWATER- SUBMITTED ONE DAY LATE
	<u>Comments</u>

DID NOT CHECK AS  
 BIDDER WAS NOT LOW

- Signed Addendum Nos. 1 and 2
- Corporate Seal (if applicable)
- Correct Signatures (Page V-3)
- Bid Totals Correctly
- List of SubContractors
- Equipment/Material Source Information
- Contractors Rates
- 10% Bid Bond
- Construction Schedule
- Non-Collusion Certificate
- Contractor Prequalified

DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
<b>DELETABLE ITEMS - IRWD CAPITAL IMPROVEMENTS (LD) - VTTM 17277</b>						
The following Deletable Items may or may not be part of the contract						
<b>GENERAL</b>						
MOBILIZATION (NTE EXCEED 2% OF CONTRACT PRICE SECTIONS H-J)	1	LS	9,899.10	9,899.10	15,000.00	15,000.00
DEVELOP CONSTRUCTION WATER (SECTIONS H-J)	1	LS	10,000.00	10,000.00	10,000.00	10,000.00
TRAFFIC CONTROL (SECTIONS H-J)	1	LS	5,000.00	5,000.00	5,500.00	5,500.00
<b>CAPITAL DOMESTIC WATER</b>						
INSTALL 12" C-900 PVC CL 200 PER IRWD STD W-17	2,503	LF	40.00	100,120.00	80.00	200,240.00
INSTALL 12"x10" D.I. REDUCING TEE (FE X FE)	4	EA	1,000.00	4,000.00	1,100.00	4,400.00
INSTALL 12" X 10" D I. REDUCING CROSS (FE X FE)	1	EA	1,000.00	1,000.00	1,500.00	1,500.00
FURNISH 12" BFV (FE X FE) CLASS 150	10	EA	1,000.00	10,000.00	3,000.00	30,000.00
INSTALL 12" BFV (FE X FE) CLASS 150	10	EA	500.00	5,000.00	600.00	6,000.00
INSTALL 12"-22.5" D.I. BEND	2	EA	1,000.00	2,000.00	800.00	1,600.00
INSTALL 12" D.I. ADAPTOR (FE X MJ)	9	EA	1,000.00	9,000.00	1,000.00	9,000.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	7,200.00	7,200.00
INSTALL 12" BLIND FLANGE	1	EA	1,000.00	1,000.00	630.00	630.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	6,300.00	12,600.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	7	EA	500.00	3,500.00	230.00	1,610.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	4,000.00	16,000.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	1	EA	1,000.00	1,000.00	5,000.00	5,000.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	4,200.00	4,200.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	13,000.00	13,000.00
<b>CAPITAL RECYCLED WATER</b>						
INSTALL 6" AWWA C-900 PVC PURPLE PIPE, CL 200 PER IRWD STD. W-17	4,480	LF	25.00	112,000.00	55.00	246,400.00
FURNISH 6" BFV D.I. FE X FE CLASS 150	11	EA	750.00	8,250.00	1,800.00	19,800.00
INSTALL 6" BFV D.I. FE X FE CLASS 150	11	EA	500.00	5,500.00	500.00	5,500.00
INSTALL 6" CROSS D.I. (FE X FE)	1	EA	1,000.00	1,000.00	700.00	700.00
INSTALL 6" X 4" D.I. REDUCING TEE (FE X FE)	5	EA	1,000.00	5,000.00	600.00	3,000.00
INSTALL 6" D.I. ADAPTOR (FE X PO)	14	EA	1,000.00	14,000.00	700.00	9,800.00
INSTALL 6"-90° D.I. BEND (FE X PO)	1	EA	1,000.00	1,000.00	700.00	700.00
INSTALL 6"-45° D.I. BEND	2	EA	1,000.00	2,000.00	600.00	1,200.00
INSTALL 6"-22.5° D.I. BEND	4	EA	1,000.00	4,000.00	600.00	2,400.00
INSTALL 4" BLOWOFF PER IRWD STD. W-14	1	EA	1,000.00	1,000.00	7,000.00	7,000.00
INSTALL CONCRETE THRUST BLOCK PER IRWD STD W-16	14	EA	500.00	7,000.00	160.00	2,240.00
INSTALL TEMPORARY FLUSH-OUT ASSEMBLY PER IRWD STD. W-12	4	EA	2,000.00	8,000.00	3,800.00	15,200.00
REMOVE TEMPORARY FLUSH-OUT ASSEMBLY AND CONNECT TO EXISTING	3	EA	1,000.00	3,000.00	3,800.00	11,400.00
INSTALL 2" AIR AND VACUUM RELEASE VALVE PER IRWD STD W-11	2	EA	2,000.00	4,000.00	6,000.00	12,000.00
ADJUST VALVES TO GRADE (AC BASE COURSE)	1	LS	10,000.00	10,000.00	4,000.00	4,000.00
ADJUST VALVES TO GRADE (AC FINISH COURSE)	1	LS	10,000.00	10,000.00	12,500.00	12,500.00
<b>CAPITAL SANITARY SEWER</b>						
INSTALL 12" AWWA C-900 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	1,594	LF	40.00	63,760.00	90.00	143,460.00
INSTALL 16" AWWA C-905 PVC SEWER PIPE, CL 200 PER IRWD STD. S-6	5	LF	65.00	325.00	800.00	3,000.00
INSTALL 72" DIA. MANHOLE PER IRWD STD S-1	1	EA	7,500.00	7,500.00	23,000.00	23,000.00
INSTALL 60" DIA. MANHOLE PER IRWD STD S-1	7	EA	6,000.00	42,000.00	14,500.00	101,500.00
INSTALL T-LOCK PVC LINER OR RAVEN COATING PER IRWD STANDARDS AND REQUIREMENTS	4	EA	1,000.00	4,000.00	6,200.00	24,800.00
INSTALL CLEANOUT PER IRWD STD. S-3 AND S-5	1	EA	2,000.00	2,000.00	6,200.00	6,200.00
ADJUST SEWER MANHOLES TO GRADE (AC BASE COURSE)	1	LS	5,000.00	5,000.00	10,500.00	10,500.00
ADJUST SEWER MANHOLES TO GRADE (AC FINISH COURSE)	1	LS	5,000.00	5,000.00	9,030.00	9,030.00
<b>PAYMENT AND PERFORMANCE BONDS</b>						
PAYMENT AND PERFORMANCE BONDS (SECTIONS G-J)	1	LS	5,198.54	5,198.54	10,000.00	10,000.00
<b>TOTAL IRWD CAPITAL IMPROVEMENTS (SECTIONS G-K)</b>				<b>525,052.64</b>		<b>1,028,810.00</b>



# IRVINE RANCH WATER DISTRICT EXHIBIT "E"

## Expenditure Authorization

Project Name: PA40 PHZ I DW BACKBONE PIPELINES  
 Project No: 11563 EA No: 1  
 Project Manager: CORTEZ, MALCOLM  
 Project Engineer: SUNDBERG, RANDALL  
 Request Date: December 27, 2010

ID Split: Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
150	100.0	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$229,900
<b>Total EA Requests:</b>	<b>\$229,900</b>
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$229,900
<b>Updated Budget:</b>	<b>\$229,900</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	0	0	0	0	0	9/10	12/10
ENGINEERING DESIGN - OUTSIDE	16,000	0	16,000	16,000	0	16,000	9/10	12/10
DESIGN STAFF FIELD SUPPORT	0	0	0	0	0	0	9/10	12/10
ENGINEERING - CA&I IRWD	20,000	0	20,000	20,000	0	20,000	12/10	7/11
ENGINEERING - CA&I OUTSIDE	15,000	0	15,000	15,000	0	15,000	12/10	7/11
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	5,000	0	5,000	12/10	7/11
CONSTRUCTION	150,000	0	150,000	150,000	0	150,000	12/10	7/11
LEGAL	3,000	0	3,000	3,000	0	3,000	12/10	7/11
Contingency - 10.00% Subtotal	\$20,900	\$0	\$20,900	\$20,900	\$0	\$20,900		
<b>Subtotal (Direct Costs)</b>	<b>\$229,900</b>	<b>\$0</b>	<b>\$229,900</b>	<b>\$229,900</b>	<b>\$0</b>	<b>\$229,900</b>		
Estimated G/A - 195.00% of direct labor*	\$48,800	\$0	\$48,800	\$48,800	\$0	\$48,800		
<b>Total</b>	<b>\$278,700</b>	<b>\$0</b>	<b>\$278,700</b>	<b>\$278,700</b>	<b>\$0</b>	<b>\$278,700</b>		
Direct Labor	\$25,000	\$0	\$25,000	\$25,000	\$0	\$25,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: *Randy J. Huber* 12-28-10  
 Department Director: *Ken H. Bunker* 1-6-11  
 Finance: \_\_\_\_\_  
 Board/General Manager: \_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$285,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

Project Name: PA40 PHZ I TRUNK SEWER  
 Project No: 21563 EA No: 1  
 Project Manager: CORTEZ, MALCOLM  
 Project Engineer: SUNDBERG, RANDALL  
 Request Date: December 28, 2010

ID Split: Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
250	100.0	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$231,000
<b>Total EA Requests:</b>	<b>\$231,000</b>
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$231,000
<b>Updated Budget:</b>	<b>\$231,000</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	0	0	0	0	0	9/01	12/10
ENGINEERING DESIGN - OUTSIDE	17,000	0	17,000	17,000	0	17,000	9/01	12/10
DESIGN STAFF FIELD SUPPORT	0	0	0	0	0	0	9/01	12/10
ENGINEERING - CA&I IRWD	10,000	0	10,000	10,000	0	10,000	12/10	7/11
ENGINEERING - CA&I OUTSIDE	15,000	0	15,000	15,000	0	15,000	12/10	7/11
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	5,000	0	5,000	12/10	7/11
CONSTRUCTION	160,000	0	160,000	160,000	0	160,000	12/10	7/11
LEGAL	3,000	0	3,000	3,000	0	3,000	9/10	7/11
Contingency - 10.00% Subtotal	\$21,000	\$0	\$21,000	\$21,000	\$0	\$21,000		
<b>Subtotal (Direct Costs)</b>	<b>\$231,000</b>	<b>\$0</b>	<b>\$231,000</b>	<b>\$231,000</b>	<b>\$0</b>	<b>\$231,000</b>		
Estimated G/A - 195.00% of direct labor*	\$29,300	\$0	\$29,300	\$29,300	\$0	\$29,300		
<b>Total</b>	<b>\$260,300</b>	<b>\$0</b>	<b>\$260,300</b>	<b>\$260,300</b>	<b>\$0</b>	<b>\$260,300</b>		
Direct Labor	\$15,000	\$0	\$15,000	\$15,000	\$0	\$15,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator:

*Randall J. Sunberg* (W)

12-28-10

Department Director:

*Kevin L. Burton*

1-6-11

Finance:

Board/General Manager:

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$266,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated into this authorization. The official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

Project Name: PA40 PHZ I RW BACKBONE PIPELINES  
 Project No: 31563 EA No: 1  
 Project Manager: CORTEZ, MALCOLM  
 Project Engineer: SUNDBERG, RANDALL  
 Request Date: December 27, 2010

ID Split: Miscellaneous

### Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
250	100.0	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$0
This Request:	\$194,700
<b>Total EA Requests:</b>	<b>\$194,700</b>
Previously Approved Budget:	\$0
Budget Adjustment Requested this EA:	\$194,700
<b>Updated Budget:</b>	<b>\$194,700</b>
<b>Budget Remaining After This EA</b>	<b>\$0</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	0	0	0	0	0	9/10	12/10
ENGINEERING DESIGN - OUTSIDE	15,000	0	15,000	15,000	0	15,000	9/10	12/10
DESIGN STAFF FIELD SUPPORT	0	0	0	0	0	0	9/10	12/10
ENGINEERING - CA&I IRWD	5,000	0	5,000	5,000	0	5,000	12/10	7/11
ENGINEERING - CA&I OUTSIDE	12,000	0	12,000	12,000	0	12,000	12/10	7/11
CONSTRUCTION FIELD SUPPORT	2,000	0	2,000	2,000	0	2,000	12/10	7/11
CONSTRUCTION	140,000	0	140,000	140,000	0	140,000	12/10	7/11
LEGAL	3,000	0	3,000	3,000	0	3,000	9/10	7/11
Contingency - 10.00% Subtotal	\$17,700	\$0	\$17,700	\$17,700	\$0	\$17,700		
<b>Subtotal (Direct Costs)</b>	<b>\$194,700</b>	<b>\$0</b>	<b>\$194,700</b>	<b>\$194,700</b>	<b>\$0</b>	<b>\$194,700</b>		
Estimated G/A - 195.00% of direct labor*	\$13,700	\$0	\$13,700	\$13,700	\$0	\$13,700		
<b>Total</b>	<b>\$208,400</b>	<b>\$0</b>	<b>\$208,400</b>	<b>\$208,400</b>	<b>\$0</b>	<b>\$208,400</b>		
Direct Labor	\$7,000	\$0	\$7,000	\$7,000	\$0	\$7,000		

\*EA includes estimated-G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: \_\_\_\_\_

Department Director: \_\_\_\_\_

Finance: \_\_\_\_\_

Board/General Manager: \_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$213,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This authorization is an official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

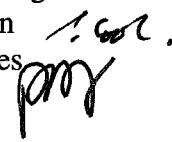


January 24, 2011

Prepared by: R. Sundberg/M. Cortez

Submitted by: K. Burton

Approved by: Paul Jones



## CONSENT CALENDAR

### PLANNING AREA 18 NORTH – BUDGET INCREASE AND EXPENDITURE AUTHORIZATIONS

#### SUMMARY:

Irvine Community Development Company (ICDC) is resuming development of Planning Area 18 (PA 18) North through the construction of streets, storm drains, domestic water, sewer, and recycled water improvements in the area of the Laguna Altura development. As part of the project, ICDC will construct the Irvine Ranch Water District (IRWD) domestic and recycled water capital facilities under the Supplemental Reimbursement Agreement approved on January 22, 2007. The IRWD capital facilities include approximately 4,700 feet of 12-inch diameter domestic water pipeline and recycled water pipelines ranging in size of 6-inch, 8-inch and 36-inch with lengths of 2,300 feet, 880 feet and 3,650 feet, respectively. Staff recommends that the Board:

- Approve an increase to the FY 2010-11 Capital Budget for Project 30444 in the amount of \$39,700, from \$1,760,000 to \$1,799,700; and
- Approve Expenditure Authorizations for Project 10444 in the amount of \$495,400 and Project 30444 in the amount of \$1,562,300.

#### BACKGROUND:

IRWD and ICDC have had a Reimbursement Agreement (RA) for construction of IRWD capital facilities in place since May 1997. Under this RA, a Supplemental Reimbursement Agreement serves to define the improvements to be constructed within a specific planning area as well as the estimated reimbursable costs. ICDC and IRWD entered into a Supplemental Reimbursement Agreement for PA 18 on February 1, 2008.

ICDC is now moving forward with the Laguna Altura development within the northern portion of PA 18 North. PA 18 North is located in the City of Irvine and is generally bound by State Route 133 to the west, Interstate 405 to the north, and Planning Area 39, and San Diego Creek to the east as shown on Exhibit "A". All required IRWD capital improvements are documented in the PA 18 Sub-Area Master Plan, dated July 2006, prepared by Stantec.

The capital facilities will consist of approximately 4,700 feet of 12-inch diameter domestic water pipeline and recycled water pipelines ranging in size of 6-inch, 8-inch and 36-inch with lengths of 2,300 feet, 880 feet and 3,650 feet, respectively.

With approval by IRWD in January 2007, ICDC retained the services of PBS&J to prepare the capital facility improvement plans for PA 18. The development of PA 18 was placed on hold by ICDC in 2008. In May 2010, ICDC started to move forward again with the development of the northern portion of PA 18.

ICDC received bids from seven contractors on August 17, 2010 for the PA18 North improvements. Kennedy Pipeline was the lowest bidder with a bid in the amount of \$1,667,373.15 for the IRWD facilities as shown in Exhibit “B”. In addition, ICDC received consultant proposals for construction surveying and geotechnical soils testing during construction from VA Consulting and NMG Geotechnical, in the respective amounts of \$6,810 and \$4,500. Staff has reviewed the consultant proposals and the construction bids and found them to be acceptable.

A summary of the costs under the Supplemental Reimbursement Agreement approved in February 2008 is shown below.

Construction (Kennedy Pipeline)	\$ 1,695,470
Construction Survey (VA Consulting)	\$ 6,810
Construction Soil Testing (NMG Geotechnical)	\$ 4,500
ICDC Administration Fee (1%)	<u>\$ 17,100</u>
	\$ 1,723,880

A Sole Source Engineering Services contract with PBS&J was approved by the Engineering and Operations Committee on January 18, 2011. A copy of the proposal is provided as Exhibit “C”.

**FISCAL IMPACTS:**

Projects 10444 and 30444 are included in the FY 2010-11 Capital Budget. Staff requests a budget increase and Expenditure Authorizations as shown in the table below and in Exhibit “D”.

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
10444	\$1,308,000	\$ -0-	\$1,308,000	\$126,100	\$ 495,400	\$ 621,500
30444	\$1,760,000	\$39,700	\$1,799,700	\$165,000	\$1,562,300	\$1,727,300
<b>TOTAL</b>	<b>\$3,068,000</b>	<b>\$39,700</b>	<b>\$3,107,700</b>	<b>\$291,100</b>	<b>\$2,057,700</b>	<b>\$2,348,800</b>

The above funding provides for the reimbursement costs to ICDC for the design and construction of IRWD capital facilities, staff time, and consultant construction management support.

**COMMITTEE STATUS:**

This item was reviewed at the Engineering and Operations Committee on January 18, 2011.

**ENVIRONMENTAL COMPLIANCE:**

This project is subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7 an Environmental Impact Report was certified on July 18, 2006 by the City of Irvine, lead agency. A Notice of Determination was filed with the Office of Planning and Research, SCH 2005081099, on July 19, 2006.



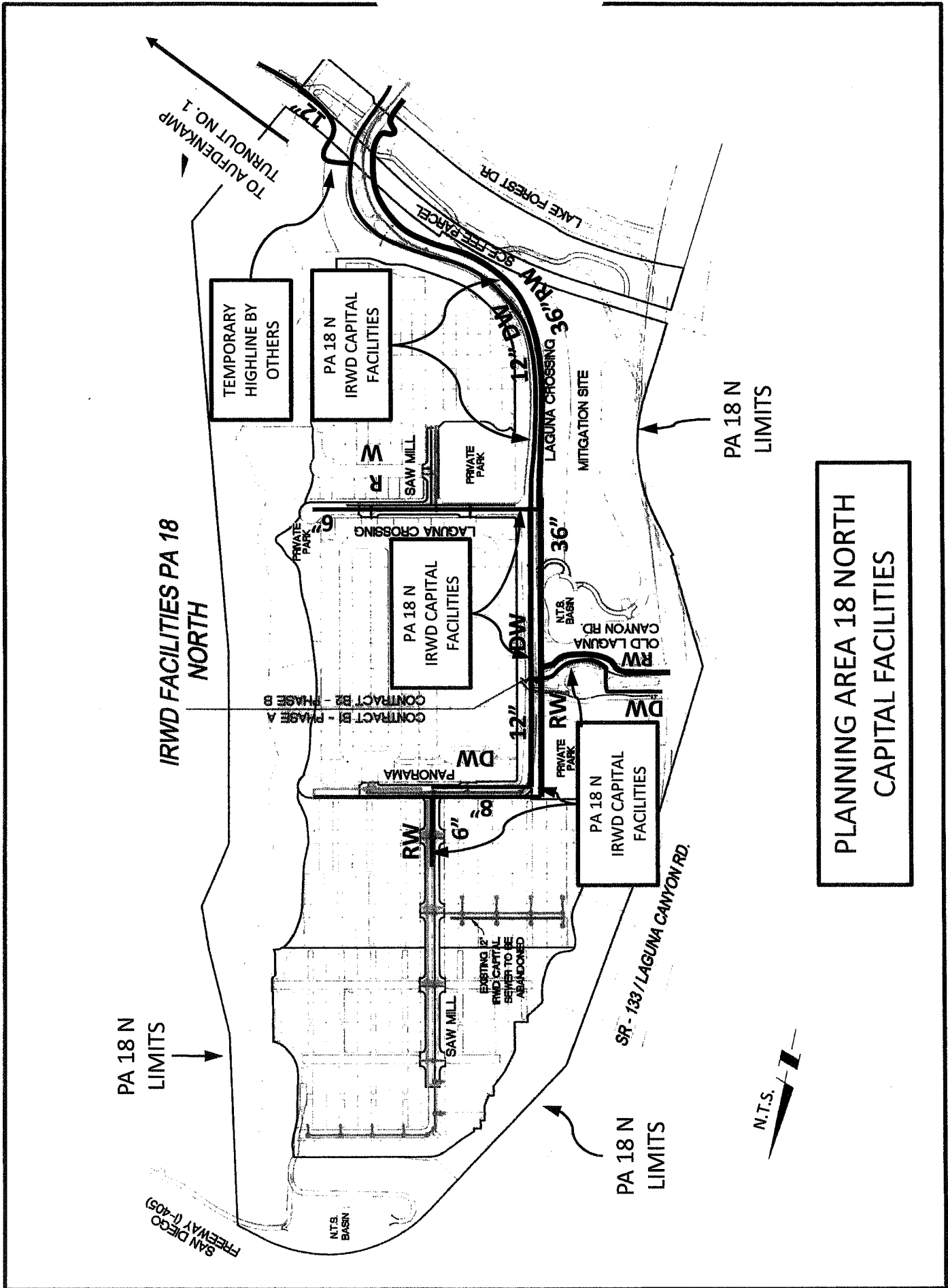
RECOMMENDATION:

THAT THE BOARD AUTHORIZE AN INCREASE TO THE FY 2010-11 CAPITAL BUDGET FOR PROJECT 30444 IN THE AMOUNT OF \$39,700, FROM \$1,760,000 TO \$1,799,700; APPROVE EXPENDITURE AUTHORIZATIONS FOR PROJECT 10444 IN THE AMOUNT OF \$495,400; AND PROJECT 30444 IN THE AMOUNT OF \$1,562,300 FOR PLANNING AREA 18 NORTH, PROJECTS 10444 AND 30444.

LIST OF EXHIBITS:

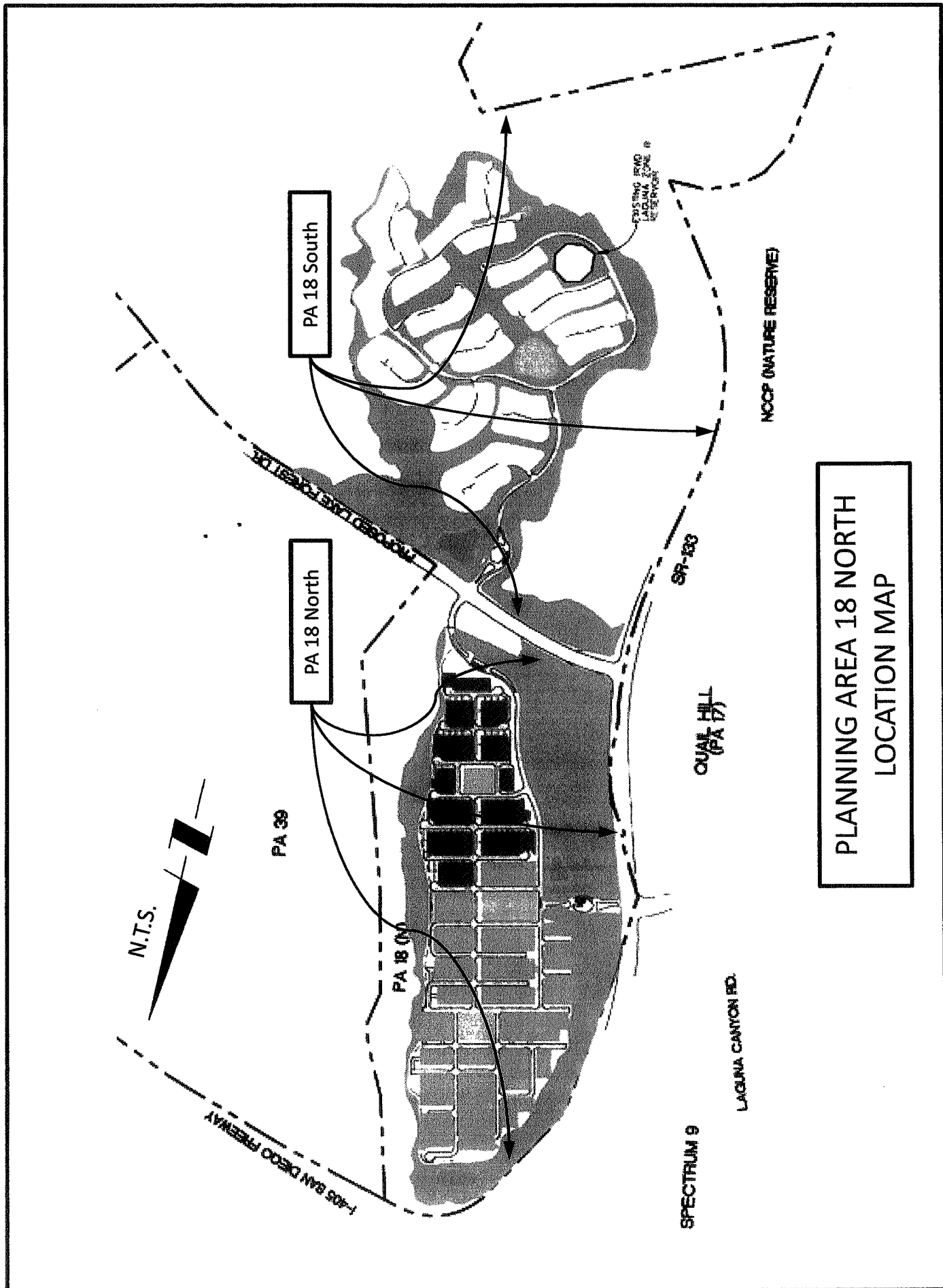
- Exhibit “A” - Location Map
- Exhibit “B” - Bid Summary for Construction of IRWD Capital Facilities
- Exhibit “C” - Construction Management Support Proposal from PBS&J
- Exhibit “D” - Expenditure Authorizations





IRWD FACILITIES PA 18 NORTH

PLANNING AREA 18 NORTH CAPITAL FACILITIES



PLANNING AREA 18 NORTH  
LOCATION MAP

BID OPENING DATE: August 17, 2010  
 DECLINED AFTER PRE-BID  
 WITNESSED BY: Tom Pasquini  
Tom Pasquini  
 Dave Conroy  
 Alex Moore  
 N. Borne  
 So. California Pipeline  
 Clearwater Pipeline

ENGINEERS ESTIMATE  
 HIRSHAKER

LOW BIDDER  
 L-LS

2ND BIDDER  
 LEATHERWOOD

3RD BIDDER  
 KAWA

4TH BIDDER  
 LOWMEYER IRWD  
 KERN COUNTY  
 KERN COUNTY

5TH BIDDER  
 PAULLUS

6TH BIDDER  
 LOW BIDDER -  
 REC

DESCRIPTION	ENGINEERS ESTIMATE	LOW BIDDER	2ND BIDDER	3RD BIDDER	4TH BIDDER	5TH BIDDER	6TH BIDDER
1. MOBILIZATION (NOT TO EXCEED 2% OF CONTRACT PRICE SECTIONS N-Q)	5,000.00	5,000.00	5,800.00	1,100.00	2,500.00	11,450.76	5,000.00
2. DEVELOP CONSTRUCTION WATER (SECTIONS N-Q)	1,550.00	1,050.00	1,000.00	1,100.00	750.00	5,730.37	7,000.00
3. CONSTRUCT 12" ANWVA C-800 PVC CL200 PIPE AND DI FITTINGS	186,540.00	77,914.00	50.00	40.00	52.50	61.49	83,085.86
4. INSTALL 12" CL250 BUTTERFLY VALVE & BOX	3,500.00	3,500.00	2,850.00	3,050.00	3,100.00	3,740.70	3,450.00
5. INSTALL 6" CL200 RWVG & BOX	1,500.00	1,500.00	1,700.00	1,772.00	1,200.00	1,851.52	1,350.00
6. INSTALL 1" AIR-VAC ASSEMBLY	2,500.00	5,300.00	5,400.00	4,699.00	2,000.00	2,852.35	2,350.00
7. INSTALL BLOW OFF DRAIN ASSEMBLY	4,000.00	5,200.00	9,700.00	8,302.00	3,800.00	3,693.45	5,674.70
8. INSTALL FIVE FITTINGS W/TELEPHONE CONNECTION	6,000.00	4,500.00	5,000.00	5,000.00	3,900.00	5,773.52	4,387.50
9. ADJUST VALVES TO GRADE	5,000.00	2,450.00	4,150.00	3,560.00	2,500.00	1,497.57	2,812.50
10. RECLAIMED WATER (IRWD CAPITAL)	100.00	350.00	385.00	238.00	500.00	372.47	592.50
11. CONSTRUCT 6" PURPLE ANWVA C-800 PVC CL200 PIPE AND DI FITTINGS	65,000.00	29,520.00	34.00	31.00	49.00	40.83	35,930.40
12. CONSTRUCT 6" PURPLE ANWVA C-800 PVC CL200 PIPE AND FITTINGS RWVG & BOX	85,475.00	34,190.00	23.00	25.00	45.00	40.83	53,691.45
13. INSTALL 6" CL200 RWVG & BOX	1,000.00	1,000.00	1,650.00	1,778.00	1,200.00	1,851.52	1,350.00
14. INSTALL 1" AIR-VAC ASSEMBLY	2,500.00	7,850.00	12,500.00	10,311.00	800.00	1,600.00	900.00
15. INSTALL BLOW OFF DRAIN ASSEMBLY	15,000.00	16,000.00	10,800.00	8,022.00	2,000.00	3,500.00	2,250.00
16. INSTALL TEMPORARY FLUSH-OUT ASSEMBLY	2,000.00	1,600.00	950.00	2,660.00	800.00	1,862.72	600.00
17. INSTALL FLUSH-OUT ASSEMBLY	2,000.00	1,600.00	7,100.00	1,232.00	900.00	3,500.00	1,012.50
18. ADJUST VALVES TO GRADE	100.00	350.00	385.00	255.00	500.00	350.00	592.50
19. ROCK TRENCHING							
20. HARD BEDROCK EXCAVATION AND POTENTIAL BLASTING - AREA H81	2,200.00	22,000.00	3,600.00	56,000.00	750.00	3,000.00	1,000.00
21. HARD BEDROCK EXCAVATION AND POTENTIAL BLASTING - AREA H82	5,600.00	22,000.00	3,600.00	70,000.00	750.00	3,000.00	1,000.00
22. PAYMENT AND PERFORMANCE BONDS - IRWD RANCH WATER DISTRICT (IRWD CAPITAL FACILITY IMPROVEMENTS N-Q)	6,750.00	5,000.00	4,200.00	16,000.00	4,189.00	4,200.00	4,000.00
TOTAL DELETABLE ITEMS PRICE (SECTIONS N-R)	443,515.00	297,258.00	290,990.00	381,616.00	313,828.04	313,828.04	327,584.99

BID OPENING DATE: August 17, 2010  
 WITNESSED BY: Tim Bachelder  
 M. Doran

Dem Cooley  
 Alex Moore  
 Tom Hogg

BID SUMMARY  
 CROSSING (PA, 18 NORTH) BACKSLOPE (OFF-SITE) AND IN-TRACT  
 TRACT 1717A, PROPOSED ASSESSMENT DISTRICT 19-2A, NON-ASSESSMENT  
 DISTRICT AND IRWD CAPITAL FACILITIES  
 TASK PC ID: LD-001457.02.6101

ENGINEER'S ESTIMATE HUNSEWER	LOW BIDDER - IRWD KENNEDY	2ND BIDDER KAMA PIPELINE	3RD BIDDER REC ENGINEERING	4TH BIDDER LES CONSTRUCTION	5TH BIDDER LEATHERWOOD	6TH BIDDER PALLIS
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III. DELETABLE ITEMS - TR 1717B  
 IRVINE RANCH WATER DISTRICT (RWID) CAPITAL  
 FACILITY IMPROVEMENTS

DESCRIPTION	ENGINEER'S ESTIMATE	LOW BIDDER - IRWD	2ND BIDDER	3RD BIDDER	4TH BIDDER	5TH BIDDER	6TH BIDDER
L. GENERAL							
1. MOBILIZATION (NOT TO EXCEED 2% OF CONTRACT PRICE SECTIONS L-N)	40,000.00	10,500.00	1,150.00	10,000.00	28,000.00	33,000.00	11,460.76
2. DEVELOP CONSTRUCTION WATER (SECTIONS L-N)	30,000.00	1,000.00	1,150.00	5,000.00	3,100.00	5,000.00	5,730.37
M. DOMESTIC WATER (RWID CAPITAL)							
3. INSTALL 12" AWWA C-900 PVC PIPE CL 200 PIPE AND DI FITTINGS	3,161 LF 110.00	52.25	165,162.25	58.78	46.00	42.00	61.48
4. INSTALL 12" CL 250 BUTTERFLY VALVE & BOX	12 EA 3,500.00	3,100.00	6,418.00	3,487.50	3,100.00	6,350.00	3,748.70
5. INSTALL 10" CL 200 RWGSV & BOX	1 EA 3,000.00	1,900.00	2,608.00	2,137.50	2,600.00	2,550.00	2,738.45
6. INSTALL 8" CL 200 RWGSV & BOX	3 EA 1,800.00	1,200.00	3,680.00	1,350.00	1,650.00	1,750.00	1,851.62
7. INSTALL 1" AIR-VAC ASSEMBLY	2 EA 2,500.00	2,000.00	4,000.00	2,250.00	2,550.00	6,400.00	2,837.35
8. INSTALL BLOW OFF DRAIN ASSEMBLY	1 EA 4,000.00	6,500.00	7,900.00	7,312.50	5,150.00	10,700.00	7,414.16
9. INSTALL FIRE HYDRANT ASSEMBLY	3 EA 6,000.00	3,900.00	11,700.00	4,387.50	13,320.00	4,300.00	5,773.52
10. ADJUST VALVES TO GRADE	20 EA 100.00	500.00	10,000.00	582.50	400.00	350.00	372.47
H. RECLAIMED WATER (RWID CAPITAL)							
11. INSTALL 36" CHALC WELDED STEEL CLASS 200 PIPE AND FITTINGS	3,621 LF 350.00	189.80	723,837.80	224.88	225.00	200.00	233.63
12. INSTALL 24" AWWA C-905 CLASS 235 PIPE	86 LF 250.00	120.00	10,320.00	151.88	115.00	165.00	181.02
13. DI FITTINGS	839 LF 65.00	45.00	42,255.00	51.75	32.00	35.00	45,194.07
14. INSTALL 24" CL 260 BUTTERFLY VALVE & BOX	1 EA 5,000.00	13,000.00	19,468.00	14,825.00	14,250.00	20,100.00	12,808.08
15. INSTALL 6" CL 200 RWGSV & BOX	3 EA 1,000.00	800.00	2,400.00	900.00	1,180.00	1,350.00	1,651.62
16. INSTALL 4" CL 200 RWGSV & BOX	1 EA 800.00	650.00	1,683.00	731.25	820.00	1,700.00	1,277.61
17. CONSTRUCT 36" WATERLINE CONNECTION	1 EA 5,000.00	4,500.00	4,851.00	5,612.50	7,350.00	20,500.00	12,037.59
18. INSTALL 24" ACCESS MANWAY	2 EA 7,500.00	2,500.00	5,000.00	3,150.00	6,890.00	6,900.00	4,388.46
19. INSTALL ISOLATION VALVE VALVE W/ 36" BUTTERFLY VALVE	2 LF 50,000.00	108,600.00	217,200.00	122,175.00	204,000.00	175,000.00	202,911.24
20. INSTALL 6" OUTLET AND GATE VALVE FOR FUTURE STATION	4 EA 3,000.00	1,500.00	6,000.00	2,235.00	1,200.00	1,950.00	3,292.22
21. INSTALL 2-WIRE CATHODIC PROTECTION TEST STATION	8 EA 500.00	376.00	3,008.00	421.88	2,800.00	850.00	538.13
22. INSTALL INSULATOR TEST STATION	2 EA 750.00	1,000.00	9,621.00	552.50	7,100.00	10,900.00	538.15
23. INSTALL 2" AIR-VAC ASSEMBLY	3 EA 3,200.00	3,000.00	9,000.00	3,375.00	7,650.00	7,300.00	4,920.01

**BID SUMMARY**  
**LAGUNA CROSSING (PA 18 NORTH) BACKBONE (OFF-SITE) AND IN-TRACT**  
**TRACT 1779, PROPOSED ASSESSMENT DISTRICT 19-23, NON-ASSESSMENT**  
**DISTRICT AND RWD CAPITAL FACILITIES**  
**TASK PC ID: LD-0118.87.001**

ENGINEERING ESTIMATE HOURS/EA	LOW BIDDER - RWD KENNEDY	2ND BIDDER KAMA PIPELINE	3RD BIDDER KEC ENGINEERING	4TH BIDDER LAS CONSTRUCTION	5TH BIDDER LEATHERWOOD	6TH BIDDER PALUIS
1 EA 2,500.00	2,000.00	4,524.00	2,250.00	4,140.00	5,900.00	3,209.82
5 EA 7,500.00	12,000.00	15,986.00	13,500.00	13,800.00	17,400.00	17,255.86
1 EA 1,000.00	900.00	4,852.00	1,012.50	2,750.00	7,800.00	3,678.25
1 EA 2,000.00	1,200.00	6,295.00	1,350.00	2,750.00	5,000.00	5,110.55
1 EA 3,000.00	2,500.00	11,531.00	2,812.50	9,000.00	18,500.00	3,798.68
13 EA 100.00	500.00	3,120.00	562.50	400.00	350.00	372.47
	<u>20,004.00</u>	<u>45,215.00</u>	<u>20,000.00</u>	<u>25,000.00</u>	<u>20,400.00</u>	<u>19,814.00</u>
1 LS 30,000.00	20,404.00	15,215.00	20,000.00	25,000.00	20,400.00	19,814.00
	<u>2,000,295.00</u>	<u>1,425,395.00</u>	<u>1,559,871.99</u>	<u>1,516,490.00</u>	<u>1,536,417.00</u>	<u>1,513,237.83</u>

PAYMENT AND PERFORMANCE BONDS - RYRIE RANCH  
 O. WATER TREATMENT PLANT CAPITAL FACILITY  
 30. PAYMENT AND PERFORMANCE BONDS (SECTIONS L-N)

TOTAL DELETABLE ITEMS PRICE (SECTIONS L-O)

**LAGUNA CROSSING (PA 18 NORTH) BACKBONE (OFF-SITE) AND IN-TRACT (BUILDER) STREET IMPROVEMENTS  
TRACT 17179, PROPOSED ASSESSMENT DISTRICT 10-23, NON-ASSESSMENT DISTRICT AND IRWD CAPITAL FACILITIES**

Dave Conley  
 Mike Morse  
 Tom Heggi

**CONSULTANT PROPOSALS:**

	LOW PROPOSAL LEIGHTON	2ND PROPOSAL LGC	3RD PROPOSAL NMG	4TH PROPOSAL GMU	
<b>Geotechnical</b>					
I. PROPOSED ASSESSMENT DISTRICT 10-23 IMPROVEMENTS	\$16,380.00	\$22,700.00	\$31,272.00	\$43,715.00	
II. NON-ASSESSMENT DISTRICT IMPROVEMENTS	\$11,860.00	\$33,100.00	\$50,322.00	\$39,750.00	
III. IRWD CAPITAL IMPROVEMENTS	<del>33,570.00</del>	\$3,500.00	\$7,845.00	\$8,725.00	
<b>Total:</b>	<b>1%</b>	<b>\$59,300.00</b>	<b>\$89,439.00</b>	<b>\$92,190.00</b>	
	LOW PROPOSAL VA CONSULTING	2ND PROPOSAL ADAMS STREETER	3RD PROPOSAL HUNBAKER	4TH PROPOSAL FUSCOE	5TH PROPOSAL STANTEC
<b>Survey &amp; Stationing</b>					
I. PROPOSED ASSESSMENT DISTRICT 10-23 IMPROVEMENTS	\$12,820.00	\$13,030.00	\$15,620.00	\$24,850.00	\$34,000.00
II. NON-ASSESSMENT DISTRICT IMPROVEMENTS	\$33,550.00	\$66,865.00	\$70,980.00	\$98,375.00	\$115,350.00
III. IRWD CAPITAL IMPROVEMENTS	<del>55,180.00</del>	\$3,085.00	\$12,360.00	\$10,125.00	\$20,750.00
<b>Total:</b>	<b>1%</b>	<b>\$78,960.00</b>	<b>\$98,965.00</b>	<b>\$134,350.00</b>	<b>\$170,100.00</b>

**B-4**





An employee-owned company

September 21, 2010

Malcolm Cortez, P.E.  
Principal Engineer  
Irvine Ranch Water District  
P.O. Box 57000  
Irvine, CA 92619

**SUBJECT: PLANNING AREA 18 NORTH – CAPITAL IMPROVEMENT PROJECTS,  
IRWD CODE 4799**

Dear Mr. Cortez:

As you are aware, the Capital Improvement Plans have been approved for the Planning Area 18 North, IRWD Code 4799. The contract has been awarded to Kennedy Pipeline of Aliso Viejo for all Code 4799, with the exception of temporary 12-inch diameter waterline.

PBS&J is tasked to provide construction support services duration of the project as the engineer of the record. Our efforts will generally be consist of review of shop drawings, addressing request for information (RFI) attending the weekly coordination meetings as necessary and preparation of as-built drawings.

Our assumptions and estimated hours and fees are as follows;

**SCOPE OF WORK**

Following is our proposed scope of work;

- Shop drawing reviews, we assume a total of 20 submittals, each with 4 hours of review time.
- Addressing request for information and/or request for clarifications, we assume a total of 10 RFI/RFC, each with 4 hours of review time.
- Attending the weekly coordination meetings as necessary, assume attendance to 6 meetings, each with 4 hours.
- Preparation of as-built drawings, assume 80 hours of as built drawings.

**FEES AND CONDITIONS**

The services described herein will be provided on a time and material basis with a not-to-exceed amount of \$32,816.00 as detailed in following table.

<b>Classification</b>	<b>Labor Hours</b>	<b>Labor Rate</b>	<b>Labor Subtotal</b>
Project Director	24	\$209	\$5,016
Project Manager/Senior Engineer II	120	\$145	\$17,400
CAD Designer	80	\$130	\$10,400
<b>Total</b>	<b>224</b>	<b>Varies</b>	<b>\$32,816</b>

We appreciate the opportunity to offer the Irvine Ranch Water District this proposal. If this proposal is acceptable to you, please provide us with an agreement for signature.

If you have any comments or questions, please do hesitate to contact me at 714-750-7275Ext. 153.

Respectfully submitted,  
PBS&J

M. Cenk Yavas  
Project Director

**IRVINE RANCH WATER DISTRICT**

Expenditure Authorization

Project Name: PA18 DW PIPELINES  
 Project No: 10444 EA No: 2  
 Project Manager: CORTEZ, MALCOLM  
 Project Engineer: SUNDBERG, RANDALL  
 Request Date: January 4, 2011

ID Split: Miscellaneous

Improvement District (ID) Allocations

ID No.	Allocation %	Source of Funds
130	100.0	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$126,100
This Request:	\$495,400
<b>Total EA Requests:</b>	<b>\$621,500</b>
Previously Approved Budget:	\$1,308,000
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$1,308,000</b>
<b>Budget Remaining After This EA</b>	<b>\$686,500</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	20,000	20,000	0	50,000	50,000	1/11	6/11
ENGINEERING DESIGN - OUTSIDE	0	90,000	90,000	0	150,000	150,000	1/11	6/11
DESIGN STAFF FIELD SUPPORT	0	5,000	5,000	0	5,000	5,000	1/11	6/11
ENGINEERING - CA&I IRWD	25,000	0	25,000	0	45,000	45,000	7/11	7/12
ENGINEERING - CA&I OUTSIDE	15,000	0	15,000	0	79,000	79,000	7/11	7/12
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	7/11	7/12
CONSTRUCTION	400,000	0	400,000	0	850,100	850,100	7/11	7/12
LEGAL	0	5,000	5,000	0	5,000	5,000	1/11	7/12
Contingency - 10.00% Subtotal	\$50,400	\$6,100	\$56,500	\$0	\$118,900	\$118,900		
<b>Subtotal (Direct Costs)</b>	<b>\$495,400</b>	<b>\$126,100</b>	<b>\$621,500</b>	<b>\$0</b>	<b>\$1,308,000</b>	<b>\$1,308,000</b>		
Estimated G/A - 195.00% of direct labor*	\$63,600	\$43,800	\$107,400	\$0	\$204,900	\$204,900		
<b>Total</b>	<b>\$559,000</b>	<b>\$169,900</b>	<b>\$728,900</b>	<b>\$0</b>	<b>\$1,512,900</b>	<b>\$1,512,900</b>		
Direct Labor	\$30,000	\$25,000	\$55,000	\$0	\$105,000	\$105,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: *Randy J. Sundberg* 1-4-11

Department Director: *Kevin G. Burton* 1-6-11

Finance: \_\_\_\_\_

Board/General Manager: \_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$1,544,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This project is made under Treasury Regulation Section 1.150-2 official intent to reimburse costs of the above-captioned

# IRVINE RANCH WATER DISTRICT

## Expenditure Authorization

Project Name: PA18 RW PIPELINES  
 Project No: 30444 EA No: 2

ID Split: Miscellaneous

### Improvement District (ID) Allocations

Project Manager: CORTEZ, MALCOLM  
 Project Engineer: SUNDBERG, RANDALL  
 Request Date: January 4, 2011

ID No.	Allocation %	Source of Funds
230	100.0	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

### Summary of Direct Cost Authorizations

Previously Approved EA Requests:	\$165,000
This Request:	\$1,562,300
<b>Total EA Requests:</b>	<b>\$1,727,300</b>
Previously Approved Budget:	\$1,760,000
Budget Adjustment Requested this EA:	\$39,700
<b>Updated Budget:</b>	<b>\$1,799,700</b>
<b>Budget Remaining After This EA</b>	<b>\$72,400</b>

Comments:

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING DESIGN - IRWD	0	25,000	25,000	0	50,000	50,000	1/08	6/11
ENGINEERING DESIGN - OUTSIDE	82,000	125,000	207,000	48,000	159,000	207,000	1/08	6/11
DESIGN STAFF FIELD SUPPORT	0	5,000	5,000	0	5,000	5,000	1/08	6/11
ENGINEERING - CA&I IRWD	80,000	0	80,000	30,000	50,000	80,000	7/11	7/12
ENGINEERING - CA&I OUTSIDE	35,000	0	35,000	0	79,000	79,000	7/11	7/12
CONSTRUCTION FIELD SUPPORT	5,000	0	5,000	0	5,000	5,000	7/11	7/12
CONSTRUCTION	1,285,800	0	1,285,800	35,800	1,250,000	1,285,800	7/11	7/12
LEGAL	0	2,000	2,000	0	2,000	2,000	6/08	7/12
Contingency - 5.00% Subtotal	\$74,500	\$8,000	\$82,500	(\$74,100)	\$160,000	\$85,900		
<b>Subtotal (Direct Costs)</b>	<b>\$1,562,300</b>	<b>\$165,000</b>	<b>\$1,727,300</b>	<b>\$39,700</b>	<b>\$1,760,000</b>	<b>\$1,799,700</b>		
Estimated G/A - 195.00% of direct labor*	\$171,800	\$52,600	\$224,400	\$58,500	\$214,600	\$273,100		
<b>Total</b>	<b>\$1,734,100</b>	<b>\$217,600</b>	<b>\$1,951,700</b>	<b>\$98,200</b>	<b>\$1,974,600</b>	<b>\$2,072,800</b>		
Direct Labor	\$85,000	\$30,000	\$115,000	\$30,000	\$110,000	\$140,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

EA Originator: Randy Johnson (W) 1-4-11

Department Director: Kevin L. Benton 1-6-11

Finance: \_\_\_\_\_

Board/General Manager: \_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$2,115,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. The official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.

January 24, 2011

Prepared by: J. McGehee/P. Uematsu

Submitted by: K. Burton

Approved by: Paul Jones

## ACTION CALENDAR

### WELLS 21 AND 22 WELLHEAD FACILITIES AND PIPELINES EXPENDITURE AUTHORIZATION AND DESIGN VARIANCE

#### SUMMARY:

Staff requested additional design support from RBF Consulting for coordination with City of Tustin, California Department of Public Health (CDPH) and others for the design of the wellhead facilities and pipelines for the Wells 21 and 22 Project. Staff recommends that the Board:

- Approve an Expenditure Authorization in the amount of \$78,800 for Project 10286, and
- Authorize the General Manager to execute Variance No. 2 in the amount of \$74,510 with RBF for engineering services for the Wells 21 and 22 Wellhead Facilities and Pipelines, Project 10286.

#### BACKGROUND:

Staff is proceeding with the implementation of the Wells 21 and 22 Project. This project is eligible to receive funding of up to \$11,700,000 in Title XVI funding from the American Recovery and Reinvestment Act of 2009 (ARRA) through the United States Bureau of Reclamation. Pursuant to funding requirements the project is required to be substantially complete by September 2011. To meet this schedule objective, the aggressive implementation of all project components is required. The proposed treatment plant is utilizing a design/build delivery approach and is to be completed in parallel with the wellhead and pipeline design and construction process.

A conventional design/bid/build approach will be implemented for the design and construction of the wellhead facilities and the offsite pipelines. The offsite pipelines will consist of the untreated, product and brine disposal pipelines. RBF has been contracted to design both the wellhead facilities and the offsite pipelines. To expedite construction of the project, RBF will develop two sets of bid documents: one for the wellhead facilities and another for the offsite pipelines. Staff is in the process of finalizing the offsite pipelines construction plans which are also currently under review by Tustin.

#### RBF Design Variance No. 2:

On December 27, 2010, RBF Consulting requested a Design Variance for additional work related to changes to the well site layouts per coordination with Tustin and other pipeline coordination issues. Staff met with Tustin in September to review the well sites which were originally presented as vertical turbine pumps with sound-attenuated building enclosures. Staff received negative feedback on the layout and appearance of both sites. After the meeting staff directed RBF to investigate the use of submersible pumps, placement of the pumps within a vault and revise site layouts. Staff received approval from CDPH to install the pumps within a vault.

Action Calendar: Wells 21 and 22 Wellhead Facilities and Pipelines Expenditure Authorization and Design Variance

January 24, 2011

Page 2

revised conceptual layouts were then completed by RBF for additional coordination with Tustin. Staff met with Tustin again in December and received general approval of the revised well site layouts. During this time RBF assisted staff with exhibits, meeting preparation and coordination with Tustin. Additional coordination with CDPH, Orange County Sanitation District, Orange County Transit Authority, and Tustin Unified School District was also required for the Wellhead Facilities and Pipelines. RBF's Variance No. 2 request in Exhibit "A" summarizes the additional work items in the amount of \$74,510.

**FISCAL IMPACTS:**

Project 10286 is included in the FY 2010-11 Capital Budget. An Expenditure Authorization is requested as shown in the table below and in Exhibit "B".

Project No.	Current Budget	Addition <Reduction>	Total Budget	Existing EA	This EA Request	Total EA Request
10286	\$39,921,200	\$-0-	\$39,921,200	\$22,911,100	\$78,800	\$22,989,900

**ENVIRONMENTAL COMPLIANCE:**

This project is subject to the California Environmental Quality Act (CEQA). In conformance with the California Code of Regulations Title 14, Chapter 3, Section 15004, a Mitigated Negative Declaration was adopted February 8, 2010. To fulfill requirements of the American Recovery and Reinvestment Act of 2009, the project is also subject to compliance with the National Environmental Policy Act (NEPA). An Environmental Assessment was prepared to achieve NEPA compliance for the project and the USBR is anticipated to adopt a Categorical Exemption for the project.

**COMMITTEE STATUS:**

This item was reviewed at the Engineering and Operations Committee on January 18, 2011.

**RECOMMENDATION:**

THAT THE BOARD APPROVE AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$78,800, AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 IN THE AMOUNT OF \$74,510 WITH RBF CONSULTING FOR ENGINEERING SERVICES FOR THE WELLS 21 AND 22 WELLHEAD FACILITIES AND PIPELINES, PROJECT 10286.

**LIST OF EXHIBITS:**

- Exhibit "A" – RBF's Variance Request
- Exhibit "B" – Expenditure Authorization



December 27, 2010

Ms. Patty Lee Uematsu, PE  
Principal Engineer – Capital Projects  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Subject: Wells 21/22 Wellhead Facilities and Pipeline Design – Request for Variance No. 2**

Dear Patty,

## **BACKGROUND**

Since the kick-off meeting on May 5, 2010, RBF Consulting (RBF) has been working closely with Irvine Ranch Water District (IRWD) to complete the design of the Wells 21/22 Desalter Project wellhead facilities and pipelines. In order to meet the ARRA (American Recovery and Reinvestment Act of 2009) funding deadlines and the schedule for the design/build RO treatment plant, the design team has been required to identify project issues, expeditiously review each option, make a decision and quickly forward the design process. In addition, this complex project requires coordination and approval from many agencies besides IRWD.

## **ADDITIONAL WORK**

While nearing successful completion of the design phase, several unforeseen issues have required additional RBF effort beyond our contracted scope of work. This additional work has required our request for additional project funding and an extension of our project schedule. The more significant additional work items are described below:

### **A. Revisions to Wells 21 and 22 Wellhead Facilities**

To adhere to the design schedule, RBF completed the preliminary designs for the Wells 21 and 22 well sites improvements in June 2010. Both well sites proposed vertical turbine above-grade pumps and motors. All piping, water meters and appurtenances, and all electrical equipment except for the transformer and electrical meter were to be in acoustically treated buildings. Each building would have a portion constructed from concrete blocks and a portion that would have removable steel panels.

Based on the conclusions from this preliminary analysis, RBF prepared and submitted 60% complete design drawings to IRWD in August 2010. In September 2010, RBF's team and IRWD had several workshops to address architectural, mechanical, site and electrical/instrumentation issues. To meet the tight schedule, RBF started to work towards the 90% complete design submittal which was scheduled for October 2010.

In late September 2010, Kevin Burton and Rich Mori met with representative of the city of Tustin to discuss the proposed wellhead facilities. At that meeting the Tustin representatives

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 ■ P.O. Box 57057, Irvine, CA 92619-7057 ■ 949.472.3505 ■ Fax 949.472.8373  
Offices located throughout California, Arizona & Nevada ■ www.RBF.com

were provided site plans and architectural renderings prepared by the RBF team. The Tustin representatives stated that both proposed sites "look like compounds," and would not be acceptable to the city.

Based on the feedback from the city of Tustin, the design team was directed to revisit the submersible well pump option. RBF selected submersible pumps, calculated the power requirements, cable size and confirmed that the power cables would fit into the existing well casing pipes. RBF revised the mechanical design and the civil design to include a buried concrete vaults in place of the buildings. RBF worked with IRWD to refine the proposed wellhead facilities designs. RBF assisted IRWD in working with the California Department of Public Health (DPH) to confirm that this design configuration would be acceptable to DPH. After IRWD reviewed the revised well sites with the city of Tustin on December 22, 2010, the design will include buried vaults and submersible well pumps at both well sites.

Since RBF had completed the 60% design submittal and was working towards the 90% submittal, the construction plans were approximately 70% complete overall. Therefore, significant work must be revised to reflect the current design direction. An abbreviated summary is provided below.

The mechanical piping plans will be significantly revised for the new buried vault configuration. The yard piping will also be revised. Since the Well 21 untreated water and pump to waste pipelines points of connection will be revised, the untreated water and pump-to-waste pipelines plan and profiles must be revised as well. The ventilation system will also require total redesign. Sumps and sump pumps will be required.

With the removal of the buildings, the moving of the perimeter walls, the moving of the driveways and the locating of the electrical cabinets outside, the two site plans will be almost completely revised.

The electrical site plan must be completely revised as well. With outdoor electrical cabinets, the cabinet design must be completely revised. With these revisions, the conduit schedule must be revised. In summary, almost every electrical drawing will require some modification.

#### **B. Additional Coordination with the City of Tustin**

All proposed facilities for the Wells 21/22 Desalter Project will be located in the City of Tustin. An encroachment permit will be required for all pipeline construction in the streets' rights-of-way. In addition, Tustin has requested significant input in the design process for the two well sites.

Besides the processing of the construction plans for permit, RBF has prepared agenda, conducted meetings and prepared minutes for several meeting with the city of Tustin staff. We have also prepared exhibits for IRWD's meetings with Tustin regarding the well sites. The



exhibits, which were modified several times, included architectural renderings, site plans and piping plans.

**C. Non-Reclaimable Waste Pipeline Additional Coordination with the Orange County Sanitation District**

When IRWD and RBF met with the Orange County Sanitation District (OCSD) representatives on June 3, 2010, the OCSD direction was to allow the non-reclaimable waste produced by the Wells 21/22 Desalter Project RO treatment plant to join the OCSD interceptor sewer in the intersection of Edinger Avenue and Redhill Avenue. However, OCSD was in the early stages of the analysis of their collection system in this vicinity. During their Gisler-Redhill Trunk and Interceptor design process, discussed potential points of connection have changed from the intersection of Edinger and Redhill to a manhole in close proximity to the treatment plant and also to a sewer manhole along Redhill Avenue southwest of its intersection with Edinger Avenue. Discussions have included the IRWD pipeline contractor constructing portions of the proposed OCSD facilities.

RBF has worked with IRWD staff to obtain the best solution for the project and IRWD. This work has included the preparation of agendas, conducting of additional meetings, and the preparation of exhibits and notes.

**D. Exhibits and Correspondence with California Department of Public Health (DPH) related to Pipeline Separations in Mitchell Avenue**

The Untreated Water Pipeline and the Well Pump-to-Waste Pipeline will be routed from the well sites to Newport Avenue along Mitchell Avenue. Mitchell Avenue is a narrow road with many buried utilities. Based on the locations of the existing facilities, the proposed pipelines cannot be aligned with sufficient separation from the existing domestic water and sanitary sewer pipelines to meet the California Department of Public Health (DPH) standards. Therefore, IRWD has requested a waiver from DPH. RBF has prepared a request letter and exhibits to accompany the letter. Based on comments from the District staff, the letter and exhibits have been modified several times.

**E. Alignment Study and Exhibits for Product Water Alignment in OCTA Right-of-Way**

When performing the Product Water Pipeline alignment study in June 2010, RBF met with representatives from the Southern California Regional Rail Authority (SCRRA) to discuss possible alignments within the OCTA/SCRRA right-of-way. We were told that a parallel alignment within the right-of-way would not be acceptable. The SCRRA representatives advised us that IRWD could request a longitudinal alignment, but that it would probably be denied after a several month review period.

**PLANNING ■ DESIGN ■ CONSTRUCTION**

14725 Alton Parkway, Irvine, CA 92618-2027 · P.O. Box 57057, Irvine, CA 92619-7057 | 949.472.3505 Fax 949.472.8373  
Offices located throughout California, Arizona & Nevada www.RBF.com

Based on this advice, RBF began to design the pipeline along Edinger Avenue. After reviewing the proposed pipeline alignment within Edinger Avenue, representatives from the city of Tustin requested that more political pressure be placed on OCTA/SCRRA to accept the parallel alignment within the OCTA/SCRRA right-of-way. Therefore, IRWD representatives met with OCTA representatives twice to discuss the possibility of aligning the pipeline within their right-of-way. RBF prepared a preliminary alignment study for this option, along with several large color exhibits.

**F. Parking Lot Improvements Related to Untreated Water Pipeline Alignment through Tustin Unified School District (TUSD) Parcel**

After the potential Untreated Water Pipeline alignment through the future Newport Avenue grade separation became too problematic, the preferred alignment was determined to be along Sycamore Avenue, School Lane and a Tustin Unified School District parcel.

During the easement negotiations with representatives from the Tustin Unified School District (TUSD), IRWD agreed to re-pave the TUSD parking lot in exchange for the temporary and permanent easements. RBF obtained and reviewed record drawings for the existing parking lot, performed a field investigation and evaluation of the condition of the existing asphalt section, recommended an improvement plan to obtain the required results and be cost-effective, and prepared an engineer's estimate of probable construction costs for the additional pavement work.

**COST IMPACT**

The total requested variance amount is summarized in the table below. If approved, the additional work would be billed on a time-and-materials not-to-exceed basis, like our existing agreement.

**Requested Variance Summary**

Task	Additional Budget Requested
A. Revisions to Wellhead Facilities	\$ 46,200
B. Additional Coordination – Tustin	\$ 7,900
C. Non-Reclaimable Waste – OCSD	\$ 4,400
D. DPH Correspondence for Mitchell Ave.	\$3,810
E. Alignment Study - OCTA	\$5,500
F. TUSD Parking Lot	\$6,700
<b>Variance Request Total</b>	<b>\$74,510</b>

Ms. Patty Lee Uematsu, PE  
December 27, 2010  
Page 5

## **SCHEDULE IMPACT**

Based on the assumption that the additional work is authorized in early January 2011, the revised schedule shows that the pipeline construction documents would be ready for bidding by late-January 2011 and the wellhead facilities construction document would be ready for bidding by late-March 2011. However, we will work with IRWD staff to accelerate the wellhead facilities design without compromising the design process.

If you have any questions or comments, please do not hesitate to contact me at [rreid@rbf.com](mailto:rreid@rbf.com) or (949) 855-5763. We will start to work on this task upon written authorization from the District.

Sincerely,

Robert S. Reid, PE  
Project Manager

## IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Project Title: Wells 21/22 Wellhead Facilities and Pipelines File No.: 10286  
 Date: December 27, 2010  
 Variance No.: 2  
 Project No.: 10286 Project No. 10-107295.001  
 Purchase Order No.: 124673

Originator:  IRWD  ENGINEER/CONSULTANT  Other (Explain) \_\_\_\_\_

**Description of Variance (attach any back-up material):**

Revise Wells 21 and 22 wellhead facilities based on Tustin concerns and IRWD comments. Additional work related to increased coordinating with the city of Tustin, Department of Public Health, OCTA and OCSD. Additional work related to TUSD parking lot. See attached letter dated December 27, 2010.

**Engineering & Management Cost Impact:**

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Revisions to Wellhead Facilities						\$ 46,200
Additional Coordination – Tustin						\$ 7,900
Non-Reclaimable Waste – OCSD						\$ 4,400
DPH Correspondence for Mitchell Ave.						\$3,810
Alignment Study - OCTA						\$5,500
TUSD Parking Lot						\$6,700
<b>Total \$ =</b>						<b>\$ 74,510.</b>

**Schedule Impact:**

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
3	Final Design	October 2010	5 months	March 2011

**Required Approval Determination:**

Total Original Contract	\$ <u>910,628.</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000. <input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000. <input checked="" type="checkbox"/> Board: Single Variance greater than \$60,000. <input type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
Previous Variances \$	<u>29,200.</u>	
This Variance	\$ <u>74,510.</u>	
Total Sum of Variances	\$ <u>103,710.</u>	
New Contract Amount	\$ <u>1,014,338.</u>	
Percentage of Total Variances to Original Contract	<u>11</u> %	

ENGINEER/CONSULTANT: RBF Consulting  
 Company Name  
[Signature]  
 Project Engineer/Manager  
[Signature]  
 Date 1/11/11  
 Engineer's/Consultant's Management Date 1/11/11

IRVINE RANCH WATER DISTRICT  
[Signature]  
 Department Director  
 Date 1-11-11  
 General Manager/Comm./Board  
 Date \_\_\_\_\_





# IRVINE RANCH WATER DISTRICT Exhibit "B"

## Expenditure Authorization

**Project Name:** WELLS 21 & 22 WELLHEAD PIPELINE & TREATMENT PLANT  
**Project No:** 10286 EA No: 7

**ID Split:** Regional Potable Water Splits (11/08)  
**Improvement District (ID) Allocations**

**Project Manager:** UEMATSU, PATRICIA  
**Project Engineer:** MORI, RICHARD  
**Request Date:** January 7, 2011

ID No.	Allocation %	Source of Funds
112	4.3	BONDS YET TO BE SOLD**
113	5.2	BONDS YET TO BE SOLD**
115	7.3	CAPITAL FUND
121	15.3	BONDS YET TO BE SOLD**
130	11.8	BONDS YET TO BE SOLD**
140	4.2	BONDS YET TO BE SOLD**
150	31.2	BONDS YET TO BE SOLD**
153	3.4	BONDS YET TO BE SOLD**
154	1.5	BONDS YET TO BE SOLD**
161	8.0	BONDS YET TO BE SOLD**
182	3.0	BONDS YET TO BE SOLD**
184	2.8	BONDS YET TO BE SOLD**
186	1.0	BONDS YET TO BE SOLD**
188	1.0	BONDS YET TO BE SOLD**
<b>Total</b>	<b>100.0%</b>	

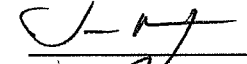
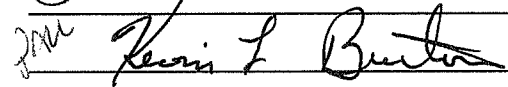
**Summary of Direct Cost Authorizations**

Previously Approved EA Requests:	\$22,911,100
This Request:	\$78,800
<b>Total EA Requests:</b>	<b>\$22,989,900</b>
Previously Approved Budget:	\$39,921,200
Budget Adjustment Requested this EA:	\$0
<b>Updated Budget:</b>	<b>\$39,921,200</b>
<b>Budget Remaining After This EA</b>	<b>\$16,931,300</b>

**Comments:**

Phase	This EA Request	Previous EA Requests	EA Requests to Date	This Budget Request	Previous Budget	Updated Budget	Start	Finish
ENGINEERING - PLANNING OUTSIDE	0	0	0	0	0	0	2/10	4/12
ENGINEERING DESIGN - IRWD	0	250,000	250,000	0	250,000	250,000	11/09	6/11
ENGINEERING DESIGN - OUTSIDE	75,000	2,844,900	2,919,900	0	3,200,000	3,200,000	11/09	6/11
DESIGN STAFF FIELD SUPPORT	0	50,000	50,000	0	50,000	50,000	11/09	6/11
ENGINEERING - CA&I IRWD	0	250,000	250,000	0	250,000	250,000	5/10	4/12
ENGINEERING - CA&I OUTSIDE	0	1,055,000	1,055,000	0	1,300,000	1,300,000	5/10	4/12
CONSTRUCTION FIELD SUPPORT	0	10,000	10,000	0	10,000	10,000	5/10	4/12
CONSTRUCTION	0	12,900,000	12,900,000	0	28,500,000	28,500,000	5/10	4/12
LEGAL	0	10,000	10,000	0	10,000	10,000	11/09	4/12
LAND	0	4,325,100	4,325,100	0	4,325,100	4,325,100	1/10	6/10
WATER QUALITY	0	50,000	50,000	0	50,000	50,000	11/09	4/12
ENGINEERING ENVIRONMENTAL-OUTS	0	75,000	75,000	0	75,000	75,000	6/09	6/10
Contingency - 5.00% Subtotal	\$3,800	\$1,091,100	\$1,094,900	\$0	\$1,901,100	\$1,901,100		
<b>Subtotal (Direct Costs)</b>	<b>\$78,800</b>	<b>\$22,911,100</b>	<b>\$22,989,900</b>	<b>\$0</b>	<b>\$39,921,200</b>	<b>\$39,921,200</b>		
Estimated G/A - 195.00% of direct labor*	\$0	\$1,189,500	\$1,189,500	\$0	\$1,189,500	\$1,189,500		
<b>Total</b>	<b>\$78,800</b>	<b>\$24,100,600</b>	<b>\$24,179,400</b>	<b>\$0</b>	<b>\$41,110,700</b>	<b>\$41,110,700</b>		
Direct Labor	\$0	\$610,000	\$610,000	\$0	\$610,000	\$610,000		

\*EA includes estimated G&A. Actual G&A will be applied based on the current ratio of direct labor to general and administrative costs.

**EA Originator:**  1-11-11  
**Department Director:**  1-11-11  
**Finance:** \_\_\_\_\_  
**Board/General Manager:** \_\_\_\_\_

\*\* IRWD hereby declares that it reasonably expects those expenditures marked with two asterisks to be reimbursed with proceeds of future debt to be incurred by IRWD in a maximum principal amount of \$41,933,000. The above-captioned project is further described in the attached staff report and additional documents, if any, which are hereby incorporated by reference. This declaration of official intent to reimburse costs of the above-captioned project is made under Treasury Regulation Section 1.150-2.





January 24, 2011  
Prepared by: W. Stewart Malloy  
Submitted by: K. Burton  
Approved by: Paul Jones

*Handwritten initials and signatures:*  
SB  
SM  
KLB  
G.C.  
P.J.

**ACTION CALENDAR**

**MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION  
AND FLOOD PROTECTION IMPROVEMENTS – VARIANCES**

**SUMMARY:**

The Michelson Water Recycling Plant (MWRP) Phase 2 Expansion and Flood Protection Improvements are currently being constructed by J. R. Filanc Construction Co. Staff recommends that the Board:

- Authorize the General Manager to execute Variance No. 4, in the amount of \$604,960, with HDR Engineering, Inc. for engineering support services during construction for the MWRP Phase 2 Expansion and Flood Protection Improvements, Projects 20214 and 30214; and
- Authorize the General Manager to execute Variance No. 1, in the amount of \$98,389, with DTL&V Systems Engineering for programming services for the MWRP Phase 2 Expansion, Projects 20214 and 30214.

**BACKGROUND:**

Construction of the MWRP Phase 2 Expansion and Flood Protection Improvements project was awarded to J.R. Filanc Construction Company (Filanc) in July 2009 in the amount of \$87,479,450. This project will expand the recycled water production capacity of MWRP to 28 million gallons per day and protect MWRP from flooding of San Diego Creek. A Project Overview Diagram of the MWRP Phase 2 Expansion is attached as Exhibit “A”.

**Variance No. 4 with HDR Engineering, Inc. for Projects 20214 and 30214:**

Since September 2009, HDR Engineering, Inc. (HDR) has been providing engineering support services during construction. Variance No. 4, in the amount of \$604,960 and attached as Exhibit “B”, includes the following items:

*Additional Submittal Reviews:* The Contractor has submitted significantly more submittals than had originally been anticipated. Many of the submittals involved were electrical and structural. The original estimate for submittals was 712 for the entire project. As of December 31, 2010, there have been 754 submittals, and an additional 228 submittals are anticipated. This item, at a budget of \$511,860, is for the engineering review of these submittals.

*Arc Flash Hazard Analysis:* An arc flash analysis is required by OSHA for protection of personnel from the potential hazards of arc flash (for example, burns from the rapid release of energy due to a short-circuit event). This analysis was not part of HDR’s existing scope. HDR will analyze 87 electrical items within the existing facilities and 88 electrical items under Phase 2 Expansion at a budget of \$93,100.

Variance No. 1 with DLT&V Systems Engineering for Projects 20214 and 30214:

Since February 2010, DLT&V Systems Engineering (DLT&V) has been providing SCADA programming for the MWRP Phase 2 Expansion. Variance No. 1, in the amount of \$98,389 and attached as Exhibit “C”, includes the following items:

- Converting the existing plant controls to new MWRP SCADA system. This task is budgeted for \$41,750.
- Converting the new plant equipment to the new MWRP SCADA system. This task is budgeted for \$16,114.
- Programming the new Sodium Hypochlorite System into the new MWRP SCADA system. Due to phasing, the Sodium Hypochlorite System system had to be programmed in the existing MWRP SCADA system. This item was not included in DLT&V’s original contract. This task is budgeted for \$12,208.
- DLT&V will write programming code for several treatment systems. The programming areas include the grit washer, MBR feed pumps, MPS-2, ultraviolet disinfection facility, and primary effluent pump station. This task is budgeted for \$12,452.
- Programming the new High Rate Clarifier/ES-3 Vault into the new MWRP SCADA system. This item was not included in DLT&V’s original contract. This task is budgeted for \$15,865.

Staff had anticipated that these tasks would be completed as part of the MWRP Phase 2 Expansion, but the items listed above were not included in DLT&V’s original scope of work. These added tasks include the requirements as developed in IRWD’s new SCADA Standards.

FISCAL IMPACTS:

Projects 20214, 20452, 30214, and 30452 are included in the FY 2010-11 Capital Budget. The existing budgets and Expenditure Authorizations are sufficient to fund Variance No. 4 with HDR Engineering, Inc. and Variance No. 1 with DTL&V Systems Engineering for Projects 20214 and 30214.

ENVIRONMENTAL COMPLIANCE:

The Michelson Water Recycling Plant Phase 2 Expansion and Flood Protection Improvements, Projects 20214, 20452, 30214, and 30452 are subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, an Environmental Impact Report, SCH # 2005051174, were certified by the lead agency on February 27, 2006.

COMMITTEE STATUS:

This item was reviewed at the Engineering and Operations Committee on January 18, 2011.

RECOMMENDATION:

THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 4 IN THE AMOUNT OF \$604,960 WITH HDR ENGINEERING, INC. FOR ENGINEERING SUPPORT SERVICES DURING CONSTRUCTION FOR THE MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 AND 30214; AND RECOMMEND THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 1 IN THE AMOUNT OF \$98,389 WITH DLT&V SYSTEMS ENGINEERING FOR SCADA PROGRAMMING SERVICES FOR MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION, PROJECTS 20214 AND 30214.

LIST OF EXHIBITS:

- Exhibit “A” – Location Map
- Exhibit “B” – Variance No. 4 – HDR Engineering, Inc.
- Exhibit “C” – Variance No. 1 – DLT&V Systems Engineering



# Overview of MWRP Phase 2 Expansion



1. North and South Influent Interceptors
2. Headworks
3. Primary Sedimentation
4. Primary Effluent Pump Stn-1
5. Flow Equalization Basins
6. Aeration Blowers
7. Membrane Bioreactors (MBR)
8. High Rate Clarifier (HRC)
9. Spent Backwash
10. Ultraviolet (UV) Disinfection and Chlorine Contact Modifications
11. Chemical Systems
12. Odor Control
13. Central Electrical Building
14. Sodium Hypochlorite System
15. Flood Protection Improvements

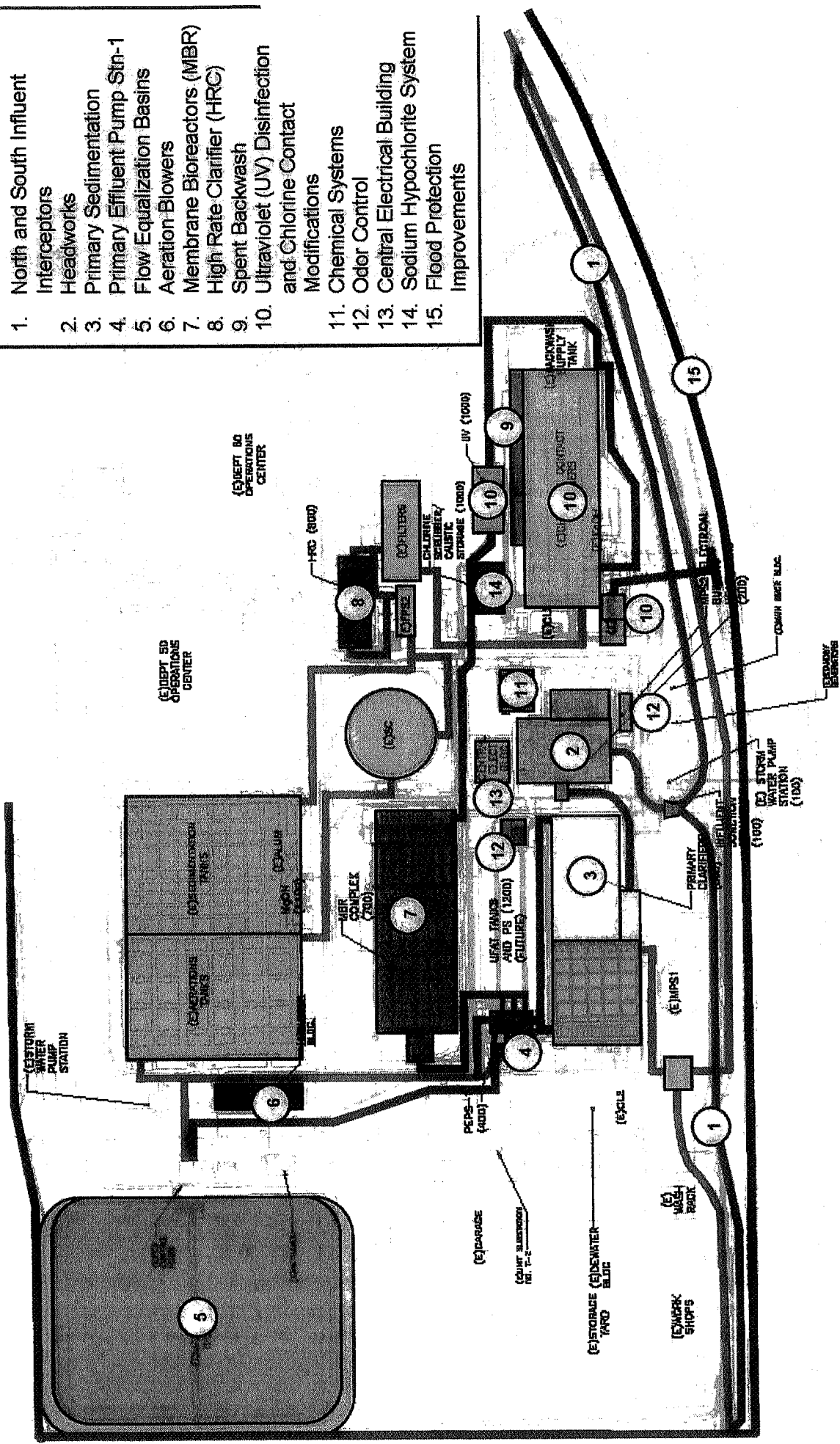


Exhibit "A"



# Exhibit "B"

## IRVINE RANCH WATER DISTRICT PROFESSIONAL SERVICES VARIANCE

Project Title: Michelson Water Reclamation Plant  
Phase 2 Engineering Services  
During Construction

File No.: 007012-100808 (HDR)  
 Date: January 3, 2011  
 Variance No.: Four  
 HDR Project No.: 007012-100808 (HDR)

IRWD Project No.: 20214 and 30214  
 Purchase Order No.: 117518

Originator:      IRWD      ENGINEER/CONSULTANT      Other (Explain) \_\_\_\_\_

Description of Variance (*attach any back-up material*):

To expand HDR and Tetra Tech's submittal review quantities based on the extend of Contractor submittals received to date and as anticipated to complete the project.

Addition of an Arc Flash Hazard Analysis preparation of associated panel labels to meet requirements of OSHA and NFPA.

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Tech Rev / PM	42	\$267	\$11,214			
Senior Engineer	180	\$230	\$41,400			
Electrical Engr	296	\$176	\$52,096			
Staff Engineer	810	\$140	\$113,400			
Administration	184	\$105	\$19,320			
Direct Costs				\$5,828		
Subconsultant Costs					\$361,702	
					Total =	\$604,960

Schedule Impact:

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
A	Add'l Submittal Review	9/2009 – 2/2012	0	9/2009 – 2/2012
B	Arc Flash Analysis	N/A	+ 3 months	11/2011 – 2/2012

Required Approval Determination:

Total Original Contract	\$ <u>5,672,465</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.
Previous Variances \$	<u>1,557,704</u>	<input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.
This Variance \$	<u>604,960</u>	<input type="checkbox"/> Board: Single Variance greater than \$60,000.
Total Sum of Variances	\$ <u>2,162,664</u>	<input checked="" type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
New Contract Amount	\$ <u>7,835,129</u>	
Percentage of Total Variances to Original Contract	<u>38.0%</u>	

ENGINEER/CONSULTANT: HDR Engineering, Inc.

IRVINE RANCH WATER DISTRICT

*Scott Tolson*  
Project Engineer/Manager

1/3/11  
Date

*Steve Malloy*  
Department Director

*Karin L. Buehler*  
Date

1-10-11  
Date

*[Signature]*  
Engineer's/Consultant's Management

1/3/11  
Date

\_\_\_\_\_  
General Manager/Comm./Board

\_\_\_\_\_  
Date



December 30, 2010

Mr. Steve Malloy  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Subject: MWRP Phase 2 Expansion – Engineering Services During Construction  
Request for Variance No. 4 – Additional Submittals and Arc Flash Study**

Dear Mr. Malloy,

HDR Engineering, Inc. (HDR) is requesting a variance to our scope of work to account for expanded project submittal reviews beyond the original negotiated quantities, as well as a District request to conduct an Arc Flash study for the existing MWRP electrical panels and new panels associated with the Phase 2 Expansion.

Per your request, we are preparing this additional scope of services as Variance #4 to the MWRP Phase 2 Engineering Services During Construction (ESDC) contract.

**ITEM A- ADDITIONAL SUBMITTAL REVIEWS**

The project team has carefully tracked the quantities of Contractor submittals received to date, number of resubmittals, and level of effort to review and respond to each. You may recall that during the original negotiations for the Engineering Services During Construction, the estimated quantities of contractor submittals were reduced by the District from 823 submittals to 712. As of December 1, 2010, the Contractor's schedule is approximately 47% complete, and we have received 714 submittals/resubmittals to date; exceeding the negotiated quantity of submittal reviews. Specific disciplines, such as structural and electrical, have also experienced significantly more submittals than anticipated. Also, since this is a large, complex project, we have experienced a number of submittals that at times are very large, ranging from 100 to over 900 pages each. In particular, many of the structural and electrical related submittals have fallen under this purview. Large submittals of this magnitude require additional review effort over our negotiated average of 12 hours per submittal in order to confirm acceptance of the detailed information provided within the submittal packages. To some extent, the engineering team has been able to manage and offset these longer reviews through efficiencies with other discipline reviews, however the size and complexity is greater than anticipated.

The rate of submittals and resubmittals will begin to decrease in the second half of the project. Our team has reviewed the Contractor's anticipated submittal log, as well as the Document Control System tracking of submittals that require revisions and resubmission. Based on our review, we are estimating an additional 228 submittals beyond our current scope. Table 1 summarizes the anticipated additional submittals on a "per discipline" basis.

8690 Balboa Avenue  
Suite 200  
San Diego, CA 92123

858-712-8400  
858-712-8333 (fax)

<b>Table 1 – Estimated Additional Submittals/Resubmittals</b>					
	<b>Contract Qnty</b>	<b>Completed thru 11/2010</b>	<b>Est Add'l Submittals Remaining</b>	<b>Total Est Submittals</b>	<b>Add'l Scope Qnty</b>
Electrical (Tetra Tech)	72	96	32	128	56
Structural (Tetra Tech)	146	189	61	250	104
General/Div1/O&M (HDR)	56	45	45	90	34
Civil (HDR)	28	27	8	35	7
Architectural/Structural (HDR)	59	56	10	66	7
Process (HDR)	310	277	45	322	12
I&C (HDR)	41	24	25	49	8
<b>Total</b>	<b>712</b>	<b>714</b>	<b>226</b>	<b>940</b>	<b>228</b>

The engineering team's is averaging \$2,245 per submittal review on the project to date, which results in an additional fee request of \$511,860 for the additional 228 submittals.

**ITEM B- ARC FLASH HAZARD ANALYSIS**

The District has requested HDR to conduct an Arc Flash Hazard Analysis for the electrical equipment associated with the existing Michelson Water Recycling Plant, and also for the electrical equipment associated with the Phase 2 expansion. This scope of services was not previously accounted for in the original negotiations.

An arc flash analysis is required by OSHA for protection of personnel from the potential hazards of arc flash (i.e. burns from the rapid release of energy due to a short-circuit event). NFPA-70E establishes the various elements included in the arc flash study, including appropriate calculations for the analysis, labeling requirements, and setting of arc flash boundaries.

The arc flash study will produce information to determine the amount of energy that will be released as a result of a short circuit. This data will be used by IRWD to determine procedures and protective gear that maintenance staff should use when working on the various electrical panels.

HDR's scope of services will include the following items:

- Data collection from each 480V and 4160V MCC, local control panels that are fed from the MCCs, transformers, distribution panels, lighting panels, switchgear, and generators. (This task requires assistance from the District's field electrician.)
- Prepare arc flash calculations per NFPA-70E
- Follow-up field visits
- Print arc flash hazard labels and install on each panel
- Prepare final Arc Flash report

HDR developed a detailed list of the electrical items associated with the arc flash hazard analysis, which is included under Exhibit A, herein. We have identified a total of 87 electrical items within

the existing treatment facilities, and 88 electrical items under the Phase 2 expansion that will be accounted for during the arc flash evaluation. The estimated level of effort takes into account that the data associated with the Phase 2 Expansion should be more readily available through contractor submittals and testing requirements. As such, the level of effort for the Phase 2 data collection has been discounted when compared to the effort for the existing treatment facilities. It should be noted that the scope does not include a breaker protective coordination study since this work is to be performed by the Contractor as part of the Phase 2 Expansion, and we assume was previously performed during commissioning of the existing facilities.

Table 2 summarizes the level of effort and requested fee for the arc flash analysis. Refer to Exhibit A for a detailed breakdown of the arc flash scope of services and fee allocations.

<b>Table 2 – Arc Flash Hazard Analysis Summary</b>			
		<b>Total Hours</b>	<b>Fee</b>
Task 1 – Existing MWRP		304	\$51,600
Task 2 – Ph 2 Expansion		248	\$41,500
<b>Total</b>		<b>552</b>	<b>\$93,100</b>

**SUMMARY**

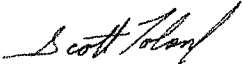
The total requested fee for Variance #4 is summarized in Table 3.


<b>Table 3 – Variance #4 Summary</b>			
<b>Description</b>			<b>Fee</b>
Task A – Additional Submittal Reviews			
Tetra Tech			\$361,702
HDR			\$150,158
<b>Task A Subtotal</b>			<b>\$511,860</b>
Task B-1 Existing MWRP Arc Flash Study			\$51,600
Task B-2 MWRP Ph 2 Arc Flash Study			\$41,500
<b>Task B Subtotal</b>			<b>\$93,100</b>
<b>Total</b>			<b>\$604,960</b>

Please do not hesitate to contact me if you wish to discuss the proposed scope of services further.

Sincerely,

**HDR ENGINEERING, INC.**

 for  
 Albert Binsfield  
 Project Manager

  
 Sam Abi-Samra, P.E.  
 Senior Vice President

Attachments: Exhibit A: Arc Flash Hazard Analysis– Estimated Level of Effort & Fee Table

**Exhibit A**

**Detailed Breakdown**

**Arc Flash Hazard Analysis**

**IRVINE RANCH WATER DISTRICT  
MWRP PHASE 2 EXPANSION - ENGINEERING SERVICES DURING CONSTRUCTION  
ARC FLASH HAZARD ANALYSIS  
Estimated Level of Effort and Fee**

TASK NO.	DESCRIPTION	LEVEL OF EFFORT, HOURS						FEE, DOLLARS				CLIENT TOTAL
		PROJ MAN	SR ENGR	STAFF ENGR	ADMIN ASSIS	TOTAL LABOR	LABOR	TECH CHG	SUBS	ODC	TOTAL	
	Client Billing Rates	\$267	\$176	\$140	\$93	\$160						
1	Arc Flash - Existing Facilities											
1.1	Project Admin & Controls	4			8	12	1,810	44			1,855	
1.2	Data Collection (87 items [25 panels])		120			120	21,118	444			21,562	
1.3	Calculations / Final Report		8	80		88	12,568	326			12,893	
1.4	Follow-up Field Visit (s)		40			40	7,039	148			7,187	
1.5	Label prep and install (87 labels)		8	36		44	6,430	163		1,500	8,093	
						0	0	0			0	
	<b>Subtotal 1</b>	<b>4</b>	<b>176</b>	<b>116</b>	<b>8</b>	<b>304</b>	<b>48,966</b>	<b>1,125</b>	<b>0</b>	<b>1,500</b>	<b>51,591</b>	<b>51,600</b>
2	Arc Flash - Ph 2 Expansion											
2.1	Project Admin & Controls	4			8	12	1,810	44			1,855	
2.2	Data Collection (88 items [14 panels])		80			80	14,079	296			14,375	
2.3	Calculations / Final Report		8	80		88	12,568	326			12,893	
2.4	Follow-up Field Visit (s)		24			24	4,224	89			4,312	
2.5	Label prep and install (88 labels)		8	36		44	6,430	163		1,500	8,093	
						0	0	0			0	
	<b>Subtotal 2</b>	<b>4</b>	<b>120</b>	<b>116</b>	<b>8</b>	<b>248</b>	<b>39,111</b>	<b>918</b>	<b>0</b>	<b>1,500</b>	<b>41,528</b>	<b>41,500</b>
	<b>TOTAL, hours</b>					<b>552</b>						
	<b>TOTAL, dollars</b>	<b>8</b>	<b>296</b>	<b>232</b>	<b>16</b>		<b>88,077</b>	<b>2,042</b>	<b>0</b>	<b>3,000</b>	<b>93,119</b>	<b>93,100</b>

IRVINE RANCH WATER DISTRICT  
MICHELSON WRP - ARC FLASH HAZARD ANALYSIS  
SUMMARY OF EXISTING AND PHASE 2 EXPANSION ELECTRICAL PANELS

PAGE	SINGLE LINE NAME	FEEDS	FEEDS EXISTING	FEEDS NEW	NOTES
E108	MPS2-SWITCHGEAR (SWGR-1000)	XFMR (FEEDS PNL-HA)		1	
E108	MPS2-SWITCHGEAR (SWGR-1000)	PNL-HA		1	
E1010	MPS2-SWITCHGEAR (SWGR-1000)	MCC-7A (MPS2)	1		
E1010	MPS2-SWITCHGEAR (SWGR-1000)	277/480V XFMR T7 (FEEDS DPA-C)	1		
E1010	MPS2-SWITCHGEAR (SWGR-1000)	DPA-C (MPS2)	1		
E1011	MPS2-SWITCHGEAR (SWGR-1000)	XMPR 10HA (FEEDS PNL-10HA AND MHGGC)		1	
E1011	MPS2-SWITCHGEAR (SWGR-1000)	PNL-10HA (FEEDS PNL-10HA AND XFMR 10LA (FEEDS PNL-10LA))		1	
E1011	MPS2-SWITCHGEAR (SWGR-1000)	PNL-10HB (FEEDS XFMR 10LB)		1	
E1011	MPS2-SWITCHGEAR (SWGR-1000)	XFMR 10LB (FEEDS PNL-10LB)		1	
E1011	MPS2-SWITCHGEAR (SWGR-1000)	PNL-10LB		1	
E1011	MPS2-SWITCHGEAR (SWGR-1000)	XFMR 10LA (FEEDS PNL-10LA)		1	
E1011	MPS2-SWITCHGEAR (SWGR-1000)	PNL-10LA		1	
E122	SCE	P5530896 3750/12.4KV NEW TRANSFORMER		1	
E201	(E) UNIT SUBSTATION T1 MPS1	277/480V XFMR T1	1		INSIDE (E) UNIT SUBSTATION T1 MPS1
E201	(E) UNIT SUBSTATION T1 MPS1	MCC-1B (MPS1)	1		
E201	(E) UNIT SUBSTATION T1 MPS1	DSB-200 (HW)		1	
E201	DSB-200 (HW)	MCC-200		1	SEE E202
E201	DSB-200 (HW)	MCC-300		1	SEE E301
E201	DSB-200 (HW)	MCC-1200 (FUTURE)		1	
E201	DSB-200 (HW)	277/480V, 3 PHASE, 4W, EG		1	GENERATOR
E201	MCC-1B (MPS1)	DPB PANEL COLLECTIONS SHOP	1		
E201	MCC-1B (MPS1)	XFMR TO LPA	1		INSIDE MCC-1B (MPS1)
E201	MCC-1B (MPS1)	LPA	1		INSIDE MCC-1B (MPS1)
E201	MCC-1B (MPS1)	(E)DPB: CHEM BLDG PAINT SHOP	1		
E202	MCC-200 (HW)	PNL-2HA		1	INSIDE MCC-200 (HW)
E202	MCC-200 (HW)	PNL-2HB		1	INSIDE MCC-200 (HW)
E202	MCC-200 (HW)	PNL-2HC		1	INSIDE MCC-200 (HW)
E202	MCC-200 (HW)	XFMR 21A		1	INSIDE MCC-200 (HW)
E202	MCC-200 (HW)	PNL-21A		1	INSIDE MCC-200 (HW)
E301	MCC-300 (PRIMARY)	XFMR 31A		1	INSIDE MCC-300 (PRIMARY)
E301	MCC-300 (PRIMARY)	PNL-31A		1	INSIDE MCC-300 (PRIMARY)
E301	MCC-300 (PRIMARY)	PNL-31A		1	LOCATED @ ODOOR CONTROL SYSTEM AREA 1300
E301	MCC-300 (PRIMARY)	PNL-31C		1	LOCATED NEAR AREA 300 SCUM BOX
E301	MCC-300 (PRIMARY)	LCP-0110		1	
E301	MCC-300 (PRIMARY)	LCP-0210		1	
E301	MCC-300 (PRIMARY)	PNL-3HB		1	SEE E809
E301	MCC-300 (PRIMARY)	XFMR 3HB		1	
E301	MCC-300 (PRIMARY)	LCP-1300		1	LOCATED @ ODOOR CONTROL AREA 1300
E301	MCC-300 (PRIMARY)	PNL-3LB		1	SEE E809, FECL SYSTEM AREA 800
E301	MCC-300 (PRIMARY)	PNL-3HA		1	LOCATED @ SLUDGE ROOM
E301	MCC-300 (PRIMARY)	01-LCP-0130		1	
E301	MCC-300 (PRIMARY)	01-LCP-0140		1	
E401	UNIT SUBSTATION T2 (OLD BLOWER BLDG)	277/480V XFMR T2	1		INSIDE UNIT SUBSTATION T2 (OLD BLOWER BLDG)
E401	UNIT SUBSTATION T2 (OLD BLOWER BLDG)	MCC-400		1	
E401	UNIT SUBSTATION T2 (OLD BLOWER BLDG)	(E) MCC-2A		1	SEE E408
E401	UNIT SUBSTATION T2 (OLD BLOWER BLDG)	277/480V, 3 PHASE, 4W, EG		1	GENERATOR
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	277/480V, 3 PHASE, 4W, EG		1	GENERATOR
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	ACTIVE FILTER PANEL???		1	LOCATED INSIDE MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	LCP-200		1	AIR GAP SYSTEM
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	PNL-41B		1	
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	XFMR 41B		1	
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	PNL-41B		1	
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	XFMR 41A		1	
E401	MCC-400 (PEPS-1) (LOCATED @ (E) DEWATERING BLDG)	PNL-41A		1	
E408	MCC-2A	XFMR 2A			FROM LOAD SCHEDULE
E501	UNIT SUBSTATION T3 MPS3	277/480V XFMR T3			INSIDE UNIT SUBSTATION T3 MPS3
E501	UNIT SUBSTATION T3 MPS3	277/480V, 3 PHASE, 4W, EG			GENERATOR
E501	UNIT SUBSTATION T3 MPS3	MCC-500 (MPS3)			
E501	MCC-500 (MPS3)	MCC-3B		1	HAS 2 EXISTING SS INSIDE MCC-3B
E501	MCC-500 (MPS3)	XFMR 51A		1	INSIDE MCC-500 (MPS3)
E501	MCC-500 (MPS3)	PNL-51A		1	INSIDE MCC-500 (MPS3)
E601	(E) UNIT SUBSTATION T4 BLOWER BLDG	277/480V XFMR T4		1	INSIDE (E) UNIT SUBSTATION T4 BLOWER BLDG
E601	(E) UNIT SUBSTATION T4 BLOWER BLDG	(E) MCC-4A		1	
E601	(E) UNIT SUBSTATION T4 BLOWER BLDG	(E) MCC-4C		1	
E601	(E) UNIT SUBSTATION T4 BLOWER BLDG	(E) MCC-4D		1	
E601	(E) UNIT SUBSTATION T4 BLOWER BLDG	LCP-0150		1	(E) UNIT SUBSTATION T4 BLOWER BLDG FEEDS BWR-0150 WHICH FEEDS LCP-0150
E601	(E) MCC-4A	VFD, MLRP 1		1	
E601	(E) MCC-4A	VFD, MLRP 2		1	
E601	(E) MCC-4A	VFD, MLRP 3		1	
E601	(E) MCC-4A	VFD, MLRP 4		1	
E601	(E) MCC-4A	VFD, MLRP 5		1	
E601	(E) MCC-4A	VFD, MLRP 6		1	
E601	MCC-4C (BLOWER BLDG)	PNL-BBPP		1	
E601	MCC-4C (BLOWER BLDG)	LCP-0130		1	
E701	UNIT SUBSTATION T12 MBR	277/480V XFMR T12		1	INSIDE UNIT SUBSTATION T12 MBR
E701	UNIT SUBSTATION T12 MBR	SUB T13		1	
E701	UNIT SUBSTATION T12 MBR	SWBD-700 (MBR)		1	
E701	UNIT SUBSTATION T12 MBR	GENERATOR		1	
E701	SWBD-700 (MBR)	MCC-700 (MBR)		1	
E701	SWBD-700 (MBR)	MCC-701 (LIQUOR MCC)		1	SEE E702
E701	MCC-700 (MBR)	XFMR 71H		1	INSIDE MCC-700 (MBR)
E701	MCC-700 (MBR)	PNL-71H		1	INSIDE MCC-700 (MBR)
E701	MCC-700 (MBR)	PNL-7HA		1	
E701	MCC-700 (MBR)	XFMR 7HA - FEEDS PNL-7LA		1	
E701	MCC-700 (MBR)	PNL-7LA		1	LOCATED @ BLOWERS
E701	MCC-700 (MBR)	PNL-7HB		1	
E701	MCC-700 (MBR)	XFMR 7HB - FEEDS PNL-7LB		1	
E701	MCC-700 (MBR)	PNL-7LB		1	LOCATED @ PERMEATE PUMPS
E701	MCC-700 (MBR)	PNL-7HC		1	LOCATED @ PERMEATE PUMPS
E701	MCC-700 (MBR)	PNL-7HH		1	
E701	MCC-700 (MBR)	PNL-7HE		1	
E701	MCC-700 (MBR)	XFMR 7HE - FEEDS PNL-7LE		1	
E701	MCC-700 (MBR)	PNL-7LE		1	LOCATED @ MIXED LIQUOR PUMPS
E701	MCC-700 (MBR)	PNL-7HF		1	LOCATED @ AERATION BASINS
E701	MCC-700 (MBR)	PNL-7HG		1	
E701	MCC-700 (MBR)	XFMR 7HG - FEEDS PNL-7LG		1	
E701	MCC-700 (MBR)	PNL-7LG		1	LOCATED @ SCREENING FACILITY
E702	UNIT SUBSTATION T13 MBR	277/480V XFMR T13		1	INSIDE UNIT SUBSTATION T13 MBR
E702	UNIT SUBSTATION T13 MBR	SWBD-710 (MBR) FUTURE			
E702	UNIT SUBSTATION T13 MBR	GENERATOR		1	
E702	SWBD-710 (MBR) FUTURE	MCC-710 (MBR) FUTURE			

E702	SWBD-710 (MBR) FUTURE	MCC-711 (MBR) FUTURE			
E702	MCC-710 (MBR) FUTURE	PNL-7HX			
E702	MCC-710 (MBR) FUTURE	PNL-7HY			
E702	MCC-701				
E801	UNIT SUBSTATION T6 BLOWER BLDG	MCC-800 (HRC)			1
E801	UNIT SUBSTATION T6 BLOWER BLDG	DSB-6 (FPS2)	1		
E801	UNIT SUBSTATION T6 BLOWER BLDG	MCC-1010 (UV)			1
E801	MCC-800 (HRC)	LCP-0310			1
E801	MCC-800 (HRC)	LCP-0320			1
E801	MCC-800 (HRC)	PNL-SHA			1
E801	MCC-800 (HRC)	LCP-0840			1
E801	MCC-800 (HRC)	XFMR 81A			1
E801	MCC-800 (HRC)	PNL-81A			1
E801	DSB-6 (FPS2)	PPA PANEL			1
E801	DSB-6 (FPS2)	PNL-A			1
E801	DSB-6 (FPS2)	KFMR PNL-LB			1
E801	DSB-6 (FPS2)	MCC-6A (FPS2)			1
E801	DSB-6 (FPS2)	FILTER PUMP 1 VFD			1
E801	DSB-6 (FPS2)	FILTER PUMP 2 VFD			1
E801	DSB-6 (FPS2)	FILTER PUMP 3 VFD			1
E801	DSB-6 (FPS2)	FILTER PUMP 4 VFD			1
E801	DSB-6 DISTRIBUTION PANEL	CONTROL PANEL			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	XFMR 91A			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	PNL-91A			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	PNL-91A			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	XFMR PROVIDED BY UV EQUIP. SUPPLIER FEEDS PP1 PANEL			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	PP1 PANEL			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	XFMR PROVIDED BY UV EQUIP. SUPPLIER FEEDS PP2 PANEL			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	PP2 PANEL			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	XFMR PROVIDED BY UV EQUIP. SUPPLIER FEEDS PP3 PANEL (FUTURE)			1
E901	MCC-1010 (UV) HORIZONTAL ALTERNATIVE	PP3 PANEL (FUTURE)			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	KFMR 91A			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	PNL-91A			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	PNL-91A			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	XFMR PROVIDED BY UV EQUIP. SUPPLIER FEEDS PDC-1 PANEL			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	PDC-1 PANEL			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	XFMR PROVIDED BY UV EQUIP. SUPPLIER FEEDS PDC-2 PANEL			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	PDC-2 PANEL			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	XFMR PROVIDED BY UV EQUIP. SUPPLIER FEEDS PDC-3 PANEL (FUTURE)			1
E901	MCC-1010 (UV) VERTICAL ALTERNATIVE	PDC-3 PANEL (FUTURE)			1
E1010	DP-C (MPS2)	MONORAIL PANEL (OUT OF SERVICE)			1
E1010	DP-C (MPS2)	MCC-7C			1
E1010	DP-C (MPS2)	MCC-7B (MPS2)			1
E1010	DP-C (MPS2)	XFMR 7B17 (FEEDS PNL-7B17)			1
E1010	DP-C (MPS2)	PNL-7B17			1
E1010	MCC-7C	HEATER-1 PANEL			1
E1010	MCC-7C	HEATER-2 PANEL			1
E1010	MCC-7C	GAS MONITOR PANEL			1
E1010	MCC-7C	CL GAS EVAPO.-1 PANEL			1
E1010	MCC-7C	CL GAS EVAPO.-2 PANEL			1
E1010	MCC-7C	CL-NATOR PANEL			1
E1010	MCC-7C	FINAL CL-NATOR ANA. PANEL			1
E1010	MCC-7C	CONTROL CL ANA. PANEL			1
E1010	MCC-7C	LCP-0341			1
E1010	MCC-7C	LCP-0342			1
E1010	MCC-7C	LCP-0343			1
E1010	MCC-7C	LCP-0344			1
E1010	MCC-7C	LCP-0345			1
E1010	MCC-7C	LCP-0420			1
E1010	MCC-7C	LCP-0610			1
E1010	MCC-7C	LCP-0620			1
E1010	MCC-7B (MPS2)	DP-7B			1
E1010	MCC-7B (MPS2)	SCRUBBER PANEL			1
E1010	MCC-7B (MPS2)	WIER GATE PANEL			1
E1010	MCC-7B (MPS2)	XFMR T7A (FEEDS PNL-7A)			1
E1010	MCC-7B (MPS2)	PNL-7A			1
E1010	MCC-7B (MPS2)	LCP-0320			1
E1010	MCC-7B (MPS2)	XFMR T7B (FEEDS PNL-7B)			1
E1010	MCC-7B (MPS2)	PNL-7B			1
E1010	100 kW Generator				1
E1010	ATS				1
E1010	DP-7B	LCP-0310			1
E1011					
		TOSHIBA BLDG (MAIN FEEDER) (BREAKERS)			1
		MAIN PLANT GENERATORS (2) (BREAKERS)			1
		FEB			1
		NAS/WAS (DB, PB)			1
		SECONDARY CLAR #10 (MCC)			1
		COPS CENTER BLDG. 60 (BREAKERS, DB, PB)			1
		BLDG. 50 ELECTRICAL SERVICES SHOP (DB, PB)			1
		BLDG. 50 MECHANICAL SERVICES SHOP (DB, PB)			1
		BLDG. 50 FACILITIES SERVICES SHOP (PB)			1
		BLDG. 40 DEPT. 40 MAINT. SHOP (DB, PB)			1
		FLEE SERVICES BLDG. (DB, PB)			1
		COLLECTIONS SHOP BLDG. (DB, PB)			1
		WAREHOUSE BLDG. (PB)			1
		MARSH PUMP STATION (MCC)			1
		CREEK PUMP STATION (MCC)			1
		CAMPUS FACILITIES (DB, PB)			1
		T5 XFMR			1
		T6 XFMR			1
		T7 XFMR			1
		T8 XFMR			1
		T9 XFMR			1
		T10 - MARSH PUMP STATION XFMR			1
		T11 - MAIN PLANT GENERATORS XFMR			1











December 3, 2010

Mr. Steve Malloy  
Principal Engineer  
Irvine Ranch Water District  
3512 Michelson Drive  
Irvine, CA 92612

Re: DLT&V Project 1551.01.284  
Michelson Water Recycling Plant - Phase 2 Expansion  
Request for Supplemental Funding for Projects: 20214 & 30214 / Michelson WRP Phase-2  
Expansion Control System Integration Scope of Work.

Dear Mr. Malloy:

Control system integration work on the Michelson WRP Phase-2 expansion has been extensive during the initial detailed definition of the control system standards. Irvine Ranch Water District has worked with the DLT&V team to further elaborate the control system design as defined by the project specifications. We have identified a number of areas where additional work/effort is needed; these efforts are beyond the original intent of our proposal. After reviewing the scope in detail with Mr. Dave Mazzarella, we mutually concluded that we could not have anticipated the amount of engineering and integration efforts needed to fulfill not only the project specification, but also the amount of time to comply with the progressively evolving District software templates. Furthermore, clarifications of project specifications uncovered several scope change items.

During the past months, the DLT&V Integration team has expended significant effort to perform control system integration services within the contracted time and cost constraints. Unfortunately, by the second week of October 2010 it became evident that scope and cost on related to templates design can no longer be controlled within the parameters of the initial proposal. Since completion of templates is prerequisite for continuation of nearly all remaining work on the project, we identified them as being on the critical path to success of the project.

The attached pages identify the required supplemental work and requested compensation. Please review the information and contact us if more information is required on the tasks outlined.

Sincerely,

A handwritten signature in black ink, appearing to read 'Uri Papukchiev', written over a horizontal line.

Uri Papukchiev  
Sr. Project Manager

Attachments

## MICHELSON WRP PHASE-2 EXPANSION – REQUEST FOR SUPPLEMENTAL FUNDING

### SCOPE OF WORK

#### **Task S1: Existing plant controls conversion to District standards**

Finalize definition and development of high level templates associated with converting existing Michelson Water Recycling Plant control system PLC code to the latest version of design software - Unity. Review control narratives, I/O list, process and instrumentation diagrams, and template usage requirements for the conversion from existing control into District standards. Review changes with District control systems engineer and project process design engineer. Work on discovering and resolving discrepancies between various sources of design information (P&IDs, control narratives, PLC configuration spreadsheets).

#### **Task S2: New plant equipment high level control definition for compliance with District standards**

Review P&IDs against project specification Section 17100 and compare them with PLC configuration spreadsheets. Identify and resolve missing and conflicting information. Review changes with District control systems engineer and project process design engineer. Propagate changes into control flow chart diagrams.

Complete development of new programmable logic controller templates that had not been available prior start of Michelson WRP Phase 2 upgrade project and are needed for specific plant control purposes.

#### **Task S3: Modifications to PLC code for process area 1600**

Rewrite existing code for PLC-1600. The code resides in the PLC and does not comply with SCADA template structure defined by the District. The code is integrated with existing stand alone HMI application and has limited functionality. Addition of low pressure protection switches and uninterruptable power supply module diagnostic tags had been indentified after code was developed and tested. Modifications to existing code, as well as testing and commissioning during overall plant commissioning process, are included in this task.

#### **Task S4: Scope change items identified by November-1<sup>st</sup>-2010.**

At present, twelve out-of-scope items have been identified. Some originate from modifications in plant process and instrumentation diagrams (WRP plans - sheets 554 through 628). Others have been identified by the District's control systems engineer as requirements for overall compliance with District programming standards. A list of these items (Control System Integrator Scope Change Tracking List) is attached.

**DLT&V Systems Engineering, Inc.**

**Proposal Worksheet**

Date: Nov-1-2010

Project Number: 1551.01.284  
 Project Name: IRWD-MWRP Phase 2 Control System Integration

#	Sub-Task	Dept. Mgr. VII	Dept. Mgr. III	Project Mgr. III	Const. Mgr. I	Sr. Integr. III	Integr. VIII	Designer VI	CAD Des. VI	Admin. II	Tot. Hrs.	Section Subtot.
	S 1 Existing plant controls conversion to District standards											
1	DFB design and development			32.0							32.0	
2	PLC code development						200.0				200.0	
3	PLC code testing and implementation						110.0				110.0	
	S 2 New plant equipment high level control definition											
4	DFB design and development			32.0							32.0	
5	PLC code development						60.0				60.0	
6	PLC code testing and implementation						40.0				40.0	
	S 3 Modifications to process area 16000 control											
7	PLC code development										16.0	
8	PLC code testing and implementation						24.0				24.0	
9	SCADA data and HMI development						60.0				60.0	
10	SCADA data and HMI testing						40.0				40.0	
	S 4 Control system scope change items 1 through 12											
	Progressive work on PLC and SCADA modifications in accordance with scope change list			32.0			70.0				102.0	
11	Fees Sub Total:			96.0			520.0				676.0	\$82,524
	Expenses:					100.0						\$82,524
	Total Fees & Expenses:											\$82,524



IRVINE OFFICE  
16 TECHNOLOGY DRIVE + SUITE 100  
IRVINE, CALIFORNIA 92618  
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DESIGN  
CONSTRUCTION  
INTEGRATION

OCEANSIDE OFFICE  
4167 AVENIDA DE LA PLATA + SUITE 118  
OCEANSIDE, CALIFORNIA 92056  
VOICE 760.560.0675 + FAX 760.560.0675

## Fee Proposal

Date: 12/29/2010  
Attn: Steve Malloy  
Client: Irvine Ranch Water District  
Address: 3512 Michelson Drive  
City, State, Zip: Irvine, CA 92612  
Phone: (949)-453-5695  
Fax: (949)-757-0225  
Email: malloy@irwd.com

*The Client agrees that the technical methods, techniques and pricing information contained in any proposal submitted by DLT&V pertaining to this project or in this Agreement or any addendum thereto, are to be considered confidential and proprietary, and shall not be released or otherwise made available to any third party without the express written consent of DLT&V.*

Fax     Mail     Email     Courier     Hand Delivery

Project Description: HRC/ES03 Vault control conduit modifications (CRT#091)  
DLT&V Reference #: 01551.03.395

<b>Programming Services (Task 300):</b>		\$15,864.50
Programming Tasks	\$15,724	
<b>Total Programming Services:</b>	<b>\$15,724</b>	

**Grand Total: \$15,865**

Lump Sum Fee  
 Hourly, Time and Material Fee

---

Name: Uri Papukchiev  
Title: Sr. Proj. Mgr.

## Scope of Services

## **PROGRAMMING SERVICES**

### **Project Description**

- 1.0 Programming services will consist of PLC programming, SCADA HMI programming, and other services as described herein for the HRC/ES-3 Valve vault control modifications part of MWRP Phase-II upgrade project located at Riparian View, Irvine CA, 92612 (HDR Project# 100808, Change Request#091).
- 2.0 Programming services will be performed in accordance with the following bid documentation:
  1. P&ID drawings I801 and I802 dated 11/11/2010.
  2. Specification sections 17100, 17300 Dated August 2009.
  3. Other: MWRP PH 2 Construction Change Request #091, IRWD Project# 20214&30214.Programming Services outside the scope of this bid documentation will be performed at an additional cost.
- 3.0 The existing HRC Valve Vault and the new ES-3 Valve Vault are to be modified to communicate, display and control Open/Close/Manual/OutOfService/Local/Remote/Fail site Data as per the aforementioned bid spec documents to complete the field PLC and SCADA system programming. Precisely, control of four valves will be moved from Kruger/Siemens PLC-800 into existing PLC-008. The PLC/PAC code will be completed with Unity (Schneider Electric) design software. The SCADA part will be completed using System Platform 3.0 (Wonderware/Invensys). Only IRWD approved software templates will be used in the PLC/PAC and SCADA code. The control of the four valves to be programmed under this change request and part of this proposal are: 08-SE-BFV-0516, SE-BFV-0517, SE-BFV-0518, SE-BFV-0527.
- 4.0 Unless stated otherwise in the bid documents, DLT&V will use its own programming standards for the PLC, OIT, and HMI programming requirements. In the event the CLIENT's standards are to be followed the CLIENT will provide DLT&V a copy of the most current PLC, OIT, and/or HMI application that contain the required standards.
- 5.0 DLT&V will not provide PLC or HMI operational training. Training will be provided as part of training already defined in DLT&V project number 1551.00.395. Training materials will not be provided for this work separately. Instead training materials will be provided as part of global plant control system training as defined in DLT&V project number 1551.00.395.

## **Responsibilities of Others**

- 1.0 CLIENT will provide copies of the most current templates for PLC and HMI programming to DLT&V.
- 2.0 CLIENT shall verify that all field wiring is installed and terminated at the PLC-based control panels, field instruments, and any other packaged control systems that will be integrated in to the plant SCADA system being programmed by DLT&V, prior to scheduling DLT&V personnel for initial system testing and startup.
- 2.0 The CLIENT shall allocate sufficient time in the project schedule for field wiring terminations, loop testing, calibration, and commissioning of instrumentation and PLC-based control panels prior to any scheduled startup and demonstration dates required by the Contract Documents. The main purpose of this time period is to allow DLT&V personnel to assist with testing and commissioning of the PLC-based control panels that we will be programming on this project, before scheduling inspections by the Owner's Engineer or Representative, and before any required startup or demonstration listed in the Contract Documents.
- 4.0 Prior to DLT&V commencing work on programming scope, CLIENT shall furnish an additional complete set of final construction plans and specifications along with the contract or notice to proceed.
- 5.0 CLIENT shall provide descriptions of process control requirements, and if applicable identify area classifications per NFPA 820, and other related codes.

## **Deliverables**

- 1.0 Upon completion of our programming, DLT&V will provide one (1) copy of the updated and backup HMI and PLC programming files on CD-ROM.



Project Number: 01551.03.395

29-Dec-10

Project Name: HRC/ES03 Vault control conduit modifications (CR:#091)

#	Sub-Task	Project Manager	Staff Integrator	Tot. Hrs.	Section Subtot.
	<b>Task 300 - Programming</b>				
1	Create new control flow chart for new DFB controlling the interlock between water quality excursion in CCC and secondary effluent flow control.	3.0		3.0	
2	Submit the control flow chart and obtain review comments. Implement comment and create final version.	1.5			
3	Create new text description for a new DFB for control of secondary effluent valves under abnormal tertiary effluent conditions.	1.5	1.5		
4	Submit text DFB text description and obtain comments. Implement comments and create final version.	2.0			
5	Create PLC/PAC code for this new DFB and perform internal test. Correct errors if discovered.		2.0		
6	Perform witnessed test on the new DFB. Obtain client approval.		2.0		
7	Create custom application object template in SCADA for the new DFB. Create custom HMI interface for the new DFB in SCADA.		7.0		
8	Perform internal test on both PLC/PAC DFB and the SCADA application object with the HMI part. Correct errors.		4.0		
9	Perform witnessed test of both PLC/PAC and SCADA for the new DFB. Obtain client approval.		3.0		
10	Modify the configuration Excel sheets for converting existing PLC-008 from ladder logic to DFB based code. Add I/O tags, DI card, and DFBs for 4 valves.		3.0	3.0	
11	Submit sheets for review&approval	2.0		2.0	
12	Implement any changes&resubmit final	4.0	3.0	7.0	

Project Number: 01551.03.395  
 Project Name: HRC/ES03 Vault control conduit modifications (CR#091)

29-Dec-10

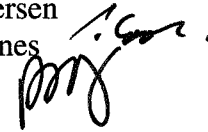
#	Sub-Task	Project Manager	Staff Integrator	Tot. Hrs.	Section Subtot.
13	Import into Unity&add hardware config		8.0	8.0	
14	Create PLC code in Unity		32.0	32.0	
15	Import tags into SCADA AppServer		4.0	4.0	
16	Create application objects instances		4.0	4.0	
17	Add ArcestrA graphics for valves		6.0	6.0	
18	Add Device Integration Tags for 4 valves		6.0	6.0	
19	Create configurations for remote alarms		6.0	6.0	
20	Test PLC and SCADA code internally		24.0	24.0	
21	Correct errors		5.0	5.0	
22	Perform factory demonstration test		16.0	16.0	
23	Perform field implementation		6.0	6.0	
24	Take part in commissioning process		24.0	24.0	
25	Manage the work progress	8.0		8.0	
	Credit for CR#20/				
26	DLT&V Project: 1551.02.395	-7.0	-47.0	-54.0	
	<b>Programming Fees Sub Total:</b>	<b>15.0</b>	<b>119.5</b>	<b>110.0</b>	<b>\$15,724</b>
	<b>Programming Expenses:</b>				
	<b>Total Programming &amp; Expenses:</b>				<b>\$15,724</b>
	<b>Totals:</b>	<b>15.0</b>	<b>119.5</b>	<b>134.5</b>	
	<b>Std Hourly Rates:</b>	<b>\$148.00</b>	<b>\$113.00</b>		
	<b>Total Fees:</b>	<b>\$2,220</b>	<b>\$13,504</b>		<b>\$15,724</b>
					<b>\$15,724</b>

January 24, 2011

Prepared and

Submitted by: D. Pedersen

Approved by: Paul Jones



## ACTION CALENDAR

### DAM MONITORING AND SURVEILLANCE – DESIGN VARIANCE EVALUATION OF SOIL FAILURES AT SYPHON CANYON DAM

#### SUMMARY:

On January 4, 2011, staff noticed that erosion and shallow slope sloughing had occurred near the bench on the downstream embankment slope of Syphon Canyon Dam. A field inspection was conducted with IRWD staff, Genterra Consultants, Inc. (IRWD's dam surveillance monitoring consultant), and a Division of Safety of Dams (DSOD) representative to identify the appropriate response measures. Based on the inspection, DSOD requested that IRWD perform a limited subsurface investigation to verify that the damage consists of superficial soil failures and to rule out the potential that internal seepage through the dam contributed to the problem.

Staff recommends that the Board authorize the General Manager to execute Variance No. 2 with Genterra, in the amount of \$86,240, to perform a limited subsurface investigation, interpret the results of the investigation, and provide design alternatives and recommendations for repair of the dam.

#### BACKGROUND:

Erosion and shallow slope sloughing occurred near the bench on the downstream embankment slope of Syphon Canyon Dam. On January 4, 2011, staff contacted Genterra and requested that they perform a field inspection of the dam, which was completed the same day. A Memorandum of Field Observations, including photos of the damage, was prepared by Genterra and is attached as Exhibit "A".

On January 12, 2011, staff met with engineers from Genterra and Rick Draeger of DSOD for the annual field inspection of the Syphon Canyon Dam. Based on the field review, Mr. Draeger indicated that the soil failures were likely caused by surficial infiltration and saturation from the recent severe rainstorms. Conditions may have been aggravated by a steeper embankment slope at the location, due to the bench being cut in just below, and rodent activity that was evident above the grade break. Based on his observations, Mr. Draeger explained that DSOD will require that IRWD perform a limited subsurface investigation to rule out the potential that the sloughing was caused by internal seepage through the dam.

#### Dam Monitoring and Surveillance Contract - Variance No. 2:

In March 2010, Genterra was awarded a three-year contract to perform monitoring and surveillance of Rattlesnake Canyon, Sand Canyon, San Joaquin, Santiago Creek, and Syphon Canyon Dams. The scope of work for the contract included a commitment by Genterra to provide additional investigative work such as that required for Syphon Canyon Dam at the same hourly rates as proposed for the three-year contract.

On January 7, 2011, staff requested that Genterra submit a design variance for additional work to perform a limited subsurface investigation, interpret the results of the investigation, and provide design alternatives and recommendations for repair of the Syphon Canyon Dam. The scope of work includes conducting a survey of the downstream embankment slope, performing a geophysical survey to determine water levels and general soil properties, hand-auguring in eight locations, and installing four shallow piezometers. The design variance, including the scope of work and Genterra's fee proposal in the amount of \$86,240, is attached as Exhibit "B".

**FISCAL IMPACTS:**

The Dam Monitoring and Surveillance Monitoring Contract is funded from the FY 2010-11 Operating Budget. Sufficient funds are available in the FY 2010-11 Operating Budget for Variance No. 2 in the amount of \$86,240.

**ENVIRONMENTAL COMPLIANCE:**

The investigation of Syphon Canyon Dam is categorically exempt from California Environmental Quality Act pursuant to the California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15301 and 15306.

**COMMITTEE STATUS:**

This item was reviewed at the Engineering and Operations Committee on January 18, 2011.

**RECOMMENDATION:**

**THAT THE BOARD AUTHORIZE THE GENERAL MANAGER TO EXECUTE VARIANCE NO. 2 WITH GENTERRA CONSULTANTS, INC., IN THE AMOUNT OF \$86,240, TO PERFORM A LIMITED SUBSURFACE INVESTIGATION, INTERPRET THE RESULTS OF THE INVESTIGATION, AND PROVIDE RECOMMENDATIONS FOR REPAIR OF SYPHON CANYON DAM.**

**LIST OF EXHIBITS:**

Exhibit "A" – Memorandum of Field Observations  
Exhibit "B" – Design Variance No. 2

# EXHIBIT "A"



## SYPHON CANYON DAM MEMORANDUM OF OBSERVATIONS

State DSOD Number: 793-009 Year Completed: 1949  
Type of Dam: Embankment Spillway Elev: EL378 Outlet: 15" RCP  
Dam Crest Elev: EL385 Dam Height: 59 feet Storage Capacity: 578 ac-ft  
Dam Crest Width: 10 feet Dam Crest Length: 843 feet

Date of Field Observation: January 5, 2011

Project No.: 346

Prepared by: John Ho, Ph.D., PE, GE, Senior Project Engineer  
Joseph J. Kulikowski, PE, GE, President and Principal-in-charge

**Subject: Downstream Face of Dam Shallow Slope Failures Above Bench**

### INTRODUCTION

During and after severe 2010-2011 winter storms, slope slumping and rotational slippage occurred immediately above a bench near the toe of the downstream face of the dam. IRWD field personnel observed the failures on January 4, 2011. GENTERRA's engineers (Joseph Dluzak and Nicholas Josten) visited the project site on January 4th, took photographs and probed in a few locations and found the downstream face of the dam was generally saturated to a depth of approximately 24 to 30 inches.

John Ho and Joe Kulikowski met with David Pedersen, Tom Roberts, Rory Moore and Eric Akiyoshi of IRWD on January 5th to discuss the situation and conducted site observation and evaluation. Joe Kulikowski informed DSOD of the failures on the same day.

### SLOPE CONDITIONS

Relatively shallow, rotational failures were observed over a distance on the order of 300 feet above the bench. The surface elevations at the bench is approximately EL340 near Piezometer No. 4. A series of failures occurred, with a near-vertical head scarp typically range from 2 to 3 feet deep. Slip surfaces appear to extend to a depth of approximately 3 to 6 feet below the top of scarp based on visual inspection. The top of the head scarp is generally 5 to 6 feet above the bench. Saturated slide debris extended from the head scarp over a lateral distance of approximately 10 to 12 feet, and remained on the bench.

Preliminary assessment based on field inspection and a review of limited data regarding the dam indicated that multiple factors may have contributed to the slippage:

- Recent rains caused saturation from the surface down, with possible seepage flows parallel to the slope surface.
- Past grading operations left a grade break and a steeper slope immediately above the bench. The grade break appear to roughly coincide with the top of the scarps of the recent slope failures.

GENTERRA Consultants, Inc.

15375 Barranca Pkwy. Building L, Irvine, CA 92618, Phone (949) 753-8766 Fax (949) 753-8887



## **SYPHON CANYON DAM MEMORANDUM OF OBSERVATIONS**

- Past wet-dry cycles over the years may have caused potential slope creep/movements prior to the rains, together with desiccation cracks facilitated surface water infiltration into embankment soils on the downstream face.
- Rodent activities may have contributed to the surface water penetration and saturation of the slope surface.
- Past erosion may have weakened the surficial soils.

The current failures are documented in selected photographs taken on January 5, 2011, please refer to photograph sheets 1 through 8. Approximate locations of the photographs are shown on Figure 1 and Figure 2.

Slow and minor seepage can be observed in the slide debris, indicating that down-slope seepage parallel to the slope has continued after the rain. Based on visual inspection at the time, there were no apparent indication of seepage through the dam embankment or through the foundation soils below the dam. However, due to past seepage that occurred before the toe drain was installed, the possibility of seepage entering the toe and bench area cannot be ruled out at this time. A field investigation program is being prepared at this time.

### **PIEZOMETER READINGS**

Approximate piezometer locations are shown on Figure 3. Piezometer readings are presented in Figures 4 through 7. Recent (2009 - 2011, Figures 4A, 4B, and 4C) and historical (1999 - 2011, Figures 5A, 5B, and 5C) piezometer readings are attached. The most recent readings collected on January 4, 2011 showed the following results:

- Piezometer readings on the crest within embankment fill (P3A, and P2A) were approximately 23.4 to 27.4 feet below the crest, respectively. P1A was dry. The top of the piezometers (generally within a couple of inches from the ground surface) range from EL385 to EL 385.9.
- Piezometer readings on the crest within the foundation soils (P1B, P2B, and P3B) are 27, 43.1, and 36.5 feet correspondingly.
- P4 (at bench) showed a depth to water of 13.4 feet below the bench. Top of P4 is at elevation EL 340\*.
- P5 (at toe) showed a depth to water at 2.3 feet. Top of P5 is at EL 330.7.

\* Note: Surface elevations described in this memorandum are based on limited existing data that are available for our review. A topographic survey is being conducted at the time of this memorandum, covering the downstream face of the dam and other relevant site features; this site survey will be tied into an Orange County Bench Mark near Portola Pkwy and Sand Canyon Ave.

A review of the historical piezometer readings showed that the ground water levels within the foundation soils generally respond closely with the reservoir levels, following nearly exact patterns of fluctuation. On the other hand, ground water levels within the embankment soils generally took more response time relative to reservoir fluctuations. The contrast between the two seems to indicate that the embankment soils are less permeable than the foundation soils. As the reservoir levels varies, the uplift pressures below the dam varies correspondingly with relatively little time lag.

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## SYPHON CANYON DAM MEMORANDUM OF OBSERVATIONS

Over the past two years, the ground water elevations in the toe area (P5, GWT is currently at EL 328.4 ft, 2.3 below ground surface) has been generally one to two feet below that under the bench (P4, GWT is currently at EL 326.6 ft, about 13.4 feet below the bench) indicating the toe drain is functioning in some capacity, provided that the toe drain is located below the bench. No as-built plans or reports of this dam were available for our review at the time of this memorandum.

It appears that water accumulated from the toe drain leads to a manhole about 300 feet from the toe of the dam towards Portola Pkwy through a 8-inch PVC. Water drops to a larger pipe within the manhole, and the outlet of the larger pipe comes out of the V-ditch along Portola Pkwy about 360 southwest of the manhole. Measured flow rates from V-ditch is approximately 18.2 gallons per minute on January 4, 2011, roughly doubled comparing to those measured in the previous months (8 to 10 gpm) prior to the storms. A maximum flow rate of 34 gpm was measured by IRWD in February 2010 during the wet seasons, which was a historical high since 1999.



### CONCLUSIONS

- The observed slope sloughing and slippage are relatively shallow.
- Multiple factors may have contributed to the failures.
- The slide areas should be covered during rain storms to prevent surface water infiltration further into the dam.
- The downstream face of the dam is generally saturated which can lead to movements upon further rains. Survey points should be installed on the downstream slope along selected critical sections and be monitored on a weekly basis in the coming months.
- Piezometer readings showed a direct response between the reservoir levels and the piezometric levels in the foundation soils. Additional piezometers may be required to evaluate the stability of the dam.
- Oversaturation/ponding of the soils in the toe area should be avoided. Ground water in the toe area should be lowered using the existing sump. The need for more dewatering wells should be evaluated.
- Due to potential time lag, the phreatic surface within the embankment fill can continue to rise after a major rain storm, and should be monitored for a few weeks after each major storm.
- An increase in uplift pressures within the foundation soils should be expected as the reservoir level is increased.
- An investigation should be conducted to evaluate this situation, to evaluate safe operational reservoir levels, and provide an action plan to mitigate the site conditions.
- Historical records should be reviewed and field verifications should be conducted.
- A mitigation action plan should be developed, DSOD approval secured, and implemented soon.

GENTERRA Consultants, Inc.



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**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**

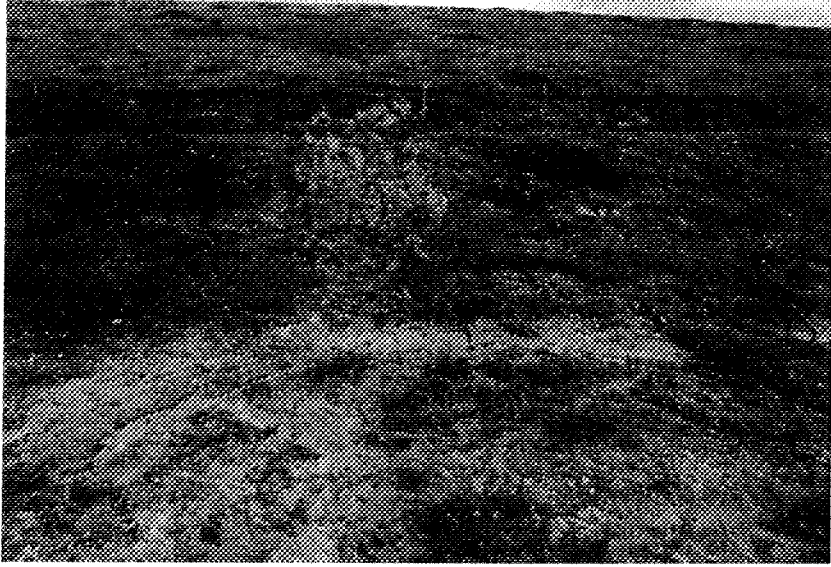
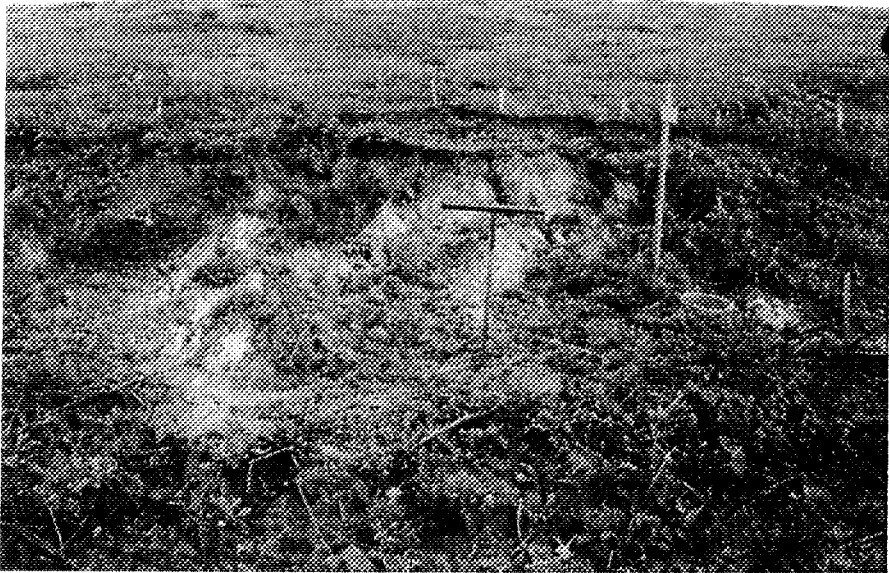
Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u> 1 </u> of <u> 8 </u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No:93
		Location: Toe of downstream face of dam
		Description: Looking up, stakes outline the slippage scarps. Erosion gullies are observed below the bench.
		Photo No: 101
		Location: Toe of downstream face of dam below bench
		Description: Looking northeast from toe of slope, overview of shallow slippage generally above the bench, with one slippage below the bench.





**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**

Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u> 2 </u> of <u> 8 </u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No: 86
		Location: From the bench looking northeast
		Description: Shallow slippage above the bench
		Photo No: 104
		Location: Toe of downstream face of dam
		Description: Looking up at slippage above bench


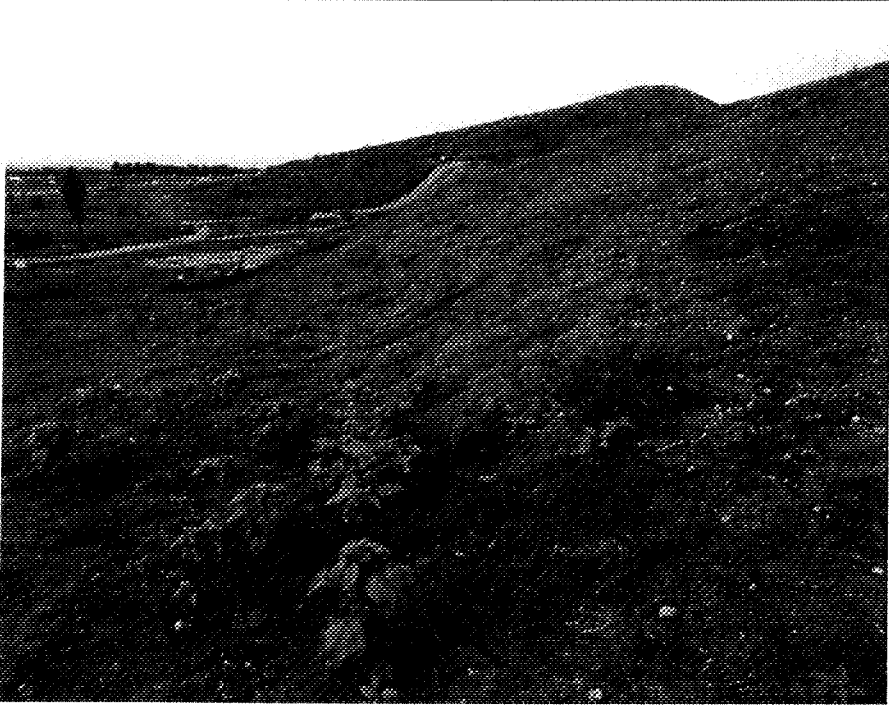
**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**

Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u> 3 </u> of <u> 8 </u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No:108
		Location: Toe of downstream face of dam below the bench
		Description: Looking upslope, shallow slippage above the bench and path of mud/water flow accumulated at the toe of the slope.
		Photo No: 37
		Location: From the bench looking at slippage near Piezometer No. 4
		Description: Shallow, rotational slippage above bench.



**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**

Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u>4</u> of <u>8</u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No:36
		Location: From the bench looking at slippage at Piezometer No. 4
		Description: Close-up look at the casing that houses Piezometer No. 4 which was tilted by movements from the slippage
		Photo No: 55
		Location: From the bench looking northwest
		Description: Shallow, rotational slippage above the bench.



**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**

Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u> 5 </u> of <u> 8 </u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No: 61
		Location: Above the bench, east of the slide areas
		Description: Close-up look at animal burrow holes and minor movements from erosion
		Photo No: 64
		Location: Approx. 100feet east of the slide areas
		Description: Viewing grade break possibly resulted from the previous bench cut.

**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**

Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u>6</u> of <u>8</u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No: 10
		Location: Top of bench, west end of the slide areas
		Description: Slope was saturated and can be probed to a depth of approximately 30 inches without undue difficulties.
		Photo No: 23
		Location: From the bench looking west
		Description: Head scarps generally started approximately 5 to 6 feet above the bench.

**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**

Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u>7</u> of <u>8</u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No: 81
		Location: Top of scarps, looking west at the slippage area
		Description: Slippage occurred near the grade break above the bench.
		Photo No: 45
		Location: Top of Scarp above bench, looking west
		Description: Close-up at a representative head scarp with 2 to 3 feet near-vertical drop, followed by a steepened slope covered by slide debris.

**IRWD SYPHON CANYON DAM FIELD PHOTOGRAPH SHEET**



Owner Name: IRWD	Inspection Date: JAN 5, 2011	Sheet <u> 8 </u> of <u> 8 </u>
Project Name: SYPHON CANYON DAM DOWNSTREAM SLOPE REPAIR	City/County: IRVINE/ORANGE COUNTY	State: California
		Photo No: 51
		Location: Scarps near the east end of the slippage areas
		Description: Materials appear to be sandy; different from the clayey soils exposed further west.
		Photo No: 57
		Location: East end of the slippage areas
		Description: Looking west; exposed sandy soils within the shallow slope failures.



FIGURE 1 . APPROXIMATE LOCATIONS OF 1-5-2011 PHOTOS (PHOTO SHEETS 1 THROUGH 5)



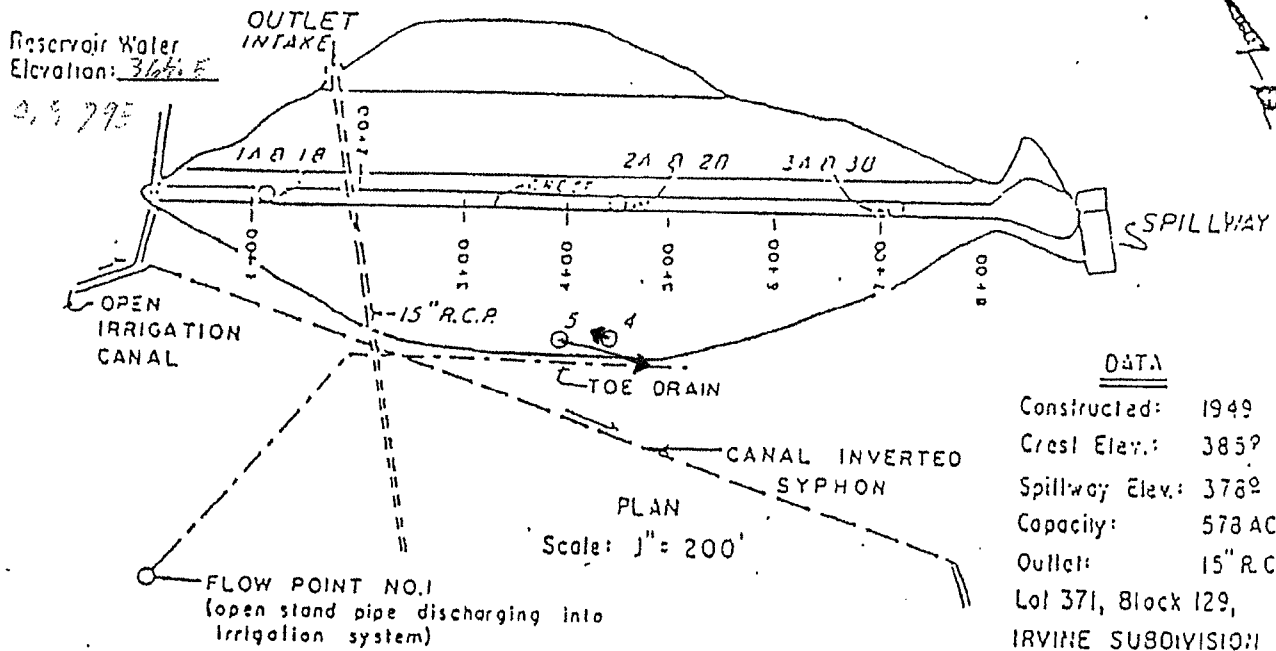


FIGURE 2 APPROXIMATE LOCATIONS OF 1-5-2011 PHOTOS (PHOTO SHEETS 6 THROUGH 8)

# SYPHON CANYON DAM INSTRUMENTATION

STATE DAM NO. 793-9

FIGURE 3 APPROXIMATE LOCATIONS OF PIEZOMETERS



DATA  
 Constructed: 1949  
 Crest Elev.: 385'  
 Spillway Elev.: 378'  
 Capacity: 578 AC-FT.  
 Outlet: 15" R.C.P.  
 Lot 371, Block 129,  
 IRVINE SUBDIVISION

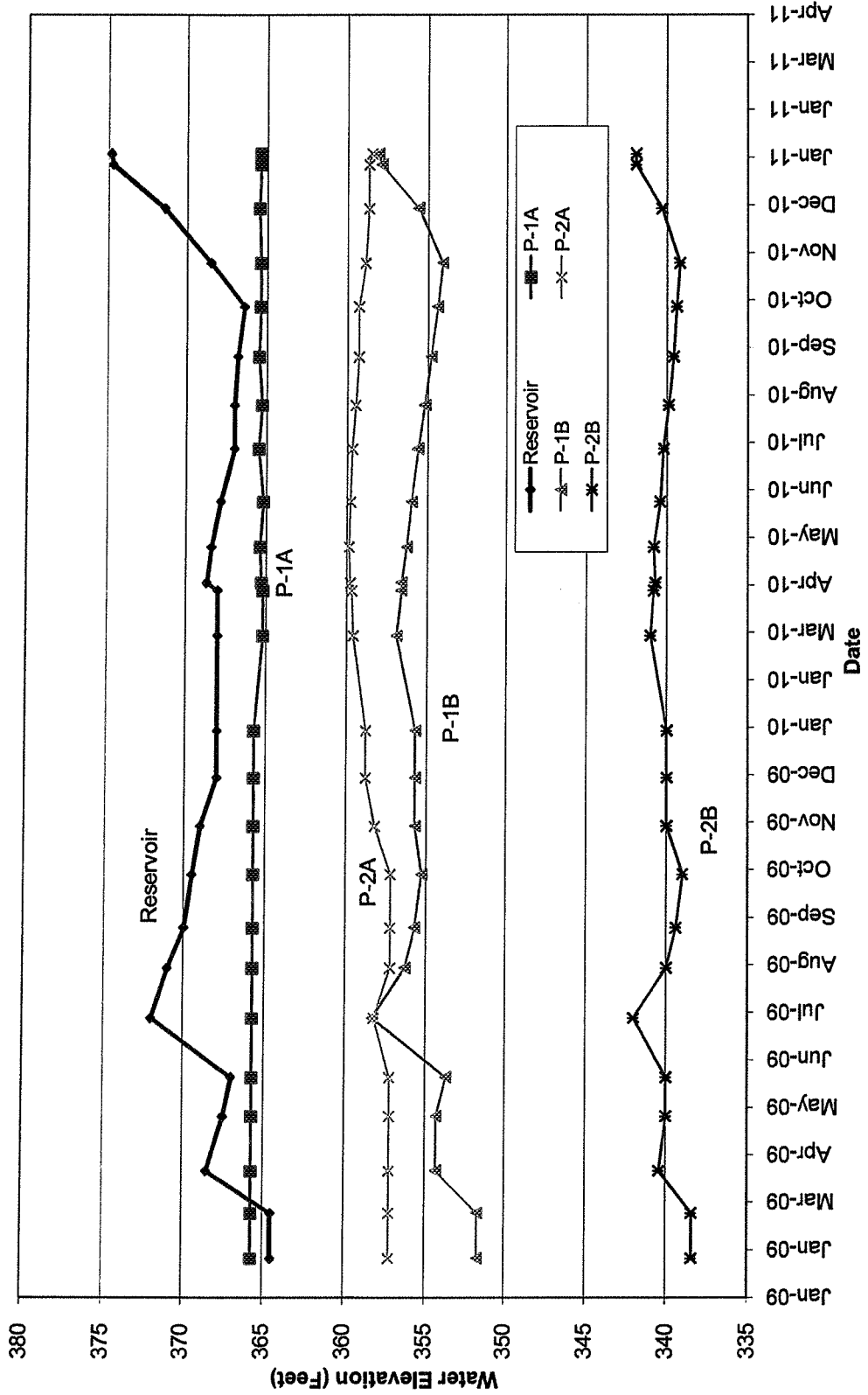
Open-Well Piezometer OPEN WELL PIEZOMETER READINGS

PIEZOMETER NO.	PIEZOMETER		DEPTH TO WATER SURFACE (feet)	PIEZOMETRIC ELEVATION (feet)	PIEZOMETER NO.	PIEZOMETER		DEPTH TO WATER SURFACE (feet)	PIEZOMETRIC ELEVATION (feet)
	ELEV. OF TOP (feet)	DEPTH TO BOTTOM (feet)				ELEV. OF TOP (feet)	DEPTH TO BOTTOM (feet)		
A	385.1	19.4	19.4	365.7	3A	385.6	23.3	23.3	362.3
B	385.1	39.4	33.4	351.7	3B	385.6	45.3	40.3	345.3
2A	385.9	43.7	28.7	357.2	4	340.0	25.3	14.3	325.7
2B	385.0	75.6	46.6	338.4	5	330.7	16.7	5.7	325.0

FLOW POINT NO. 1: 8 1/2 GPIA  
 STRENGTHENED SOLINGS: Yes  No  WEED GROWTH: Light  Moderate  Heavy   
 WEATHER: Dry  Wet ; ROBERT ACTIVITY: Nonactive  Active   
 PIEZOMETER NO. 1: Dry  Muddy  Plugged ; PIEZOMETER NO. 2: Dry  Muddy  Plugged   
 PIEZOMETER NO. 3: Dry  Muddy  Plugged ; PIEZOMETER NO. 4: Dry  Muddy  Plugged   
 EMBANKMENT INSPECTION: Main  EMBANKMENT CONDITION: Unchanged  Changed   
 Explain \_\_\_\_\_  
 CRACKING: Yes  No ; OBSERVED DISTRESS: Yes  No  If so, explain \_\_\_\_\_  
 DAM WALKED: Yes  No ; SPILLWAY WALKED: Yes  No   
 REMARKS: \_\_\_\_\_

Read By Francis J. Jones Date 1-26-09

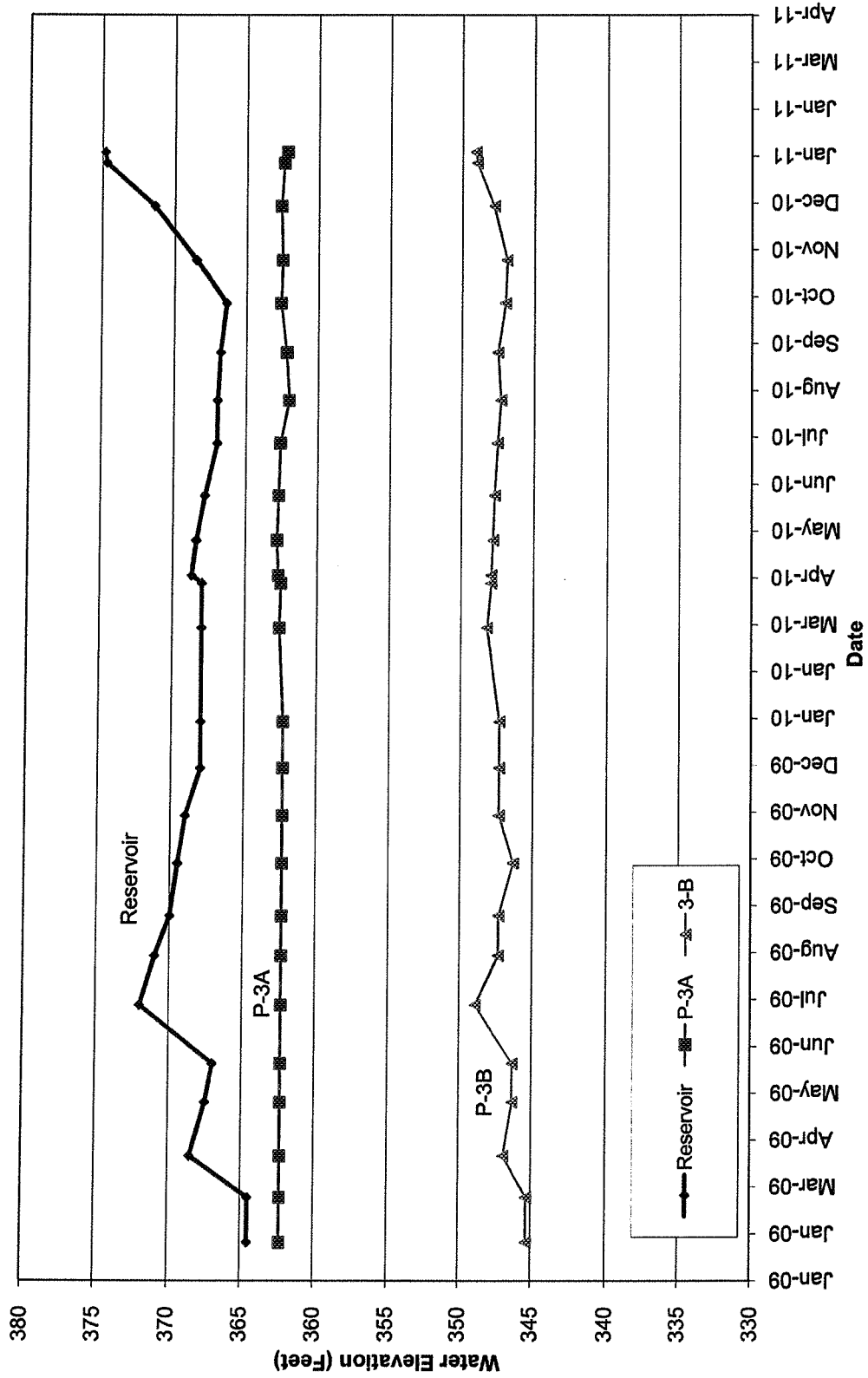
**SYPHON CANYON DAM AND RESERVOIR  
PIEZOMETER AND RESERVOIR WATER ELEVATIONS  
PIEZOMETERS P-1A, P-1B, P-2A AND P-2B  
January 2009 Through April 2011**



IRVINE RANCH WATER DISTRICT

FIGURE 4A

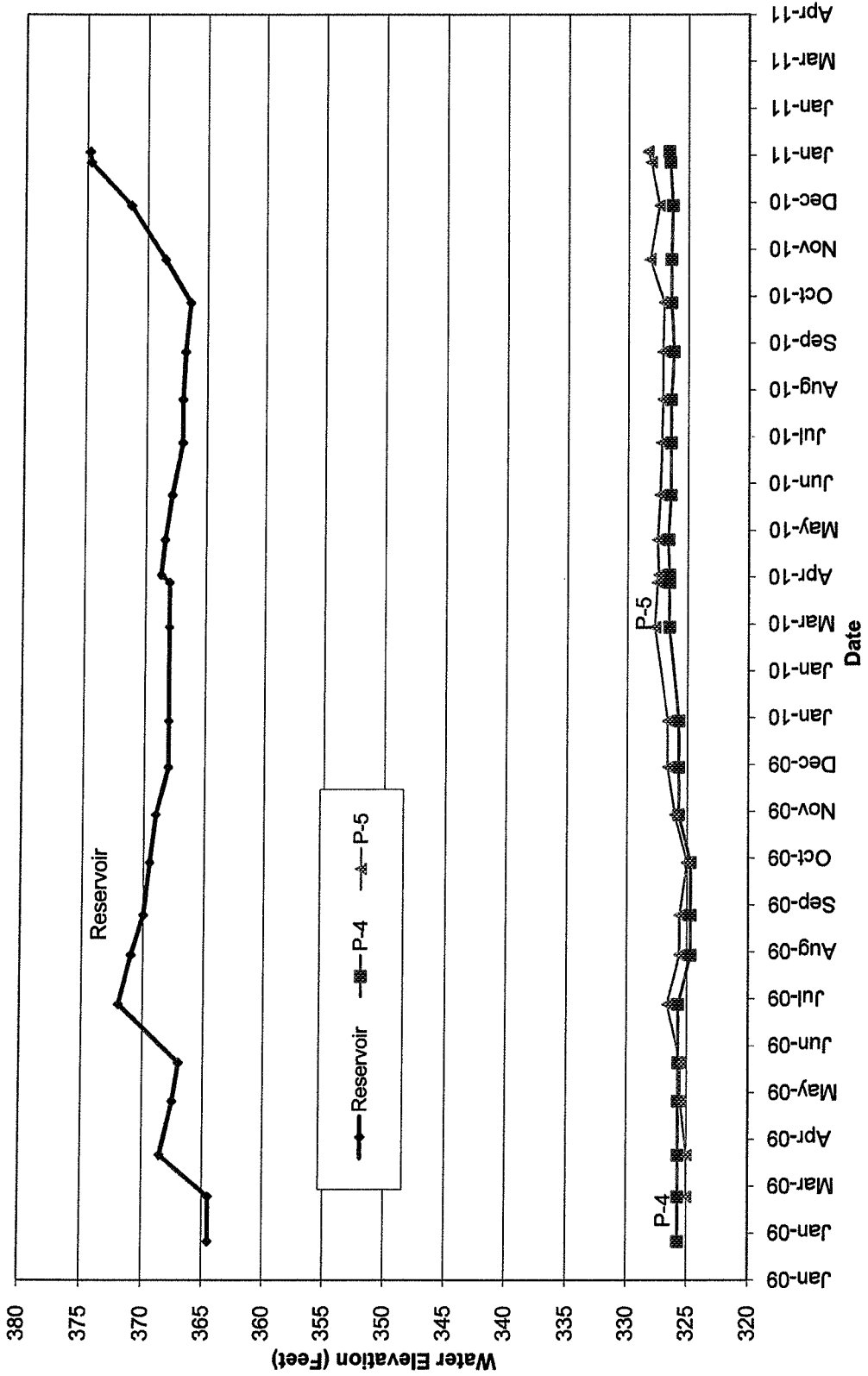
**SYPHON CANYON DAM AND RESERVOIR  
PIEZOMETER AND RESERVOIR WATER ELEVATIONS  
PIEZOMETERS P-3A AND P-3B  
January 2009 Through April 2011**



IRVINE RANCH WATER DISTRICT

FIGURE 4B

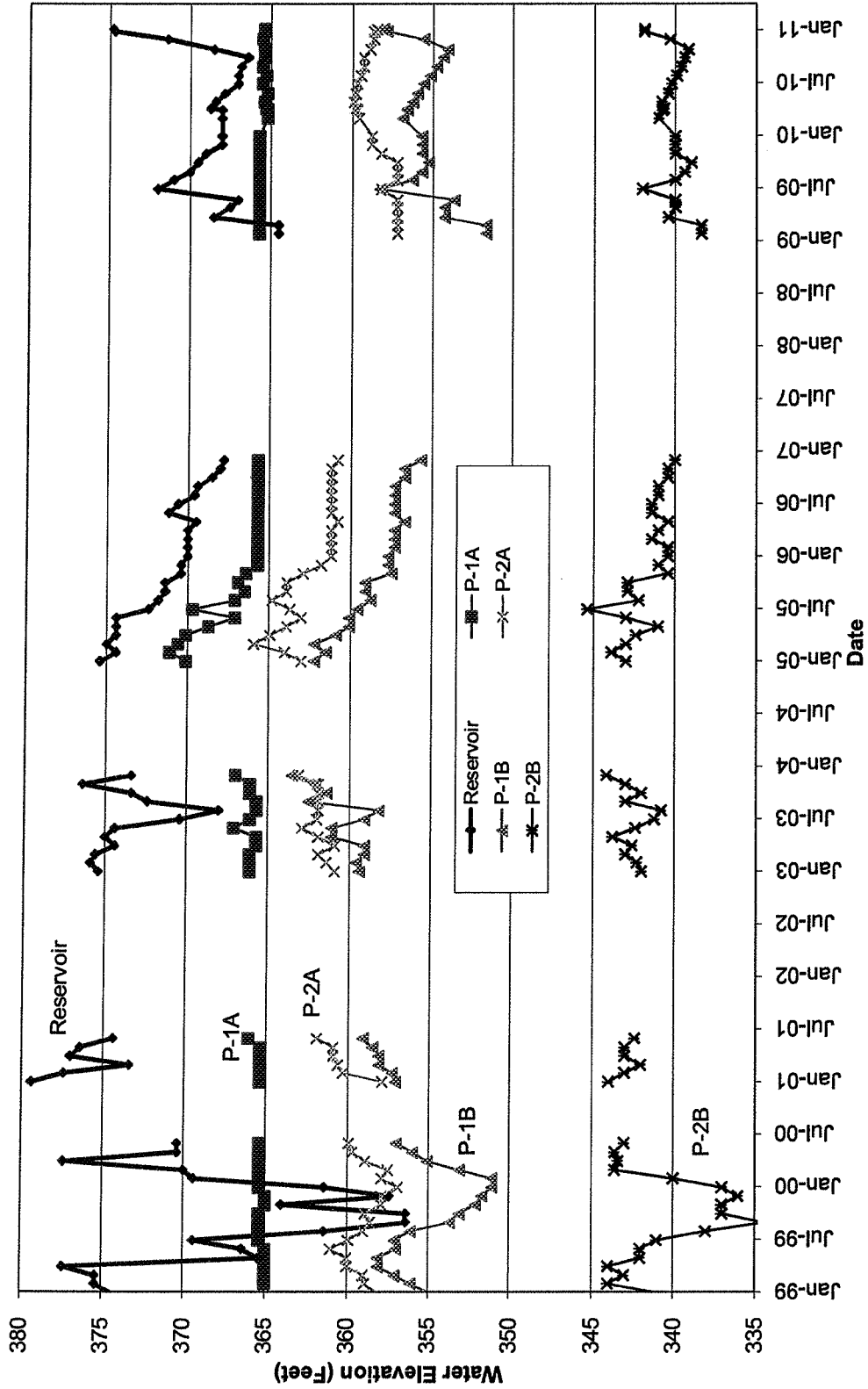
**SYPHON CANYON DAM AND RESERVOIR  
MONITORING WELL AND RESERVOIR WATER ELEVATIONS  
MONITORING WELLS P-4 AND P-5  
January 2009 Through April 2011**



IRVINE RANCH WATER DISTRICT

FIGURE 4C

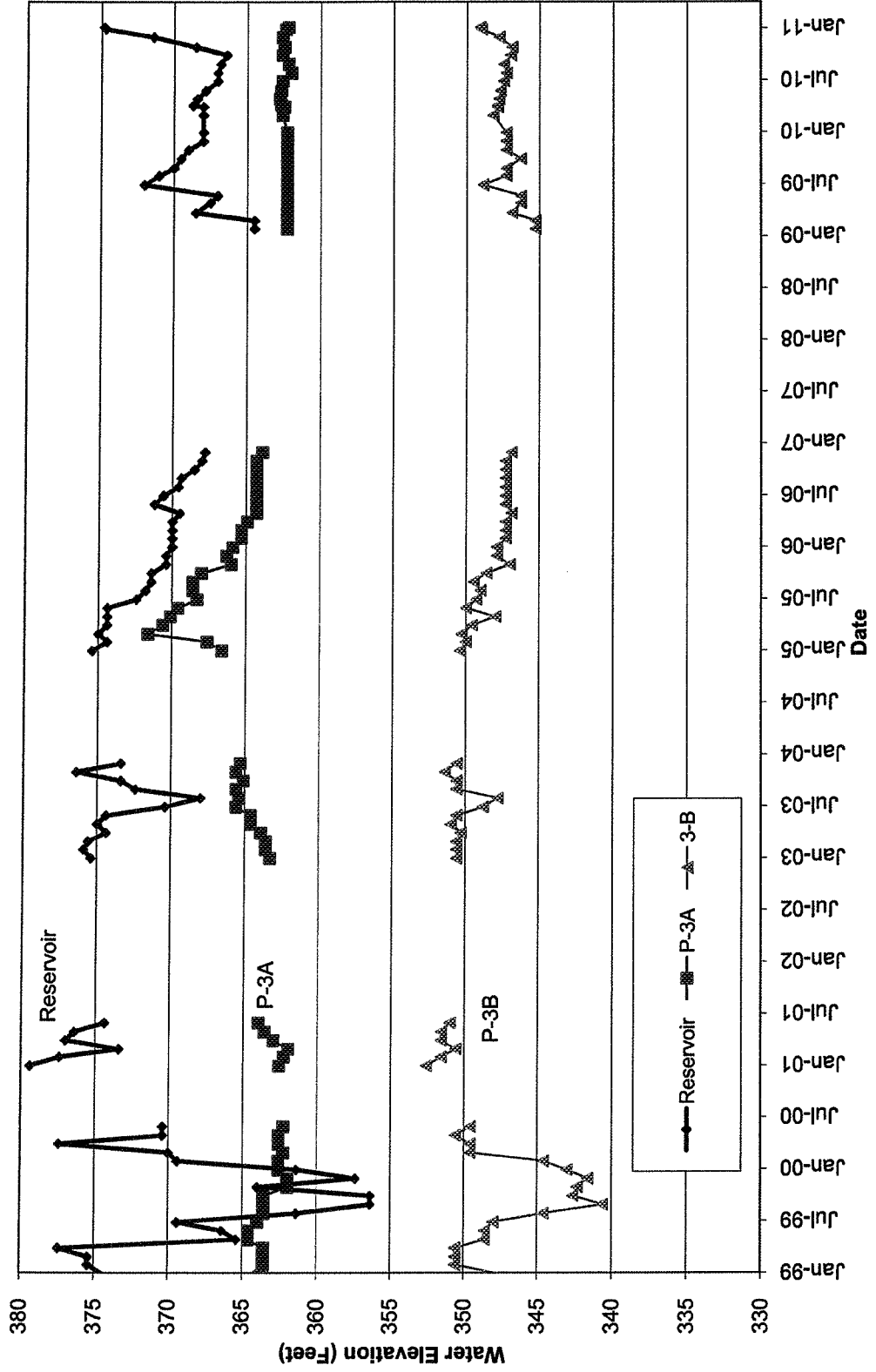
**SYPHON CANYON DAM AND RESERVOIR  
PIEZOMETER AND RESERVOIR WATER ELEVATIONS  
PIEZOMETERS P-1A, P-1B, P-2A AND P-2B  
1999 Through 2011**



IRVINE RANCH WATER DISTRICT

FIGURE 5A

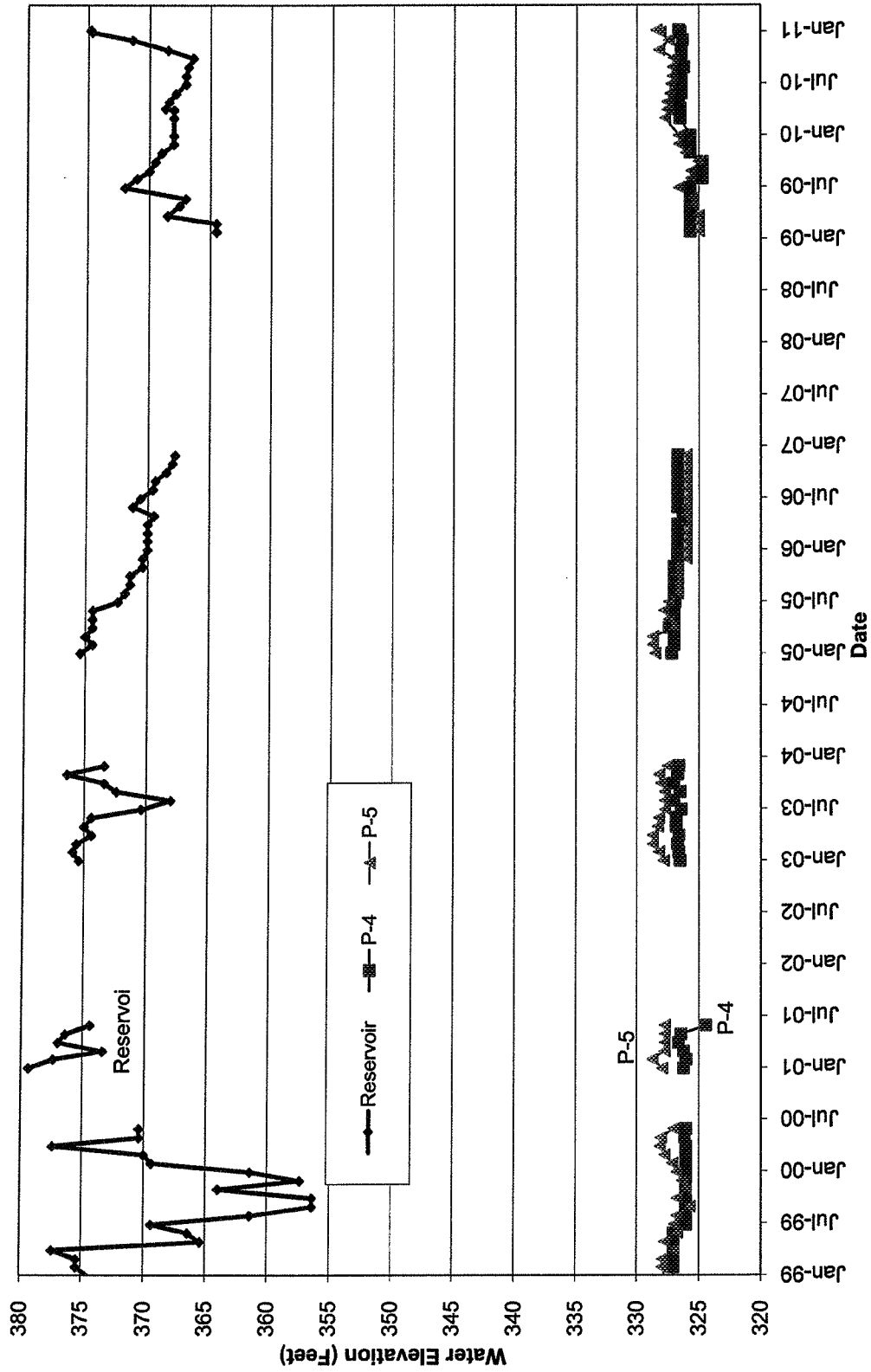
**SYPHON CANYON DAM AND RESERVOIR  
PIEZOMETER AND RESERVOIR WATER ELEVATIONS  
PIEZOMETERS P-3A AND P-3B  
1999 Through 2011**



IRVINE RANCH WATER DISTRICT

FIGURE 5B

**SYPHON CANYON DAM AND RESERVOIR  
MONITORING WELL AND RESERVOIR WATER ELEVATIONS  
MONITORING WELLS P-4 AND P-5  
1999 Through 2011**

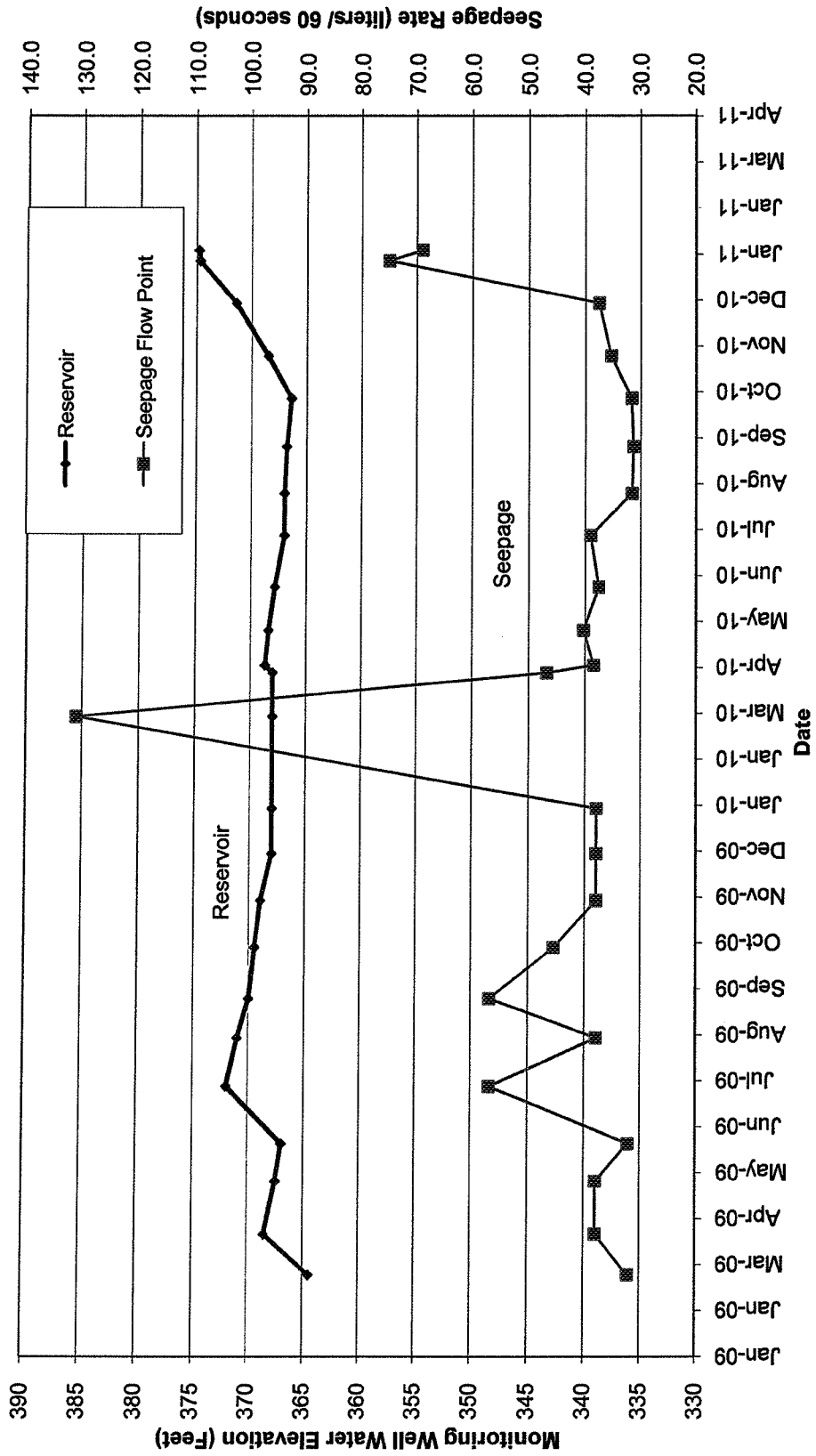


IRVINE RANCH WATER DISTRICT

FIGURE 5C



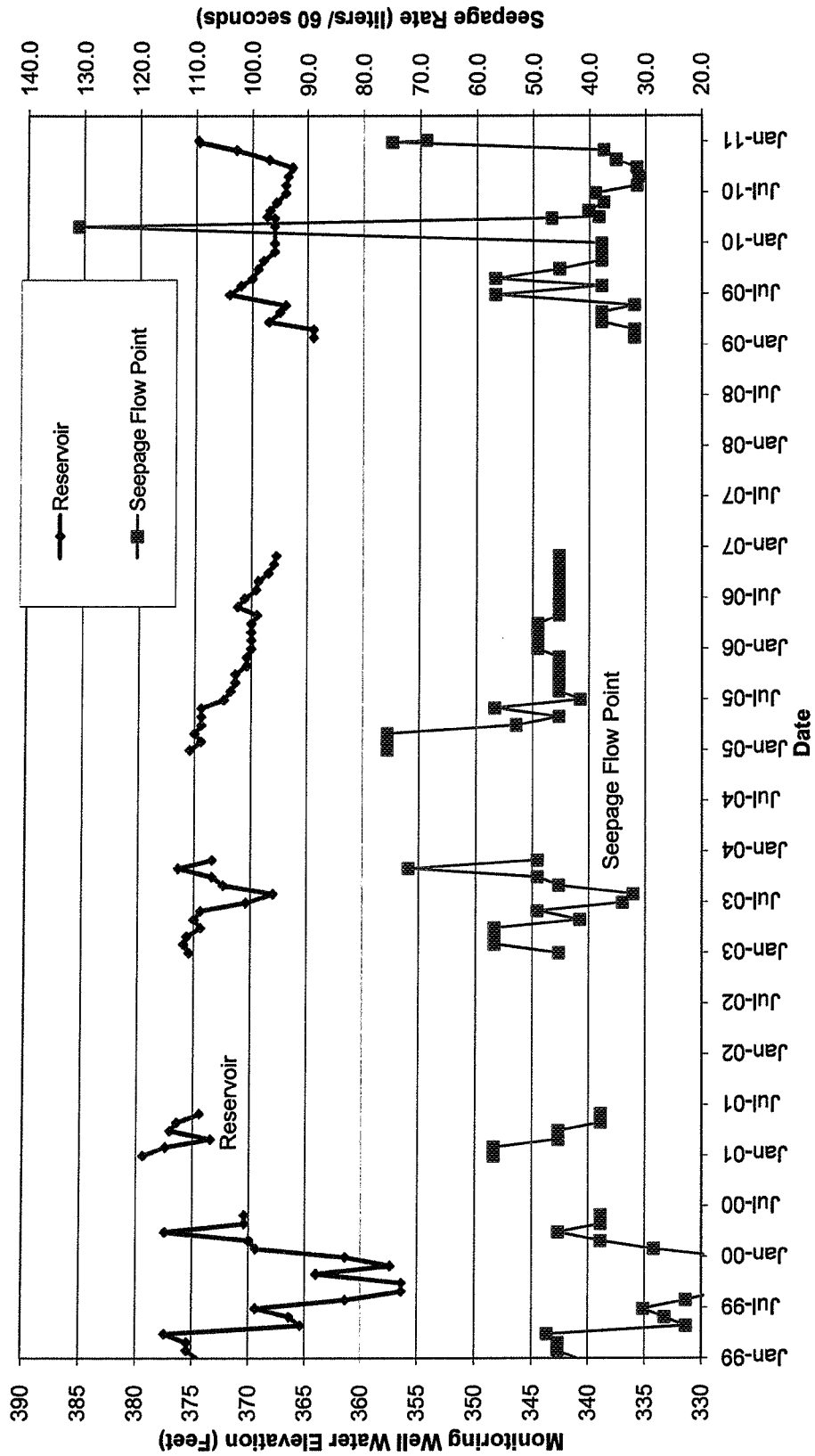
**SYPHON CANYON DAM AND RESERVOIR  
MONITORING WELL AND RESERVOIR WATER ELEVATIONS  
SEEPAGE FLOW POINT  
January 2009 Through April 2011**



**FIGURE 6**

**IRVINE RANCH WATER DISTRICT**

### SYPHON CANYON DAM AND RESERVOIR MONITORING WELL AND RESERVOIR WATER ELEVATIONS SEEPAGE FLOW POINT 1999 Through 2011



IRVINE RANCH WATER DISTRICT

FIGURE 7

**EXHIBIT "B"**

**IRVINE RANCH WATER DISTRICT  
PROFESSIONAL SERVICES VARIANCE**

Project Title: Dam Monitoring and Surveillance File No.: \_\_\_\_\_  
 Date: January 7, 2011  
 Variance No.: 2  
 Project No.: \_\_\_\_\_ Project No.: \_\_\_\_\_  
 Purchase Order No.: 124564

Originator:     IRWD     ENGINEER/CONSULTANT     Other (Explain) \_\_\_\_\_

**Description of Variance (attach any back-up material):**

Perform a limited subsurface investigation at Syphon Canyon Dam, interpret the results of the investigation, and provide conceptual recommendation for repair of the dam. See attached scope of work and fee proposal submitted by Genterra Consultants, Inc.

**Engineering & Management Cost Impact:**

Classification	Manhours	Billing Rate	Labor \$	Direct Costs	Subcon. \$	Total \$
Investigation at Syphon Canyon Dam						\$86,240
<b>Total \$ =</b>						<b>\$86,240</b>

**Schedule Impact:**

Task No.	Task Description	Original Schedule	Schedule Variance	New Schedule
			1 month	

**Required Approval Determination:**

Total Original Contract	\$ <u>126,390</u>	<input type="checkbox"/> General Manager: Single Variance less than or equal to \$30,000.
Previous Variances \$	<u>8,399</u>	<input type="checkbox"/> Committee: Single Variance greater than \$30,000, and less than or equal to \$60,000.
This Variance	\$ <u>86,240</u>	<input checked="" type="checkbox"/> Board: Single Variance greater than \$60,000.
Total Sum of Variances	\$ <u>94,639</u>	<input type="checkbox"/> Board: Cumulative total of Variances greater than \$60,000, or 30% of the original contract, whichever is higher.
New Contract Amount	\$ <u>221,029</u>	
Percentage of Total Variances to Original Contract	<u>43</u> %	

ENGINEER/CONSULTANT: Genterra Consulting, Inc. IRVINE RANCH WATER DISTRICT  
 Company Name

Project Engineer/Manager

Date

David W. DeLeon  
 Department Director

01/13/11  
 Date

Engineer's/Consultant's Management Date

General Manager/Comm./Board

Date

# IRVINE RANCH WATER DISTRICT

## PROFESSIONAL SERVICES VARIANCE REGISTER

Project Title: Dam Monitoring and Surveillance

Project No.: \_\_\_\_\_ Project Manager: David Pedersen

Variance No.	Description	Dates		Variance Amount
		Initiated	Approved	
1	Emergency field inspection of San Joaquin Dam			\$8,399
2	Investigation at Syphon Canyon Dam			\$86,240



January 7, 2011 (Revised Jan. 13, 2011)

Project No. 346-IRW

Irvine Ranch Water District  
P.O Box 57000  
Irvine, CA 92619

Attention: David Pedersen and Rory Moore

Subject: Proposal for Evaluation of Sloughing  
Syphon Canyon Dam, No. 793-09, Irvine, California  
GENTERRA Project No. 346-IRW

Gentlemen:

As requested by David Pedersen and other representatives of the Irvine Ranch Water District (IRWD), GENTERRA Consultants, Inc. (GENTERRA) is pleased to submit this proposal to IRWD to provide engineering services for performing tasks related to evaluation of sloughing at Syphon Canyon Dam.

GENTERRA Consultants, Inc. (GENTERRA) has been providing consulting engineering services to IRWD for the dam monitoring and surveillance program for Syphon Canyon Dam and Reservoir under an Agreement for monitoring and surveillance of the five IRWD dams for the period 2010 through 2012.

These additional tasks are outside the original scope of work and authorized budget for our current services related to Project Number 343D-IRW. We have identified these additional tasks as Tasks 1 through 7.

This proposal includes a description of the proposed project, our scope of services, a schedule, and cost estimate, and has been tailored to meet the needs of the project and fulfill your requirements. However, should the outlined services not meet your expectations of the assignment, we would appreciate the opportunity to discuss your concerns and make adjustments as necessary.

## **PROJECT INFORMATION**

On Tuesday, January 4, 2011, Tom Roberts of IRWD called GENTERRA to report that they observed sloughing and erosion on the downstream face of Syphon Canyon Dam. Two of GENTERRA's engineers, Nick Josten and Joseph Druzak, met Mr. Roberts at the site that same day and reviewed the condition of the dam and took photographs. In the morning of Wednesday, January 5, 2011, Joseph J. Kulikowski and John Ho of GENTERRA visited the site, performed visual inspection of the entire dam and the distressed areas, and had field discussions with David Pedersen, Tom Roberts, Rory Moore and Eric Akiyoshi of IRWD. It was observed that there has been some significant sloughing and erosion around the downstream toe area that occurred

during and/or after the recent heavy rains. Most of the length of the toe of the slope immediately above the bench at the downstream toe had failed to depths of up to about two feet normal to the downstream surface, extending from the bench to a vertical distance of about six feet. The soils were saturated. Minor seepage at a few locations was observed; this seepage may be associated with the saturation of the upper few feet of the downstream slope during the recent rain event and does not appear to be connected with the typical reservoir seepage through the dam embankment. However, the possibility of continued rising of the phreatic surface due to seepage through the dam embankment and foundation cannot be ruled out, and must be closely monitored.

It is our initial opinion that these are surficial soil failures that occurred in the over-steepened slope above the bench that had been probably constructed when the toe drain was installed. Other than the over-steepened slope, other contributing factors may include rodent holes, loose soils on the surface from the construction of the bench, tension cracks filled with water, and saturation of the upper few feet due to the heavy rains. We do not feel that there is an imminent threat, but we have recommended to IRWD that the area needs to be observed daily and that we be notified of any changes, especially more movement or signs of seepage.

GENTERRA was requested by IRWD to notify the State Division of Safety of Dams (DSOD) of this situation and to develop a work plan for mitigation of the problems. Joe Kulikowski then had a series of phone discussions and E-Mail communications on January 5 and 6 with Shawn Jones, Regional Engineer, and Rick Draeger, Area Engineer, of the DSOD in Sacramento. Also, as requested by IRWD, GENTERRA made arrangements for acquisition of a copy of all of the files, reports and plans available at DSOD.

DSOD concurred with GENTERRA's preliminary plan of action, as presented to DSOD in several E-Mail submittals, but the DSOD requires a detailed Work Plan and an application to be filed with them for review and approval before any subsurface hand-augering, drilling or sampling is performed. The general action plan as presented to DSOD includes the following general steps:

- GENTERRA will review all available data on the construction of the dam and previous repairs made by The Irvine Company (the previous owners) as documented in the files from DSOD. As indicated above, arrangements were made with DSOD to obtain a copy of the files.
- A limited survey will be performed by a surveying company under GENTERRA's direction to obtain an updated topographic map for use in our evaluation and design of remedial measures, including some representative cross sections for use in our analyses and design.
- GENTERRA will obtain and evaluate updated measurements of the piezometer water levels and toe drain seepage rates as obtained from IRWD and as taken by GENTERRA.

- GENTERRA will perform field measurements of the limits and depths of the soil failures, and will perform limited geophysical non-destructive surveys using GENTERRA's in-house Refraction Microtremor (ReMi) system to determine water levels and general soil properties in and around the affected area.
- GENTERRA will develop a Work Plan that will include limited hand-augering and sampling in, above and below the failed areas, and installation of shallow piezometers, in selected portions of the areas affected by the observed sloughing and erosion. The samples will be tested in our soils laboratory for properties to be used in limited stability analyses of the overall dam and the downstream slope in and near the failed areas.
- GENTERRA will perform limited static and pseudostatic stability analyses of the downstream slope to determine the factors of safety and to determine the safe reservoir storage level.
- GENTERRA and the District will closely monitor the situation, and protective covering will be placed over the sloughed areas by IRWD in the event of forecasted heavy rains. At this time, the forecast is for clear weather for at least several days.

GENTERRA agreed to keep IRWD and DSOD informed of progress and any changes in the condition or our opinions on the situation. At this time, we do not believe that there is an immediate threat, and there is not a need for lowering of the reservoir, but this will be considered if the movement continues or seepage is observed that could lead to a piping condition or instability. It was confirmed to DSOD that IRWD and GENTERRA are committed to a thorough evaluation and development of approved remedial measures. GENTERRA is aware that IRWD is looking at the possibility of removing the existing dam in the next several years and constructing a new dam with a larger storage capacity. However, IRWD has confirmed that they will implement necessary remedial measures to protect the existing dam.

## **PROPOSED SERVICES**

GENTERRA proposes to perform the following tasks for the evaluation of the sloughing and the design of remedial measures at Syphon Canyon Dam:

### **Task 1: Field Visits, Discussions, Coordination and Documentation**

This task will include the initial and subsequent series of field visits, inspections, discussions in the field and office, telephone and E-Mail communications with IRWD and DSOD related to the evaluation and determination of the extent and nature of the problems and preliminary discussions on the conceptual alternatives for the remedial design. We will prepare and maintain documentation of our field observations, photographs, measurements and discussions.

**Task 2: Data Acquisition and Review**

GENTERRA will review all available data on the construction of the dam and previous repairs made by The Irvine Company (the previous owners) as documented in the files from DSOD. As indicated above, arrangements were made with DSOD to obtain a copy of the files. GENTERRA will obtain and evaluate updated measurements of the piezometer water levels and toe drain seepage rates as obtained from IRWD and as taken by GENTERRA.

**Task 3: Updated Topographic Survey**

GENTERRA will coordinate and subcontract to a surveying company the performance of a limited topographic survey to obtain an updated topographic map for use in our evaluation and design of remedial measures, including some representative cross sections for use in our analyses and design. The topographic map will also be useful to IRWD for other planning purposes related to the existing dam.

**Task 4: Surface Field Measurements and Limited Geophysical Survey**

GENTERRA will perform field measurements of the limits and depths of the soil failures, and will perform limited geophysical non-destructive surveys using GENTERRA's in-house Refraction Microtremor (ReMi) system in order to determine water levels and general soil properties in and around the affected area.

**Task 5: Perform Additional Field and Laboratory Investigation**

**Subtask 5.1 Development of Work Plan, DSOD Application and Review**

GENTERRA will develop a Work Plan that will include limited hand-augering and sampling in, above and below the failed areas, and installation of shallow piezometers, in selected portions of the areas affected by the observed sloughing and erosion. The samples will be tested in our soils laboratory for properties to be used in limited stability analyses of the overall dam and the downstream slope in and near the failed areas.

The Work Plan will also include the proposed methodologies and assumptions to be incorporated into the limited stability analyses and development of the basis of design of the remedial measures.

This task will also include preparation of an Application for submittal to DSOD with the Work Plan so that review and approval can be obtained prior to the start of any subsurface sampling.

This task includes discussions and other interaction with DSOD and IRWD on the review, revisions and submittals of the Work Plan and Application during the DSOD review and approval process.



**Subtask 5.2 Field Exploration Program**

This subtask will consist of implementation of the field exploration program as described in the Work Plan developed in Subtask 5.1, as approved by IRWD and DSOD.

**Subtask 5.3 Laboratory Testing Program**

This subtask will consist of implementation of the laboratory testing program as described in the Work Plan developed in Subtask 5.1, as approved by IRWD and DSOD.

**Task 6: Limited Stability Analyses and Seepage Analyses**

**Subtask 6.1: Initial Determination of Safe Reservoir Storage Level**

GENTERRA will perform an initial set of limited analyses in the immediate phase to determine the maximum safe reservoir storage levels under both static and seismic loading conditions. Information to be used in the initial analyses will be based on what is available prior to the implementation of the field and laboratory programs in Subtasks 5.2 and 5.3. The initial analyses will include information learned from the initial review of the DSOD files, the results of the updated topographic survey, and the results of field measurements and the ReMi geophysical survey performed in Task 4.

**Subtask 6.2: Additional Limited Seepage and Stability Analyses**

Once the results of the field exploration and laboratory testing are obtained in Subtasks 5.2 and 5.3, GENTERRA will perform more comprehensive but still limited seepage analyses on the maximum dam section which consists of the dam embankment and foundation zones. Results from this limited seepage analyses will be used in the limited static and pseudostatic stability analyses of the downstream slope to determine the factors of safety. An evaluation will also be made of the potential for liquefaction in the downstream toe area when subjected to earthquake loading.

**Task 7: Presentation & Discussion of Conceptual Design Alternatives**

GENTERRA will develop conceptual alternative designs of remedial measures based on the results of Tasks 1 through 6, and we will present them for discussion with IRWD. This will include conceptual sections and approximate costs associated with up to three alternatives. We will also conduct preliminary discussions with DSOD on the concepts.

**Project Management, Meetings, & Coordination with IRWD, DSOD & Others**

Work in Tasks 1 through 7 will include GENTERRA's time and expenses for overall coordination, including project management, scheduling, meetings, phone discussions, E-Mail communications, technical review, and other activities to provide efficient and responsive

services. It will also include the coordination with IRWD representatives, DSOD representatives, and others that may be required to be involved in the project.

## **SCHEDULE**

Based on the verbal authorization to proceed that was given to us during the field meeting on January 5, 2011, the work in Tasks 1 through 7 has commenced and is in progress. We will perform the tasks and subtasks as required based on IRWD's and DSOD's schedules for review and approval. We will expedite each task as much as possible, and will inform IRWD of any issues that arise that may affect the schedule of any task.

## **COST ESTIMATE**

The estimated maximum cost for these additional tasks, for the scope of work described above, is \$86,240. A detailed breakdown of the estimated cost and our assumptions is presented on the attached spreadsheet. We will only charge for actual work performed.


The work will be done in accordance with our 2009 Professional Fee Schedule, which is attached and is the same fee schedule as our current 3-year contract for monitoring and surveillance of IRWD's five dams. We will only bill for actual work performed, and will not exceed the estimated maximum cost without your authorization. We will not charge for any mileage or computer usage, and we will not add any mark-up to subcontractors or supplies.

## **Authorization**

If this proposal is satisfactory and acceptable to the District, please issue a Variance to our current Purchase Order No. 124564.

We appreciate this opportunity to provide the District with our services. Please contact me or Dr. John Ho at (949) 753-8766 if you have any questions, need additional information or wish to discuss any aspect of this proposal. Our E-Mail addresses are [joekul@genterra.com](mailto:joekul@genterra.com) and [johnho@genterra.com](mailto:johnho@genterra.com).

Sincerely,  
GENTERRA CONSULTANTS, INC.



Joseph J. Kulikowski, PE, GE  
President & Senior Principal Engineer

Enclosure: 2009 Professional Fee schedule  
Cost Estimate Spreadsheet

STYPHON CANYON DAM DSDO DAM NO. 1029-04																		
BILLING RATES ARE FROM 2009 FEE SCHEDULE PER 3-YEAR CONTRACT FOR MONITORING & SURVEILLANCE																		
Task	ESTIMATED HOURS			Sr. Staff			Tech. Design			Office			Expenses					
	Principal	Senior	Proj Mgr.	Engr.	JHSL	JHSL	Engr.	JWK	JWK	Asst.	Asst.	Word	Computer	Travel	Subs.	Total	Total	
	JJK	JJK	JJK	JHSL	JHSL	JHSL	JWK	JWK	Asst.	Asst.	Word	Computer	Travel	Subs.	Total	Total	Total	
	\$235	\$220	\$220	\$165	\$165	\$165	\$120	\$120	\$55	\$55	\$75	\$75	No Charge	No Charge	\$0	\$0	\$0	
1	12	14	14	24	24	24	3	4	1	2	1	1	0	0	0	0	0	\$10,900
2	6	6	6	24	24	24	5	5	1	2	1	1	0	0	0	0	0	\$2,500
3	1	1	1	4	4	4	1	1	1	1	1	1	0	0	0	0	0	\$8,125
4	2	2	2	8	8	8	30	30	1	1	1	1	0	0	0	0	0	\$1,645
5	2	2	2	4	4	4	6	24	1	1	1	1	0	0	0	0	0	\$10,700
5.1	6	12	14	14	14	14	4	4	2	1	1	1	0	0	0	0	0	\$6,965
5.2	4	7	16	16	16	16	17	8	1	1	1	1	0	0	0	0	0	\$10,925
5.3	2	4	12	12	12	12	2	2	0	1	1	1	0	0	0	0	0	\$2,625
6	4	24	40	40	40	40	4	4	2	1	1	1	0	0	0	0	0	\$13,025
6.1	2	8	18	18	18	18	2	2	1	1	1	1	0	0	0	0	0	\$5,300
6.2	4	8	12	12	12	12	4	4	1	1	1	1	0	0	0	0	0	\$5,600
7	4	8	12	12	12	12	44	44	1	1	1	1	0	0	0	0	0	\$5,600
Subtotal Hours	43	88	172	172	172	172	26	43	12	12	12	12	0	0	0	0	0	\$76,640
Subtotal Cost	\$10,125	\$19,360	\$28,980	\$28,980	\$28,980	\$28,980	\$3,510	\$5,160	\$925	\$925	\$925	\$925	\$0	\$0	\$0	\$0	\$0	\$8,700
Grand Total																		\$86,240

**Hours and Cost Estimate - GENTERRA Consultants, Inc.**  
 Irvine Ranch Water District (IRWD)  
 Evaluation of Sloughing and Design of Remedial Measures for Styphton Canyon Dam  
 Project No. 046-IRW  
 See Scope of Work and Services Dated 01/09/11 (Revised 1/13/11)  
 COST ESTIMATE REVISION 2 of 01/13/11 JJK/SPJH

**Activities**  
 From Scope of Work and Services  
 See Notes and Assumptions List Presented Below

**Project Personnel Initials and Names:**  
 JJK - Jason J. Rukowski, PE, GE  
 SPJ - Scott S. Scharfstein, PhD, PE, GE  
 SPJ - Douglas A. Hartman, PE, CGWP, REA  
 SPJ - John H. Ph.D., PE, GE  
 SPJ - Steve L. Ph.D., PE  
 SPJ - Nicholas M. Weston, EIT  
 SPJ - Krishna M. Mohan  
 SPJ - Joe Dzusak, EIT  
 SPJ - J. W. Kulkowski  
 SPJ - Ken L. Olsen  
 SPJ - Robin Gallo

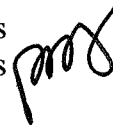
**Notes and Assumptions:**  
 1. In Task 4, the Division of Safety of Dams (DSDO) alteration application fee is not included (We assumed that the District will provide credits for DSDO)  
 2. The estimated hours and costs are maximum values, and will not be exceeded without authorization by the District  
 3. Utility Houring is not included  
 4. Hand-dugging will be performed by GENTERRA field personnel to log holes, determine water depths and obtain soil samples at selected locations per DSDO approved Work Plan  
 5. Costs for field and lab work are subject to revision pending completion of review or Work Plan by DSDO



January 24, 2011

Prepared by: Paul Jones

Submitted by: Paul Jones



## ACTION CALENDAR

### APPROVAL OF AGREEMENT BETWEEN MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (MWDOC) AND ITS MEMBER AGENCIES ON BUDGET, ACTIVITIES, CHARGES AND OTHER SERVICES

#### SUMMARY:

Since the Orange County Local Agency Formation Commission (LAFCO) Governance Study was received and filed by the commission on September 9, 2009, the south County agencies<sup>1</sup> have been negotiating with MWDOC to develop terms and conditions for an agreement to establish an acceptable wholesale service model under MWDOC's existing governance structure.

On April 12, 2010, the IRWD Board approved a conceptual framework for the agreement to specifically address MWDOC's budgeting process, reserves, choice of services and project committees, revenue collection, county-wide coordination on MWD issues and designation of a Metropolitan Water District (MWD) Director by the south County agencies for appointment by MWDOC. Subsequent to the approval of the conceptual framework, MWDOC drafted an agreement and over several months negotiated final language with an ad hoc committee of staff and elected officials representing the south County member agencies. The agreement, which is entitled: "*Agreement Between MWDOC and its Member Agencies on Budget, Activities, Charges and Other Issues*," dated December 14, 2010, represents consensus language developed by MWDOC and the south County agencies and captures all key provisions of the conceptual framework.

On January 6, 2011, MWDOC distributed the agreement to its member agencies and is requesting approval at this time. The agreement and a transmittal cover letter from MWDOC are provided as Exhibit "A." After MWDOC determines that a sufficient number of its member agencies have approved the agreement, the agreement will be taken to the MWDOC Board for final approval at which time it will go into effect. IRWD staff and legal counsel have reviewed the final agreement language and staff recommends approval by the IRWD Board and authorization for the President to execute the agreement, as presented.

#### BACKGROUND:

On November 14, 2007, LAFCO approved the Municipal Service Review (MSR 06-38) and Sphere of Influence (SOI 07-04) for MWDOC and directed staff to develop a scope, schedule and budget for funding a study to examine governance options. On February 13, 2008, LAFCO

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<sup>1</sup> El Toro Water District (ETWD), Moulton Niguel Water District (MNWD), Irvine Ranch Water District (IRWD), South Coast Water District (SCWD), Santa Margarita Water District (SMWD), Trabuco Canyon Water District (TCWD), Laguna Beach County Water District (City of Laguna Beach), and the cities of San Juan Capistrano and San Clemente.

approved the draft scope for the MWDOC governance study and subsequently approved a contract with the firm of Winzler & Kelly to conduct the study under LAFCO's direction.

The governance study was designed to be a fatal flaw analysis of a broad range of governance options, and to determine what options were feasible based upon criteria including provisions of service, financial benefits and constraints, representation locally and at MWD, and legal limitations (specifically, would legislation be necessary to implement). Initially, the following alternatives were identified and analyzed.

In coordination with the ETWD, MNWD, SCWD, SMWD and TCWD, comments were prepared and submitted on various drafts of the study. The final draft of the study included a key conclusion that formation of the south Orange County agencies into either a six- or nine-agency County Water Authority that would be detached from MWDOC and become a separate MWD member agency was "institutionally and financially feasible." The LAFCO commission received and filed the study on September 9, 2009 and concurrently urged the agencies and MWDOC to work together to determine if issues could be resolved under MWDOC's existing governance structure.

Since the LAFCO governance study was structured as a fatal flaw analysis that was not designed to provide in-depth analysis or refinement of the feasible alternatives, the six agencies concluded that more research needed to be done to determine if the County Water Authority alternatives identified as feasible were desirable and should be pursued.

Staff from the six agencies conducted additional research and jointly developed a white paper on governance alternatives using a County Water Authority model. This was done in parallel with the LAFCO governance study. The work product from this effort entitled: "*Draft White Paper Regarding the Formation of a South Orange County Water Authority*" was originally issued on June 23, 2009. The paper was revised and finalized to reflect comments and updated information on October 1, 2009. The paper provided background on the issues and concerns with MWDOC's current governance, developed a proposed South County Water Authority structure, provided a proposed budget and service plan, reviewed the LAFCO formation process, and provided conclusions regarding the benefits of this governance option.

#### Negotiations with MWDOC on a Conceptual Framework

Since the LAFCO governance study was received and filed by the Commission on September 9, 2009, the south County agencies have been negotiating with MWDOC to develop an acceptable wholesale service model under MWDOC's existing governance structure. As a result of these discussions, MWDOC prepared a proposal entitled: "*Response to items conceptually agreed upon in negotiations with South County*" dated April 7, 2010. The proposal addressed the following key issues:

- Reductions in MWDOC's budget for FY 2010/11 of \$475,000 below the FY 2009/10 budget;

- Reductions in general fund discretionary reserves held by MWDOC to \$3.7 million; and designation of restricted (\$0.5 million irrevocable trust for OPEB), unrestricted and designated reserve categories;
- Ability for member agencies to “choose” certain services and projects;
- A process for transitioning MWDOC’s core budget revenue collection to a fixed charge over a five-year period;
- Establishment of a formal forum for member agency elected official interaction and input on budget, reserves and other water policy matters;
- A process for south and north Orange County agencies to each select one Metropolitan Water District (MWD) Director; and to provide input on the remaining MWD Directors selected by MWDOC; and
- Establishment of a county-wide “MWD Roundtable” to better coordinate MWD positions between MWDOC, Fullerton, Santa Ana, Anaheim and MWDOC’s retail member agencies.

Based upon the proposal provided by MWDOC and the input received from the south County member agencies, the proposal was approved by the IRWD Board with clarifications on April 12, 2010.

#### Final Negotiations with MWDOC on Proposed Agreement

Subsequent to the approval of the conceptual framework in April 2010, MWDOC began the process of drafting an agreement to reflect the agreed-upon terms and address the requested clarifications. On June 28, 2010, MWDOC transmitted a first draft of the proposed agreement to its member agencies. Although the draft agreement included the basic principles of the conceptual framework, MWDOC had incorporated other provisions which were inconsistent with, and in some cases, eroded the intent of the agreed-to conceptual terms.

Elected official representatives and the general managers of the south County agencies met and conferred on the draft agreement. As a result of these meetings, the general managers collectively prepared a letter to MWDOC communicating serious concerns with the draft and questioning if MWDOC was committed to entering into an agreement that would fully and unequivocally implement the agreed-to terms. This letter is provided as Exhibit “B.”

In the summer of 2010 MWDOC requested meetings with a representative group of elected officials from the south County agencies and the MWDOC Board to determine what revisions needed to be made to the draft agreement to garner the south County agencies’ support. The elected officials representing the group were from IRWD, Santa Margarita Water District, Trabuco Canyon Water District and Moulton Niguel Water District; and MWDOC included their consultant, Dick Ackerman, to help facilitate the discussions. Various sections of the draft agreement were reviewed and concepts for resolving the issues were exchanged, but no agreement language was prepared or distributed.

On September 17, 2010, MWDOC transmitted to its member agencies what it termed a “final” draft of the agreement and requested the agencies approve the agreement, as presented. Once again the south County agencies’ elected official representatives and managers convened to review the agreement and determine its acceptability. Although substantial progress had been made on the agreement language, there were certain provisions of the agreement that still required clarification and revision. The south County agencies drafted amendments to the agreement and on November 18, 2010, sent a letter to MWDOC transmitting a marked-up version of the agreement and explaining the agencies’ rationale for the revisions. A tabular summary of the agencies’ proposed revisions was provided with the letter, which is attached as Exhibit “C.”

After receiving the south County agencies’ proposed revisions, MWDOC informally communicated with representatives of the south County agencies that the proposed revisions transmitted with the November 18, 2010 letter were acceptable with two exceptions: the term of the agreement and the process for approving amendments. MWDOC had originally requested a 20-year term for the agreement which was not acceptable to the south County agencies. The agencies instead wanted a two-year term or a simple termination for non-performance if MWDOC or the signatory agencies deemed the agreement was not working. MWDOC’s primary concern was the need for long-term stability and the desire to quash any potential for a LAFCO detachment effort. MWDOC subsequently offered a 10-year term. However, the consensus of the south County agencies was that a five-year initial term was the maximum length the agencies were willing to accept. This term offered reasonable assurances to MWDOC but did not foreclose the pursuit of future governance alternatives by the south County agencies if MWDOC’s performance under the agreement was not acceptable. The five-year term also corresponded to the LAFCO Municipal Services Review cycle. After further review, MWDOC accepted the proposed five-year term with the option to renew the agreement for additional five-year terms by mutual consent of the parties.

The second outstanding issue raised by MWDOC was the agreement amendment process. MWDOC had originally proposed a process whereby a majority of their member agencies could amend the agreement, even if some of those member agencies were not original signatories. This provision was proposed by MWDOC to allow an expedited amendment process. The south County agencies opposed a mechanism whereby a non-signatory agency could affect an amendment. After further negotiation, MWDOC proposed that any amendment to the agreement had to be approved by all the signatory agencies. The south County agency representatives concurred with this approach.

Based upon the negotiated language, on January 6, 2011, MWDOC distributed to its member agencies a final version of the agreement and is requesting approval at this time. After MWDOC determines that a sufficient number of its member agencies have approved the agreement, the agreement will be taken to the MWDOC Board for final approval at which time it will go into effect. IRWD staff and legal counsel have reviewed the final agreement language and staff recommends approval of the agreement by the IRWD Board and authorization for the President to execute the agreement, as presented.



**FISCAL IMPACTS:**

None.

**ENVIRONMENTAL COMPLIANCE:**

Not applicable.

**COMMITTEE STATUS:**

This item was not reviewed by a Committee.

**RECOMMENDATION:**

**THAT THE BOARD APPROVE AND AUTHORIZE THE PRESIDENT TO EXECUTE THE DECEMBER 10, 2010, AGREEMENT BETWEEN MWDOC AND ITS MEMBER AGENCIES ON BUDGET, ACTIVITIES, CHARGES AND OTHER ISSUES.**

**LIST OF EXHIBITS:**

- Exhibit "A" – Transmittal letter and Agreement Between MWDOC and its Member Agencies on Budget, Activities, Charges and Other Issues, dated December 14, 2010 (cover letter dated January 6, 2011)
- Exhibit "B" – Letter to MWDOC from south Orange County agency managers regarding: Proposed Municipal Water District of Orange County "Client Agency" Agreement, dated July 16, 2010
- Exhibit "C" – Letter to MWDOC from south Orange County water agency and city elected official representatives regarding: Agreement Between MWDOC and its Member Agencies on Budget, Activities, Charges and Other Issues, dated November 18, 2010



# EXHIBIT "A"



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Susan Hinman  
Director

Ed Royce, Sr.  
Director

Kevin P. Hunt, P.E.  
General Manager

## MEMBER AGENCIES

City of Brea  
City of Buena Park  
East Orange County Water District  
El Toro Water District  
Emerald Bay Service District  
City of Fountain Valley  
City of Garden Grove  
Golden State Water Co.  
City of Huntington Beach  
Irvine Ranch Water District  
Laguna Beach County Water District  
City of La Habra  
City of La Palma  
Mesa Consolidated Water District  
Moulton Niguel Water District  
City of Newport Beach  
City of Orange  
Orange County Water District  
City of San Clemente  
City of San Juan Capistrano  
Santa Margarita Water District  
City of Seal Beach  
Serrano Water District  
South Coast Water District  
Trabuco Canyon Water District  
City of Tustin  
City of Westminster  
Yorba Linda Water District

January 6, 2011  
Via email

Dear Board and Council Members,

**Subject: Approval of Agreement between Municipal Water District of Orange County (MWDOC) and its Member Agencies**

MWDOC has been working with its Member Agencies on changes to its business model which will enable us to better meet our agencies' needs and resolve long standing causes of disagreement with several of our Member Agencies. We thank all the City Council, Board members, water managers and staff for their assistance and patience with the process. On September 17, 2010, we distributed an Agreement to achieve new goals. Subsequently, several relatively minor changes were necessary for clarity and ease of implementation. The changes include:

- Moving Emerald Bay Service District from a North county agency to a South county agency
- Reducing the term of the agreement to five years
- Clarifying that rights and objectives specified only apply to signatory agencies
- Clarifying provisions on restrictions of actions by all parties with regard to LAFCO
- Specifying that amendments will only be implemented with unanimous consent
- Changing several minor points for clarity and consistency

Attached please find the Settlement Agreement between MWDOC and its Member Agencies on Budget, Activities, Changes and other Issues. Also attached, MWDOC has drafted a sample staff report for your use or modification in presenting the Settlement Agreement to your Board or Council. The Agreement is now ready for your consideration and action. I am asking for your agency's/city's approval. Upon approval by MWDOC's Member Agencies, the Agreement will go to MWDOC for action.

Please note that we are available anytime to explain any aspect of the agreement and its potential impacts on your agency/city. Please refer all questions to our General Manager, Kevin P. Hunt, at 714/593-5026 or email [khunt@mwdoc.com](mailto:khunt@mwdoc.com). Mr. Hunt will be glad to meet with you at your convenience. Meetings with your elected officials will include our MWDOC Director representative.

Thank you again for all of the hours you have spent over the past few months and years in negotiating this agreement. We look forward to working together to assure the future water supply reliability in Orange County at the lowest cost for all of our citizens.

Sincerely,

A handwritten signature in cursive script that reads "Joan C. Finnegan".

Joan C. Finnegan  
President

**AGREEMENT BETWEEN MWDOC AND ITS MEMBER AGENCIES ON  
BUDGET, ACTIVITIES, CHARGES, AND OTHER ISSUES**

This Agreement is made by and between the Municipal Water District of Orange County ("MWDOC") and those of its 28 Member Agencies that have signed below (referred to collectively as "Member Agency Parties" and individually as "Member Agency Party"). Signatories to this Agreement are also referred to herein collectively as "Parties" and individually as "Party." This Agreement is effective as of the Effective Date established pursuant to Section 12.1 below.

**RECITALS**

WHEREAS, MWDOC is a wholesale water provider to 28 Member Agencies in Orange County, California; and

WHEREAS, MWDOC is a member agency of the Metropolitan Water District of Southern California ("MET") and appoints four (4) directors to MET's Board of Directors, and

Whereas, MWDOC was formed in 1951 by Orange County voters to provide imported water from MET into Orange County; and

Whereas, MWDOC has been performing this function and many other functions since its formation in support of Member Agencies within its service area; and

Whereas, MWDOC was formed and operates pursuant to the Municipal Water District Law of 1911 (Water Code Section 71000 et seq.) and is governed by a seven-member publicly elected Board of Directors; and,

Whereas, an essential area of MWDOC's authority includes the setting of rates for water commodities and services, and while rates may be different for different classes or conditions of service, they shall be uniform for like classes and conditions of service (Water Code § 71614); and,

Whereas, an essential area of MWDOC's authority includes representing the Member Agencies at MET to ensure that the approximately \$140 million paid to MET each year by MWDOC is used effectively and efficiently; and,

Whereas, in addition to its role at MET, MWDOC's regional services to its Member Agencies currently include water use efficiency programs, water supply planning activities to improve reliability and emergency preparedness, the Water Emergency Response Organization of Orange County ("WERO"), the school education program, and numerous other programs; and

Whereas, in support of these services to its Member Agencies, MWDOC seeks grant funding for its programs, engages lobbyists on the Federal, State and local levels, and operates a public affairs department that serves its Member Agencies and their customers; and

Whereas, MWDOC's budget and rates have been the subject of discussion between MWDOC and some of its Member Agencies over the past several years, and these Member Agencies have raised concerns over whether the rate structure is equitable and whether a Member Agency should be able to opt out of certain services if it provides those services; and

Whereas, in conjunction with the preparation by the Orange County Local Agency Formation Commission ("OCLAFCO") of its 2007 Municipal Services Review and Sphere of Influence for MWDOC, MWDOC and several of its Member Agencies from southern Orange County participated in a series of "stakeholder" discussions facilitated by OCLAFCO in an attempt to resolve these and other concerns; and

Whereas, following approval by Orange County LAFCO of the 2007 Municipal Services Review and Sphere of Influence for MWDOC, OCLAFCO retained a consultant to conduct a study of "governance options" for MWDOC ("Governance Study"), which Study was funded 50% by MWDOC and 50% by six of its Member Agencies from southern Orange County; and

Whereas, the same six Member Agencies, namely El Toro Water District, Trabuco Canyon Water District, Santa Margarita Water District, Irvine Ranch Water District, Moulton Niguel Water District and South Coast Water District, have issued a "White Paper" regarding the formation of a "South Orange County Water Authority" that discusses issues associated with formation of such an agency if certain changes in MWDOC's operations are not made; and

Whereas, the Governance Study recommended the addition of three Member Agencies into the Study effort -- the City of San Clemente, the City of San Juan Capistrano and Laguna Beach County Water District, thereby bringing the total number of "South County Agencies" to nine; and

Whereas, the other Member Agencies of MWDOC are the City of Brea, City of Buena Park, City of Fountain Valley, City of Garden Grove, City of Huntington Beach, City of La Habra, City of La Palma, City of Newport Beach, City of Orange, City of Seal Beach, City of Tustin, City of Westminster, East Orange County Water District, Emerald Bay Services District, Golden State Water Company ("GSWC"), Mesa Consolidated Water District, Orange County Water District, Serrano Water District, and Yorba Linda Water District.

Whereas, Emerald Bay Services District boundaries are located in the southern Orange County area and has requested to be included as a South County Agency, as hereinafter defined for purposes of this agreement; and

Whereas, the Parties signing below have reached a comprehensive agreement, memorialized herein ("Agreement"), that accommodates the interests of all

Parties, maintains MWDOC as the wholesale regional planning agency and promotes a cooperative and collaborative partnership between MWDOC and its Member Agencies;

NOW, THEREFORE, THE PARTIES ACKNOWLEDGE AND AGREE AS FOLLOWS:

**1. DEFINITIONS**

- 1.1 "South County Agencies," as referenced in the recitals above, refers collectively to City of San Clemente, City of San Juan Capistrano, El Toro Water District, Irvine Ranch Water District, Laguna Beach County Water District, Moulton Niguel Water District, Santa Margarita Water District, South Coast Water District, Trabuco Canyon Water District and Emerald Bay Services District.
- 1.2 "Member Agencies" refers to any and all entities, public or private, that purchase water from MWDOC. "Member Agency Parties" refers to Member Agencies who have signed this Agreement.
- 1.3 "North County Agencies" as referenced in the Recitals above refer collectively to Member Agencies (other than the South County Agencies), including the City of Brea, City of Buena Park, City of Fountain Valley, City of Garden Grove, City of Huntington Beach, City of La Habra, City of La Palma, City of Newport Beach, City of Orange, City of Seal Beach, City of Tustin, City of Westminster, East Orange County Water District, District, Golden State Water Company, Mesa Consolidated Water District, Orange County Water District, Serrano Water District, and Yorba Linda Water District.

**2. MWDOC BUDGET**

- 2.1 **Core and Choice Services.** Commencing in Fiscal Year 2011-2012, MWDOC will organize its budget according to "Core" services and "Choice" services. (See Section 4 below regarding designation of specific services as Core and Choice.)
  - 2.1.1 The Core services budget shall include services identified by MWDOC as services that are both essential to its mission and carried out on behalf of the entire MWDOC service area for all 28 Member Agencies. The Core services also include services that MWDOC determines cannot practicably or efficiently be budgeted and charged to individual Member Agencies on an agency-by-agency basis.

- 2.1.2 Choice services shall be budgeted, described, and priced in a manner that is intended to allow individual Member Agencies to decide whether to receive such services from MWDOC. MWDOC's costs for Choice services provided, including related Overhead costs, will be recovered only from the MWDOC Member Agencies electing to receive the service.
- 2.1.3 Once Core and Choice services are established for the purpose of the Fiscal Year 2011-2012 budget, those designations and their associated cost allocations shall thereafter be presumed reasonable and appropriate; and such designations and cost allocations will be used by MWDOC in its budgeting in subsequent years, subject to Paragraph 5.3 below. The designation of any new or different services to be offered by MWDOC as Core or Choice will be made at the time the services are considered for approval by the MWDOC Board and will be subject to input from the Member Agencies during the review process described below.

**2.2 Review of Budget.** MWDOC will continue its practice of soliciting and considering review and input on its budget from all MWDOC Member Agencies commencing in December and developing a conceptual draft budget for Member Agency review the following January. On or before March 1<sup>st</sup> of each calendar year, MWDOC shall publish its draft budget and shall solicit comments from Member Agencies. Each Member Agency shall indicate to MWDOC in writing by March 15<sup>th</sup> of each year if any changes in the Choice Services they will be participating in are being considered or are to be deleted as a Choice Service (some services, such as the South Orange Coastal Ocean Desalination Project, have existing contractual commitments that differ from fiscal year commitments). In the absence of such timely notification of changes by the Member Agencies, the Member Agencies will be deemed to be participating without change in those Choice services in the following budget year to the same extent that the Member Agencies are participating in such Choice Services as of March 15. Member Agencies desiring to submit formal comments on the budget shall deliver such formal comments to MWDOC before April 15<sup>th</sup>. (See Section 6.1 below, "Elected Officials Meeting.") These comments will be considered in preparation of the final Budget and will be presented to the MWDOC Board in May. The Parties acknowledge that the MWDOC Board is solely responsible for final approval and establishment of the MWDOC Budget and all rates and charges.

### 3. **MWDOC'S RESERVES**

- 3.1 Purpose.** MWDOC's Reserves allow it to meet operating and emergency financial requirements for operation of the District, including cash flow for managing grants and such expenses as future building improvements, Other Post Employment Benefits (OPEB), unforeseen emergencies, potential litigation, and MWDOC elections.
- 3.2 Reserve Line Items.** MWDOC adopted a Reserve Policy on June 16, 2010, as outlined in the chart below. MWDOC will segregate its reserves into these categories and will report on the levels each year during the budget preparation process:

<b>MWDOC Proposed Reserves as of June 30, 2010</b>	
<b>Reserve Category</b>	<b>Proposed Amount</b>
General Reserves (Unrestricted Reserve)	\$1,850,000
Grant/WUE Cash flow (Designated Reserve)	\$1,000,000
Election Expense (Designated Reserve)	\$ 500,000
Building Repair/Replacement (Designated Reserve)	\$ 350,000
<b>Total Designated or Unrestricted</b>	<b>\$3,700,000</b>
<b>OPEB Reserve (Irrevocable Trust -- Restricted)</b>	<b>\$500,000</b>



#### **4. MWDOC CHOICE SERVICES**

MWDOC shall institute a budgeting process in accordance with Section 2 above based on a designation of certain MWDOC services as Core services and other MWDOC services as Choice services. For the purposes of this Agreement and the MWDOC 2011-2012 Budget, the designation of Core and Choice services and Overhead costs are identified in Table A, attached. (See 5.3 below.) Input to any proposed changes in the designations shall be solicited from the Member Agencies in the annual budget preparation process in accordance with Section 2.2 above.

##### **4.1 Designation of Choice Services.**

The Choice categories identified at this time are described below. During the first half of fiscal year 2010-11, MWDOC Staff and the Member Agencies will work together to develop the concept, structure, budget and participation terms for the following services and any others identified for implementation beginning July 1, 2011. These will be developed in such a way as to be offered to the Member Agencies for participation and will be incorporated into the proposed budget for 2011-12.

##### **4.1.1 Project Participation Committees**

4.1.1.1 South Orange Coastal Ocean Desalination Project will continue to be organized in a Project Participation format with five agencies participating on an equal cost-sharing basis. The participating agencies will ultimately determine all institutional, financing and delivery issues for the project.

4.1.1.2 Poseidon Huntington Beach Ocean Desalination Project is currently organized in a Project Participation format with 23 agencies participating on an equal cost-sharing basis. The costs to date for outside consulting have been paid for by Poseidon, so no local costs have been paid by the agencies.

##### **4.1.2 MWDOC - Member Agency Agreements**

4.1.2.1 School Program will be organized with each Member Agency participating and paying its share of costs on a per student basis, and this Program also includes as participants the non-Member Agency cities of Anaheim, Fullerton, and Santa Ana.

4.1.2.2 Water Use Efficiency Program will be developed as a pay-as-you-go or a pay-for-participation basis instead of a "choice" basis. Functionally, however, there will be "choice" programs offered to all Member Agencies by agreement or through direct participation by retail consumers or others in the water service area. The Parties anticipate that the terms for the agreements between MWDOC and the Member Agencies will range between 3 and 5 years. The eight programs currently in operation include:

- Residential clothes washers
- Sprinkler nozzles
- SmarTimers
- CII Plumbing Fixtures
- Synthetic Turf
- Hotel Program
- Industrial Program
- Landscape Certification Program

**4.2 Right to Submit Proposal.** If a Member Agency Party does not participate in a MWDOC Choice Service pursuant to the provisions of this Agreement, including Section 2 above, and desires to participate in a substantially similar Service from another Member Agency Party, as set forth in a written proposal, such Member Agency Party shall deliver to MWDOC, no later than March 15<sup>th</sup> of each year, a copy of the written proposal to receive such Service. MWDOC shall have thirty (30) days from receipt of such proposal to submit a scope and cost to provide the Service, for the Member Agency Party's consideration.

**4.3 Core Programs shall be those listed in Table A.** Any funding brought in via MWDOC efforts from its State or Federal advocacy efforts, except for those specifically being funded through a Project Participation Agreement, shall be available to all MWDOC Member Agencies via Core or Choice Programs, e.g., such as the Water Use Efficiency Program.

**4.4 Overhead Costs shall be those listed in Table A.** The Overhead costs are allocated over all Core and Choice services. Subject to Paragraph 5.3, if activities are ever added to or removed from the

list of Core or Choice services, the commensurate proportion of Overhead costs will also be allocated accordingly. The determination of the Overhead cost percentage applicable to each Core and Choice service for any particular year shall be made during the budget preparation process and fixed for the entire budget year.

## **5. REVENUE COLLECTION**

The Parties agree that MWDOC should transition its current rate structure, which includes both a per retail connection charge and a per acre-foot charge, to a structure that includes only a per retail connection charge. Currently, MWDOC's revenue from water rate charges is approximately 65% on the per retail connection charge and 35% on the per acre-foot charge. As described below, MWDOC shall increase the percentage on the per retail connection charge gradually, reaching 100% in fiscal year 2015-16.

- 5.1 Fixed Charges.** Commencing in fiscal year 2011 -2012, MWDOC will begin transitioning to a 100% fixed charge. In the first year of this process, 80% of MWDOC's water rate charges for its operating budget will be fixed, and 20% will be water charges. Each year for the next four years, MWDOC will increase the amount on fixed charges by 5%.
- 5.2 Method of Fixed Charges.** MWDOC will continue to use the methodology in effect as of the Effective Date to define retail service connections independent of size as the method of passing charges to the Member Agencies on a fixed charge basis.
- 5.3 Designation of Core, Choice, and Overhead Services.** The designations of services and activities set forth in (i) Section 2.1 and Table A for Core and Choice Service, in (ii) Paragraph 4.4 and Table A for Overhead Costs, and in (iii) Paragraph 5.2 for Method of Fixed Charges, shall carry a presumption of reasonableness and, therefore, shall remain unchanged for the term of this Agreement, unless changed by amendment in accordance with the provisions of Section 15.

## 6. INTERACTION OF ELECTED OFFICIALS

**6.1 Elected Officials' Meeting.** MWDOC will hold a semi-annual meeting for elected representatives of the Member Agencies and a GSWC officer or the officer's designee in October and April ("Elected Officials' Meeting") in addition to any other meetings, workshops, or assemblies open to those officials. The meetings shall be chaired by the President of the MWDOC Board and it is the intent of the Parties that the primary attendees shall be members of their respective governing bodies. The forum will be used to discuss:

- MWDOC activities, policies, and budget (including reserves)
- MET activities and policies
- Statewide water resource issues
- Strategies to increase Orange County's water supply reliability and to minimize Orange County water costs
- Other topics of significant interest to the Orange County water community

Beginning in March 2011 and each year thereafter, upon completion of the first DRAFT of the MWDOC Budget for the upcoming year, MWDOC will formally request comments on the budget from all 28 Member Agencies, as described in Section 2.2 above. MWDOC will report on the budget comments received from the Member Agencies at the Elected Officials' Meeting described herein.

**6.2 Public Meetings.** The Elected Officials' Meetings shall be noticed public meetings of MWDOC's Board. Each Member Agency participating in these meetings shall be responsible for compliance with the Brown Act by its own legislative body. (Government Code § 54950 etseq.)

## 7. SELECTION OF MET DIRECTORS

**7.1 Recommended Appointments by MWDOC Member Agency Parties.**

Commencing with the first vacant MWDOC MET Director position following the Effective Date, the MWDOC Board will institute and follow the procedure set forth in this Section 7 for appointing MET Directors.

- 7.1.1 The MWDOC Administrative Code provides that the Board President shall nominate and the Board shall approve MET Directors.
  - 7.1.2 Under the conditions and procedures established in this Agreement, the MWDOC Board will delegate limited nominating power to the MWDOC Member Agencies for two of MWDOC's MET Director positions.
  - 7.1.3 When the first MET Director vacancy occurs following the Effective Date, the South County Agencies that are Member Agency Parties ("South County Parties") may nominate a candidate of their choosing ("MET Candidate") through a process to which they all agree, directly to the MWDOC President and Board. In the absence of agreement among the South County Parties, the nomination(s) shall be determined by a "one agency, one vote" process among the South County Parties. Nominations shall be stated in a letter to the MWDOC Board President signed by authorized elected representatives of the South County Parties. Once filled, that seat will be designated, pursuant to this Agreement, as the "South County Seat".
  - 7.1.4 When the second MET Director vacancy occurs following the Effective Date, the North County Agencies that are Member Agency Parties ("North County Parties") may nominate a MET Candidate of their choosing, through a process to which they all agree, directly to the MWDOC President and Board. In the absence of agreement among the North County Parties, the nomination(s) shall be determined by a "one agency, one vote" process among the North County Parties. Nominations shall be stated in a letter to the MWDOC Board President signed by authorized elected representatives of the North County Parties. Once filled, that seat will be designated, pursuant to this Agreement, as the "North County Seat".
- 7.2 The MWDOC Board shall consider each nominated MET Candidate seriously, in good faith and in the spirit of this Agreement and can only reject said MET Candidate for cause. The remaining MET Director seats shall continue to be filled pursuant to MWDOC's Administrative Code. MWDOC shall continue its practice of advising the Member Agencies when a vacancy occurs and soliciting potential candidates and input from all Member Agencies for filling these seats.
- 7.3 All MWDOC MET Directors shall serve for an indefinite term pursuant to the MWDOC Administrative Code; provided, however, a MWDOC MET Director holding the North County Seat or the South County Seat may be removed by MWDOC only after MWDOC has convened an ad hoc committee to review that MWDOC MET Director's performance and the ad hoc committee has solicited and considered the input of the respective nominating area as provided below. If a vacancy occurs in the North County Seat or the South County Seat, the North or South County Parties, as established herein, may make subsequent nominations to fill the vacancy in accordance with Sections 7.1.3 and 7.1.4, as applicable. The MWDOC Board President shall

consider appointment of an ad hoc committee to review the performance of MWDOC's MET Directors upon request of any MWDOC Board Member or Member Agency, or upon the MWDOC President's own determination. Such review, if any, may be conducted no more than once annually. If appointed, the ad hoc committee shall solicit input from the respective nominating areas on the performance of the North County and South County nominated MET Directors. Should the North County Parties or South County Parties deem it appropriate to remove their selected MET Director, they can make their request for removal to the MWDOC Board. The MWDOC Board will not unreasonably withhold action on such request(s).

**8. COMPLIANCE WITH MWDOC ADMINISTRATIVE CODE**

Any MET Candidate nominated and appointed as provided herein must be familiar with MWDOC's Administrative Code and express a willingness to comply with it. This includes, without limitation, meeting the criteria for a MWDOC MET Director established in Section 1500 of the MWDOC Administrative Code.

**9. COMPLIANCE WITH LAW**

The nomination and appointment of any MET Candidate, as provided herein, must comply with applicable statutory and case law.

**10. MET DIRECTOR ORANGE COUNTY CAUCUS**

MWDOC will schedule and conduct at its offices regular meetings of the MET Directors representing MET Member Agencies in Orange County. Meetings will be scheduled at least three (3) times per year to be determined by the Orange County MET Directors at the first meeting each year. The purpose of the meetings is to provide special access by all Member Agencies to the MET Directors representing Orange County.

**11. REMEDIES AND ENFORCEMENT**

**11.1 Remedies in General.** Except as set forth below, each Party shall have all remedies otherwise available to enforce the terms of the Agreement and to seek remedies for any breach hereof, including but not limited to the remedies set forth in Sections 11.2.3, 11.5 and 11.6 of this Agreement.

**11.2 Breach of the Agreement.**

- 11.2.1 Any material breach or material violation of the Agreement shall be deemed a default under this Agreement.
- 11.2.2 In the event of an alleged material breach or material violation of the Agreement, the Parties agree to work together in good faith to resolve any disagreement using the following dispute resolution process:
  - 11.2.2.1 The Party alleging a breach shall notify the other Parties of the basis for the allegation and the requested cure for the breach.
  - 11.2.2.2 The alleged breaching Party receiving notice of breach shall have 15 calendar days to respond. If the response acknowledges that a breach has occurred, the breaching Party shall have 30 days to cure such breach, provided that if such breach cannot be reasonably capable of being cured within said 30-day period, then the breaching Party shall not be in default of this Agreement provided that the breaching Party is diligently continuing to cure such default.
  - 11.2.2.3 If the Party alleging a breach and the alleged breaching Party disagree with respect to whether a breach has occurred, they shall meet and confer in good faith toward a mutually satisfactory solution. The meet and confer shall be open to all Parties.
  - 11.2.2.4 If the dispute cannot be resolved through the meet and confer process within 60 calendar days after the first meeting, the Party alleging a breach and the alleged breaching Party, along with any other Party that wishes to participate, shall engage in third party mediation, with the participating Parties to equally share mediation costs. Said mediation shall end no later than 90 calendar days after the completion of the original meet and confer process. No Party may file a lawsuit concerning the alleged breach until the mediation has ended.
  - 11.2.2.5 In the event a lawsuit is filed after completion of the mediation concerning the alleged breach, the Parties' rights and obligations under this Agreement shall continue until one of three actions occurs: (1) the agreement continues as drafted; (2) the agreement is terminated; or (3) an amendment to the agreement is entered into pursuant to Section 15.
- 11.2.3 Any Party to this Agreement may, in addition to any other remedy, seek an order from a court specifically enforcing the

obligations of the Parties to the Agreement to comply with this Section 11.2.

**11.3 Material Breach in the Event of Certain Activities.** The Parties to this Agreement have mutual interests in avoiding the time, expense, and uncertainty of either (a) legislative measures that would affect MWDOC's organizational form or (b) filing an application with the OCLAFCO for secession of a Party or detachment of a Party's territory from MWDOC. Consequently, the Parties to this Agreement agree that "material breach," within the meaning of Section II.(a) shall include (but not be limited to) the following activities that any Party hereto may undertake during the term of this Agreement:

11.3.1 The submission of an application with OCLAFCO to reorganize or undertake an action that would result in a Party's secession or the detachment of all or a portion of a Party's territory, from MWDOC, or would result in any other material change in governance or structure affecting MWDOC.

11.3.2 The filing of any written letters or testimony with, or providing verbal testimony to, any committee or other body of the State Legislature in support of legislative measures that would (A) materially affect MWDOC's organizational form or change the governance of MWDOC, and (B) would result in secession or detachment of territory from MWDOC by any Member Agency.

**11.4** An action constituting a material breach under Sections 2.2, 4, 5, 6, 7, 10, or 11.3 shall be subject to the dispute resolution provisions of Section 11.2.2.

**11.5 Enforcement.** Any Party may enforce compliance by a defaulting Party with the terms of this Agreement by, among other available remedies:

11.5.1 Filing a complaint for specific performance;

11.5.2 Filing an action to recover actual damages to which the notifying Party may be entitled for violation by the defaulting Party of the terms of this Agreement;

11.5.3 Filing an action to enjoin the violation, on an ex parte basis if necessary, by temporary or permanent injunction, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies, or for other equitable relief;



11.5.4 Petitioning for a writ of ordinary or administrative mandate ordering the defaulting Party to cure; and/or

11.5.5 Petitioning for a writ of ordinary or administrative mandate ordering OCLAFCO not to process an application filed in contravention of this Agreement.

**11.6 Injunctive and Temporary Relief Appropriate.** The Parties acknowledge that breach of this Agreement may not be adequately remedied by monetary damages and could result in irreparable harm to the aggrieved Parties. Therefore, injunctive and temporary relief may be appropriate to ensure compliance with the terms of this Agreement.

## **12. TERM OF AGREEMENT**

**12.1 Effective Date.** This Agreement shall be effective upon the date of execution by MWDOC, which shall execute the Agreement upon express approval of its Board ("Effective Date"). MWDOC shall inform all Parties by e-mail when that event occurs.

**12.2 Subsequent Execution.** Any Member Agency that executes this Agreement after the Effective Date shall, upon execution, become a full Party to the Agreement, with all the rights and obligations set forth herein.

**12.3 Termination Date.** This Agreement shall run for a term of five (5) years from the Effective Date, unless terminated as provided herein. This agreement may be extended by mutual agreement of all of the Parties hereto for subsequent term(s) five (5) years, or other period as mutually agreed to at the time of the extension.

## **13. OBLIGATIONS OF MEMBER AGENCIES**

**13.1 No OCLAFCO Application.** During the term of this Agreement, none of the Member Agency Parties shall prepare, hire a consultant to prepare, or submit an application to OCLAFCO requesting reorganization or any action that would result in detachment of any territory from MWDOC or any other change affecting the governance, structure, or finances of MWDOC, unless agreed to in writing by MWDOC. In the event that the OCLAFCO undertakes proceedings, whether in response to an application or pursuant to its own discretionary powers, that reduces the territory within the boundaries or affects or changes the governance, structure or finances of MWDOC, these proceedings shall be considered a material breach of this Agreement by the Party or

Parties filing, supporting or in any way furthering the application except to the extent their actions are required by law.

- 13.2 No Legislative Activities.** During the term of this Agreement, none of the Member Agency Parties shall pursue, support, or further any legislative measures that would affect MWDOC's organizational form, board or staff members, finances, exercise of powers, or governance or result in detachment of any territory from MWDOC, unless agreed to in writing by MWDOC.
- 13.3 Participation in Agreement.** During the term of this Agreement, the Member Agency Parties, and each of them, shall contribute staff time and resources as required to participate and contribute in good faith to the activities and changes discussed in this Agreement.

#### **14. OBLIGATIONS OF MWDOC**

**14.1 No OCLAFCO Application.** During the term of this Agreement, MWDOC shall not prepare, hire a consultant to prepare, or submit an application to OCLAFCO as described in Paragraph 13.1 relating to the governance, structure, or finances of MWDOC or any equivalent OCLAFCO application relating to the governance, structure, or finances of any of its Member Agencies, unless agreed to in writing by the affected Member Agency.

- 14.2 No Legislative Activities.** During the term of this Agreement, MWDOC shall not pursue, support, or further any legislative measures that would affect any Member Agency's organizational form, board or staff members, finances, exercise of powers, or governance or result in detachment of any territory from the Member Agency, unless agreed to in writing by the Member Agency.
- 14.3 Participation in Agreement.** During the term of this Agreement, MWDOC shall contribute staff time and resources as required to participate and contribute in good faith to the activities and changes discussed in this Agreement.

#### **15. AMENDMENT OF AGREEMENT**

- 15.1** Any amendment, alteration, or variation of any provision of this Agreement ("Amendment") will not be valid unless made in writing and approved as provided in this Section.
- 15.2** The Parties acknowledge that the process of obtaining initial approvals and execution of this Agreement has required a substantial investment of public resources and time and that the same process should not be required for subsequent Amendments to the Agreement that are proposed without objection. For this reason, Amendments to the Agreement may be made as provided in this section.
- 15.2.1** An Amendment to the Agreement proposed by MWDOC shall be distributed by MWDOC to all Parties signing this

Agreement for a 60-day review period.

15.2.2 Any and all comments and objections to the Amendment shall be provided by the Parties to MWDOC and the remaining Member Agency Parties before the conclusion of the 60-day review period.

15.2.3 If no objections are received by the conclusion of the 60-day review period, the Amendment shall be valid and binding on the Parties. Upon this occurrence, MWDOC will provide a copy of the Amendment to all Parties.

15.2.4 If any objections are received within the review period, MWDOC may submit the proposed Amendment to the Parties for signatures, and if the proposed Amendment is executed by MWDOC and all of the Member Agency Parties, the Amendment shall be valid and binding on the Parties. Upon this occurrence, MWDOC will provide a copy of the Amendment to all Parties.

15.3 An Amendment to the Agreement proposed by a Party other than MWDOC shall be submitted in writing to MWDOC. Upon receipt of the proposed Amendment, MWDOC shall then follow the procedures set forth in section 15.2 above.

## **16. NO ADMISSION BY ANY PARTY**

The Parties acknowledge that statements made by the Parties during negotiation of this Agreement, statements made in this Agreement, and all rights and obligations that arise from this Agreement were and are in furtherance of the goal of resolving issues between the Parties without the need for administrative or judicial proceedings, including possible OCLAFCO proceedings and litigation. Neither any statement made during negotiation of this Agreement nor any provision of the Agreement itself shall constitute an admission by a Party or be offered as evidence or included in any record of proceedings in any future administrative or judicial proceeding.

## **17. GENERAL PROVISIONS**

17.1 All Parties are deemed to have participated in the drafting of this Agreement, and any rule of law (including, but not limited to, Civil Code Section 1654) or legal principle that would require interpretation of this Agreement against the drafter hereto shall not apply and is waived by the Parties. This Agreement may be signed in multiple counterparts for convenience of the Parties.

17.2 This Agreement will inure to the benefit of and be binding upon all Parties and their respective successors and assigns.

17.3 This Agreement will be deemed a contract made under the laws of

the State of California and for all purposes will be interpreted in accordance with such laws. The Parties hereby agree and consent to the exclusive jurisdiction of the courts of the State of California.

- 17.4** This Agreement constitutes the entire agreement among the Parties. This Agreement supersedes any and all other understandings or agreements, either oral or in writing, among the Parties with respect to the subject matter hereof and contains all of the covenants and agreements among them with respect to said matters; and each Party acknowledges that no representation, inducement, promise of agreement, oral or otherwise, has been made by any other Party or anyone acting on behalf of any other Party that is not embodied herein.
- 17.5** If any action at law or equity, including any action for writ of mandate or injunctive relief, is brought to enforce or interpret the provisions of this Agreement, the prevailing Party(ies) shall be entitled to its or their reasonable attorney's fees and costs as against the Party(ies) that did not prevail in that action or proceeding.
- 17.6** All activities undertaken pursuant to this Agreement must be in compliance with all applicable state and federal laws and regulations.
- 17.7** In the event one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable by any court of competent jurisdiction, such portion shall be deemed severed from this Agreement and the remaining parts of this Agreement shall remain in full force and effect as though such invalid, illegal, or unenforceable portion had never been a part of this Agreement.
- 17.8** All communications set forth in this Agreement shall be in writing and transmitted to and among the Parties in a manner that is consistent with the custom and practice of MWDOC and its Member Agencies then in effect. Any computations of time shall start from 5:00 PM on the day of receipt.

**IN WITNESS WHEREOF**, the Parties hereto have executed this Agreement on the respective dates shown below.

Mayor, City of San Clemente

Date

Mayor, City of San Juan Capistrano

Amended 12-14-10

Date

President, El Toro Water District

Date

President, Irvine Ranch Water District

Date

President, Laguna Beach County Water District

Date

President, Municipal Water District of  
Orange County

Date

President, Moulton Niguel Water District

Date

President, Santa Margarita Water District

Date

President, South Coast Water District

Date

President, Trabuco Canyon Water District

Date

Mayor, City of Brea

Date

Mayor, City of Buena Park

Date

Mayor, City of Fountain Valley

Date

Mayor, City of Garden Grove

Date

Mayor, City of Huntington Beach

Date

Mayor, City of La Habra

Date

Mayor, City of La Palma

Date

Mayor, City of Newport Beach

Date

Mayor, City of Orange

Date

Mayor, City of Seal Beach

Date

Mayor, City of Tustin

Date



Mayor, City of Westminster

Date

President, East Orange County Water District

Date

President, Emerald Bay Service District

Date

Officer, Golden State Water Company

Date

President, Mesa Consolidated Water District

Date

President, Orange County Water District

Date

President, Serrano Water District

Date

President, Yorba Linda Water District

Date

**Table A - MWDOC Breakdown of Services/Activities/Costs**

Core Services	Choice Services	Overhead Costs
<p>Board Compensation &amp; Benefit</p> <p>Retiree Costs</p> <p>Legal Costs</p> <p>Board Elections</p> <p>Accounting and General Admin</p> <p><u>MET Representation</u></p> <ul style="list-style-type: none"> <li>• MET Director Support</li> <li>• MET policy analysis, programs and special projects</li> <li>• MET operations, water rates and accounting</li> </ul> <p>Staff time for MWDOC's Water Use Efficiency Programs Manager</p> <p><u>Governmental Affairs</u></p> <ul style="list-style-type: none"> <li>• In-house staff for legislative info</li> <li>• WACO, ISDOC and other support</li> <li>• Federal lobbyist for countywide funding</li> <li>• State lobbyist for countywide legislative, grant funding and policy access</li> <li>• Local lobbyist for Board of Supervisors</li> </ul> <p><u>Public Affairs</u></p> <ul style="list-style-type: none"> <li>• Coordination with MET, other regional and local retailers</li> <li>• Basic communications functions-media outreach and inquiries, water information and messaging, MWDOC website</li> <li>• MWDOC newsletter (e-currents)</li> <li>• Countywide surveys as appropriate</li> <li>• Countywide water awareness in coordination with retail agencies</li> </ul> <p><u>Research</u> – support for Center for Demographic Research</p> <p><u>Water Supply Planning</u></p> <ul style="list-style-type: none"> <li>• Coordination among agencies</li> <li>• Water use tracking and projections</li> <li>• Water supply analysis</li> <li>• Regulatory compliance issues</li> <li>• Water trends analysis</li> <li>• Countywide studies</li> </ul> <p>Water Emergency Response Organization of Orange County (WEROC) – MWDOC contribution</p>	<p><u>Water Use Efficiency</u></p> <ul style="list-style-type: none"> <li>• Residential clothes washers</li> <li>• Sprinkler nozzles</li> <li>• SmartTimers</li> <li>• CII Plumbing Fixtures</li> <li>• Synthetic Turf</li> <li>• Hotel Program</li> <li>• Industrial Program</li> <li>• Landscape Certification Program</li> </ul> <p>Includes marketing materials for WUE activities, staff time, overhead and grant funds (MET and other)</p> <p><u>Governmental Relations</u></p> <ul style="list-style-type: none"> <li>• Any project or program legislative or grant support on choice activities – Townsend Public Affairs</li> </ul> <p><u>Specific Programs</u></p> <ul style="list-style-type: none"> <li>• School program</li> <li>• South Orange Coastal Ocean Desal Project                             <ul style="list-style-type: none"> <li>○ Federal lobbying for SOCODP – Barker</li> <li>○ Federal lobbying for SOCODP – Townsend</li> </ul> </li> <li>• Support for Poseidon Desal Project</li> <li>• Other Project specific studies</li> <li>• Non-countywide issue studies</li> </ul>	<p>Salary charged to overhead function (vacation, sick leave and holidays)</p> <p>Personnel development</p> <p>Legal costs charged to overhead function</p> <p>Employee benefits</p> <p>Personnel/staff development</p> <p>Information technology</p> <p>Conference employee</p> <p>Travel &amp; Accommodations employee</p> <p>Automotive/Mileage/Toll</p> <p>Office maintenance</p> <p>Rents &amp; Leases</p> <p>Office supplies</p> <p>Insurance expenses</p> <p>Utilities – telephone</p> <p>Miscellaneous expenses</p> <p>Professional fees for overhead activities</p> <p>Software support</p> <p>Computers/software</p>



EXHIBIT "B"



July 16, 2010

Mr. Kevin Hunt, P.E.  
General Manager  
Municipal Water District of Orange County  
18700 Ward Street  
Fountain Valley, CA 92708

Dear Kevin,

Subject: Proposed Municipal Water District of Orange County (MWDOC)  
"Client Agency" Agreement

The nine undersigned south Orange County water agencies and cities<sup>1</sup> were pleased to receive the draft agreement entitled: "Agreement Between MWDOC and its Client Agencies on Budget, Activities, Charges and Other Issues" that was transmitted by MWDOC via cover letter dated June 28, 2010. The managers of these agencies have had a chance to conduct a preliminary review of the draft agreement and have met to discuss our comments. In summary, we are concerned that while the draft agreement includes the basic principles and provisions previously negotiated and agreed to by MWDOC and the south Orange County agencies' elected official representatives, the agreement as drafted incorporates other provisions that are inconsistent with or erode the intent of the conceptual terms set forth in the April 7, 2010 memorandum prepared by MWDOC and the April 28, 2010 letter from the undersigned agencies concurring with the terms and providing clarifications. This lack of consistency is somewhat disconcerting and raises a fundamental question regarding MWDOC's commitment to implementing the agreed-to conceptual terms as addressed below.

While as previously noted the draft agreement nominally includes all the conceptual principles and provisions agreed to by MWDOC and the south Orange County agencies, our foremost concern is that the draft agreement maintains MWDOC's *full discretion* regarding the way in which the substantive provisions are implemented and in some cases permits MWDOC to deviate from or even disregard the agreed-to terms. In addition, the draft agreement introduces entirely new terms that were neither proposed nor discussed during the negotiation process, and incorporates an overly complicated and legalistic breach, enforcement and remedy procedure that is contrary to a simple dispute resolution

<sup>1</sup> El Toro Water District (ETWD), Moulton Niguel Water District (MNWD), Irvine Ranch Water District (IRWD), South Coast Water District (SCWD), Santa Margarita Water District (SMWD), Trabuco Canyon Water District (TCWD), Laguna Beach County Water District (City of Laguna Beach), and the cities of San Juan Capistrano and San Clemente.

and, if unsuccessful, termination for non-performance that was agreed to by the south County agencies. Taken in total, the draft agreement requires substantial consideration over the proposed 20-year term from the MWDOC member agencies that sign the agreement, while only committing MWDOC to various service provision processes that still allow discretion in implementing the substantive terms.

To illustrate this point we would like to offer three examples. First, Section 5 of the draft agreement describes the process whereby MWDOC will transition to collecting revenue from its member agencies on the meter charge within five years. This is consistent with the agreed-to conceptual terms. However, at the end of this section MWDOC reserves the right to add a volumetric charge to the water it sells at its sole discretion, thereby nullifying MWDOC's commitment to collect revenue on the meter charge.

A second example concerns MWDOC's appointment of MWD Directors designated by the south County and north County agency groups, respectively. In the draft agreement, MWDOC reserves the right to reject a nominee from the agency groups "without cause." This is not only contrary to the negotiated terms but fundamentally maintains MWDOC's ability to arbitrarily decide who it appoints to the MWD Board to represent the agency groups regardless of the groups' recommendations.

Our final example pertains to an entirely new term added by MWDOC in the draft agreement. Specifically, Section 4.2 disallows a signatory agency from providing services "similar" to MWDOC's Choice services outside its service area. This provision would essentially prevent two or more MWDOC member agencies from collaborating on items such as school education programs, conservation efforts, desalination or other such projects or programs. This is not only objectionable because it is a newly-introduced term, but it is an ill-conceived idea that is contrary to cooperation and partnerships among member agencies.

The aforementioned items have raised a fundamental question that we believe needs to be answered before the undersigned agencies continue their efforts to negotiate an acceptable agreement with MWDOC that reflects the agreed-to conceptual terms. The fundamental question is whether or not MWDOC's management and Board believe the agency can enter into an agreement which fully and unequivocally implements the agreed-to terms (thereby limiting MWDOC's discretion in the principal areas negotiated) in exchange for the signatory agencies' significant curtailment of their discretion in the form of an agreement not to proceed with LAFCO or legislative actions regarding MWDOC's governance.

We request a Board-authorized response to this question so we can inform our elected representatives of MWDOC's intentions prior to proceeding on a schedule to finalize comments and engage in further negotiations regarding the draft agreement.

In closing, last April when MWDOC and the south County agencies came to an accord on conceptual terms our agencies were all very optimistic and pleased to bring this matter to resolution. Although we remain committed to a solution, the draft agreement has triggered renewed concerns regarding MWDOC's dedication to moving forward on a balanced and mutually beneficial basis.

Thank you for your consideration and we look forward to your response.

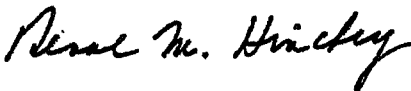
Sincerely,



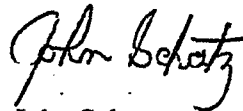
Bob Hill  
El Toro Water District



Paul D. Jones II  
Irvine Ranch Water District



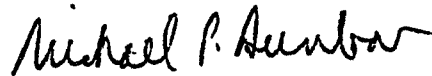
Renae Hinchey  
Laguna Beach County Water District



John Schatz  
Santa Margarita Water District



Don Chadd  
Trabuco Canyon Water District



Mike Dunbar  
South Coast Water District



Bob Gumerman  
Moulton Niguel Water District



Joe Tait  
City of San Juan Capistrano



George Scarborough  
City of San Clemente

cc: MWDOC north Orange County agencies' water service managers





**EXHIBIT "C"**

November 18, 2010

Ms. Joan Finnegan, President  
Municipal Water District of Orange County  
18700 Ward Street  
Fountain Valley, CA 92708

**Subject: Proposed Agreement between Municipal Water District of Orange County (MWDOC) and its Member Agencies on Budget, Activities, Charges and Other Issues**

Dear Ms. Finnegan:

Each of the nine undersigned south Orange County water agencies and cities<sup>1</sup> were pleased to receive both your letter and the September 17, 2010 draft of the agreement entitled: "Agreement Between MWDOC and its Member Agencies on Budget, Activities, Charges and Other Issues." We also would like to express our appreciation for the time and effort that the MWDOC Board and staff have committed to the negotiation process. Our collective goal is a positive outcome for all parties.

Since the receipt of the September 17, 2010 draft of the agreement, the managers of the south Orange County agencies and their elected representatives have met to review and discuss the draft agreement. We believe there has been excellent progress in resolving the issues, and the draft agreement successfully addresses the major points set forth in the April 7, 2010 memorandum prepared by MWDOC as well as the April 28, 2010 letter from the undersigned agencies concurring with the terms. The draft agreement also reflects many of the concerns expressed in the meeting between elected representatives of MWDOC and the member agencies held last summer.

In reviewing the draft agreement, we believe that additional clarifications are necessary for the governing bodies of the undersigned agencies to consider the agreement for approval. Most of these amendments are non-substantive and make clear that the terms, conditions and limitations apply to those that are signatory to the agreement and to activities within the control of those agencies. Other amendments have been added to better reflect the understandings discussed among the MWDOC and South County agencies' elected officials, and to clarify that certain obligations of MWDOC and the signatory agencies are reciprocal.

The single substantive revision to the agreement is the term. In the September 17, 2010 draft agreement MWDOC proposed a term of 10 years. The south Orange County member agencies believe that a five year term, with a five-year renewal by mutual agreement of the parties, would be acceptable. The five-year term is an appropriate compromise between the two-year term ("tolling") set forth by MWDOC in its April 7, 2010 memorandum to the

<sup>1</sup>El Toro Water District (ETWD), Moulton Niguel Water District (MNWD), Irvine Ranch Water District (IRWD), South Coast Water District (SCWD), Santa Margarita Water District (SMWD), Trabuco Canyon Water District (TCWD), Laguna Beach County Water District (City of Laguna Beach), and the cities of San Juan Capistrano and San Clemente.




member agencies documenting the negotiated terms and conditions and the 10-year term included in MWDOC's current draft of the agreement.

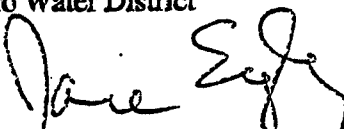
A tabular summary of the amendments and a revised version of the agreement dated November 18, 2010 that shows these revisions are attached for your use.


In closing, we would like to reiterate our appreciation to MWDOC for its efforts on the agreement and its commitment to moving forward on a balanced and mutually beneficial basis. Once MWDOC confirms the acceptability of the clarifications and amendments provided herein, we are prepared to place the enclosed amended agreement on the agendas of our respective governing bodies for their consideration.


Thank you and we look forward to your response.

Sincerely,


  
Ted Martin, President  
El Toro Water District

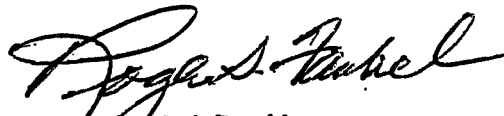
  
Jane Egly, President  
Laguna Beach County Water District


  
Matt Disston, Board Member  
Trabuco Canyon Water District


  
Richard Fiore, President  
Moulton Niguel Water District

  
Joe Anderson, Council Member  
City of San Clemente

  
Douglas Reinhart, President  
Irvine Ranch Water District

  
Roger Baubel, President  
Santa Margarita Water District

  
Richard Deitmeier, Board Member  
South Coast Water District

  
Laura Freese, Mayor Pro Tem  
City of San Juan Capistrano

cc: MWDOC Board of Directors  
MWDOC north Orange County agencies' water service managers

Attachments

Summary of Amendments to MWDOC Agreement

November 18, 2010

<p>Pages 1 and 2 – “Recitals” and “Definitions”</p>	<ul style="list-style-type: none"> <li>• Clarifies that rights and obligations specified in several areas of the agreement only apply to the signatory agencies (Member Agency Parties), not all MWDOC Member agencies.</li> </ul>
<p>Page 7 – “First Right of Refusal” (now “Right to Submit Proposal”)</p>	<ul style="list-style-type: none"> <li>• Provides MWDOC the opportunity to submit a competitive proposal for a choice service offered by another Member Agency Party.</li> <li>• Establishes a process whereby the Member Agency Party, not MWDOC, would make the decision regarding the service provider.</li> </ul>
<p>Pages 9 and 10 – “Selection of MWD Directors”</p>	<ul style="list-style-type: none"> <li>• Clarifies that only the signatory north and south County Member Agency Parties may participate in the selection process.</li> <li>• Specifies that before MWDOC may remove a seated MWD Director selected by north or south County agencies, MWDOC shall form an ad hoc committee to review performance and to confer with the appropriate north or south County agencies groups.</li> <li>• Removes all references to cause for removal.</li> </ul>
<p>Page 14 – “Term of the Agreement”</p>	<ul style="list-style-type: none"> <li>• Reduces the initial term of the agreement from 10 years to 5 years.</li> <li>• Adds the option to renew the agreement for subsequent term(s) of 5 years, or other term, by mutual consent of the parties.</li> </ul>
<p>Page 15 – “Obligations of Member Agencies” and “Obligations of MWDOC”</p>	<ul style="list-style-type: none"> <li>• Specifically defines the Member Agency Parties’ prohibited LAFCO activities to be the preparation, filing and processing of an application affecting MWDOC.</li> <li>• Provides that MWDOC’s obligations and limitations with respect to LAFCO and legislative activities are identical to those imposed on the Member Agency Parties.</li> <li>• Adds language to both MWDOC’s and the Member Agency Parties’ obligations that legislation affecting board or staff members is also prohibited.</li> </ul>
<p>Page 16 – “Amendment of Agreement”</p>	<ul style="list-style-type: none"> <li>• Limits the approval of amendments to the agreement to MWDOC and a majority of the signatory Member Agencies Parties, not a majority of all MWDOC Member Agencies.</li> <li>• Provides a process whereby both MWDOC and the Member Agency Parties can propose amendments for consideration by the Parties.</li> <li>• Allows an agency to withdraw from the agreement if it objects to an amendment approved by MWDOC and a majority of the Member Agency Parties.</li> </ul>



January 24, 2011

Prepared and Submitted by: Beth Beeman

Approved by: Paul Jones



**ACTION CALENDAR**

**SUPPORT FOR ALTERNATE SPECIAL DISTRICT COMMISSIONER ON THE  
ORANGE COUNTY LOCAL AGENCY FORMATION COMMISSION**

**SUMMARY:**

On January 10, 2011, the Board voted to support Charley Wilson as a Commissioner for the Orange County Local Agency Formation Commission (LAFCO) representing Special Districts and deferred consideration of candidates for the Alternate Commissioner representing Special Districts to the January 24, 2011 Board meeting. Staff recommends that the Board consider the candidates that have expressed an interest in serving as the Alternate Commissioner representing Special District on the LAFCO Board.

**BACKGROUND:**

The position of Commissioner representing Special Districts on the Orange County LAFCO Board is now open and will be filled by election at the Independent Special Districts of Orange County (ISDOC) Special Selection Committee meeting on January 27, 2011. On January 10, 2011, the IRWD Board voted to support Charley Wilson for this position.

If Charley Wilson is elected as Commissioner, the position of Alternate Commissioner will become vacant. An election to fill this vacancy will be conducted by ISDOC at its meeting on January 27, 2011. IRWD has received notice that four candidates have filed to run for the Alternate Commissioner position: Cheryl Brothers of Orange County Vector Control District, Joel Rattner of Rossmoor/Los Alamitos Area Sewer District, Bill VanderWerff of East Orange County Water District, and Jim Fisler of Mesa Consolidated Water District. Staff recommends that the Board consider the candidates for the Alternate Commissioner representing Special Districts on the LAFCO Board and, if warranted, support one of the candidates.

**FISCAL IMPACTS:**

None.

**ENVIRONMENTAL COMPLIANCE:**

None.

**RECOMMENDATION:**

**THAT THE BOARD CONSIDER SUPPORTING A CANDIDATE FOR THE ALTERNATE COMMISSIONER REPRESENTING SPECIAL DISTRICTS ON THE ORANGE COUNTY LOCAL AGENCY FORMATION COMMISSION AND TAKE ACTION AS APPROPRIATE.**

**LIST OF EXHIBITS**

None

