

OTAY WATER DISTRICT  
ENGINEERING, OPERATIONS & WATER RESOURCES COMMITTEE MEETING  
and  
SPECIAL MEETING OF THE BOARD OF DIRECTORS

2554 SWEETWATER SPRINGS BOULEVARD  
SPRING VALLEY, CALIFORNIA  
Board Room

**TUESDAY**  
**December 7, 2010**  
**11:30 A.M.**

This is a District Committee meeting. This meeting is being posted as a special meeting in order to comply with the Brown Act (Government Code Section §54954.2) in the event that a quorum of the Board is present. Items will be deliberated, however, no formal board actions will be taken at this meeting. The committee makes recommendations to the full board for its consideration and formal action.

**AGENDA**

1. ROLL CALL
2. PUBLIC PARTICIPATION – OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO SPEAK TO THE BOARD ON ANY SUBJECT MATTER WITHIN THE BOARD'S JURISDICTION BUT NOT AN ITEM ON TODAY'S AGENDA

**DISCUSSION ITEMS**

3. RECOGNITION OF CCL CONTRACTING, RBF CONSULTING, AND LEE & RO FOR THEIR OUTSTANDING PERFORMANCE IN THE COMPLETION OF THE JAMACHA PIPELINE PROJECT (RIPPERGER/BUELNA) [5 minutes]
4. AWARD A CONSTRUCTION CONTRACT TO BLASTCO, INC. FOR THE 657-1 AND 657-2 RESERVOIR EXTERIOR/INTERIOR COATING AND UPGRADES PROJECT IN AN AMOUNT NOT-TO-EXCEED \$632,500 (CAMERON) [5 minutes]
5. AWARD A CONSTRUCTION CONTRACT TO L.H. WOODS & SONS INC. IN THE AMOUNT OF \$379,000 FOR THE DEL RIO ROAD AND GILLISPIE DRIVE EMERGENCY INTERCONNECTIONS PROJECT (KAY) [5 minutes]
6. APPROVE CHANGE ORDER NO. 1 TO THE EXISTING CONTRACT WITH AECOM TECHNICAL SERVICES IN AN AMOUNT NOT-TO-EXCEED \$176,805 FOR THE RANCHO DEL REY GROUNDWATER WELL DEVELOPMENT PROJECT (PEASLEY) [5 minutes]
7. APPROVE CHANGE ORDER NO. 2 TO THE EXISTING CONTRACT WITH RBF CONSULTING FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR THE 36-INCH PIPELINE, SDCWA OTAY FCF NO. 14 TO THE

REGULATORY SITE PROJECT IN AN AMOUNT NOT-TO-EXCEED \$101,075  
(RIPPERGER) [5 minutes]

8. APPROVE CREDIT CHANGE ORDER NO. 3 TO THE EXISTING CONSTRUCTION CONTRACT WITH CCL CONTRACTING, INC. FOR THE JAMACHA ROAD 36-INCH POTABLE WATER PIPELINE AND 12-INCH POTABLE WATER PIPELINE REPLACEMENT PROJECTS IN THE AMOUNT OF <\$1,474,033.22> (RIPPERGER) [5 minutes]
9. APPROVE THE ISSUANCE OF A RFP FOR PHASE 2 OF THE RANCHO DEL REY WELL PROJECT WHICH WILL INCLUDE EQUIPPING THE WELL AND DESIGNING A WELLHEAD TREATMENT FACILITY (SILVERMAN) [5 minutes]
10. APPROVE WATER SUPPLY ASSESSMENTS AND VERIFICATION REPORTS, AS REQUIRED BY SENATE BILLS 610 AND 221, FOR THE OTAY RANCH VILLAGE EIGHT WEST AND OTAY RANCH VILLAGE NINE PROJECTS (KENNEDY) [5 minutes]
11. INFORMATIONAL REPORT ON THE DEVELOPMENT OF CIP PROJECT BUDGETS (RIPPERGER) [10 minutes]
12. SAN DIEGO COUNTY WATER AUTHORITY UPDATE (WATTON) [10 minutes]
13. ADJOURNMENT

BOARD MEMBERS ATTENDING:

Jose Lopez, Chair  
Gary Croucher

All items appearing on this agenda, whether or not expressly listed for action, may be deliberated and may be subject to action by the Board.

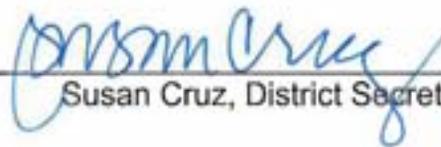
The Agenda, and any attachments containing written information, are available at the District's website at [www.otaywater.gov](http://www.otaywater.gov). Written changes to any items to be considered at the open meeting, or to any attachments, will be posted on the District's website. Copies of the Agenda and all attachments are also available through the District Secretary by contacting her at (619) 670-2280.

If you have any disability that would require accommodation in order to enable you to participate in this meeting, please call the District Secretary at 670-2280 at least 24 hours prior to the meeting.

#### Certification of Posting

I certify that on December 3, 2010 I posted a copy of the foregoing agenda near the regular meeting place of the Board of Directors of Otay Water District, said time being at least 24 hours in advance of the meeting of the Board of Directors (Government Code Section §54954.2).

Executed at Spring Valley, California on December 3, 2010.



Susan Cruz, District Secretary

# AGENDA ITEM 3



## STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011	
SUBMITTED BY:	Ron Ripperger <i>[Signature]</i> Engineering Manager	PROJECT / SUBPROJECT:	P2009- 001103	DIV. 5 NO.
APPROVED BY: (Chief)	Rod Posada <i>[Signature]</i> Chief, Engineering			
APPROVED BY: (Asst. GM):	Manny Magaña <i>[Signature]</i> Assistant General Manager, Engineering and Operations			
SUBJECT:	Recognition to the Jamacha Pipeline Construction Team			

### GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) recognize the Jamacha Pipeline Construction Team (Lee & Ro, RBF, and CCL Contracting) for their hard work and professionalism in the completion of a successful project (see Exhibit A for project location).

### COMMITTEE ACTION:

Please see Attachment A.

### PURPOSE:

To recognize the Jamacha Pipeline Construction Team for their hard work and professionalism in the completion of a successful project.

### ANALYSIS:

At the September 3, 2010, Engineering, Operations and Water Resources Committee meeting, the Committee recommended that the Board recognize the Jamacha Pipeline Construction Team for the work done to make the project successful. Staff has prepared certificates of recognition for Lee & Ro (Design Engineers), RBF (Construction Manager) and CCL Contracting (Contractor) to be presented at the January 5, 2011 Board of Directors Meeting. A draft of the Certificate of Recognition

(Exhibit B) is attached to this staff report for the Committee's review.

**FISCAL IMPACT:**



None.

**SRATEGIC GOAL:**

This project fulfills two of the District's Strategic Goals, No. 1 - Community and Governance and No. 5 - Potable Water, by maintaining proactive and productive relationships with the project stakeholders and by guaranteeing that the District will provide for current and future water needs.

**LEGAL IMPACT:**

None.



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General Manager

P:\WORKING\CIP P2009 36-inch PL - FCF 14 to Reg Site\Staff Reports\BD 01-05-11 , Staff Report, CCL, RBF, Lee-Ro (AB-RR).doc

RR:jf

Attachments: Attachment A - Committee Action  
Exhibit A - Location Map  
Exhibit B - Draft Certificate of Recognition



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b>	
P2009-001103	Recognition to the Jamacha Pipeline Construction Team

**COMMITTEE ACTION:**

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

**NOTE:**

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.

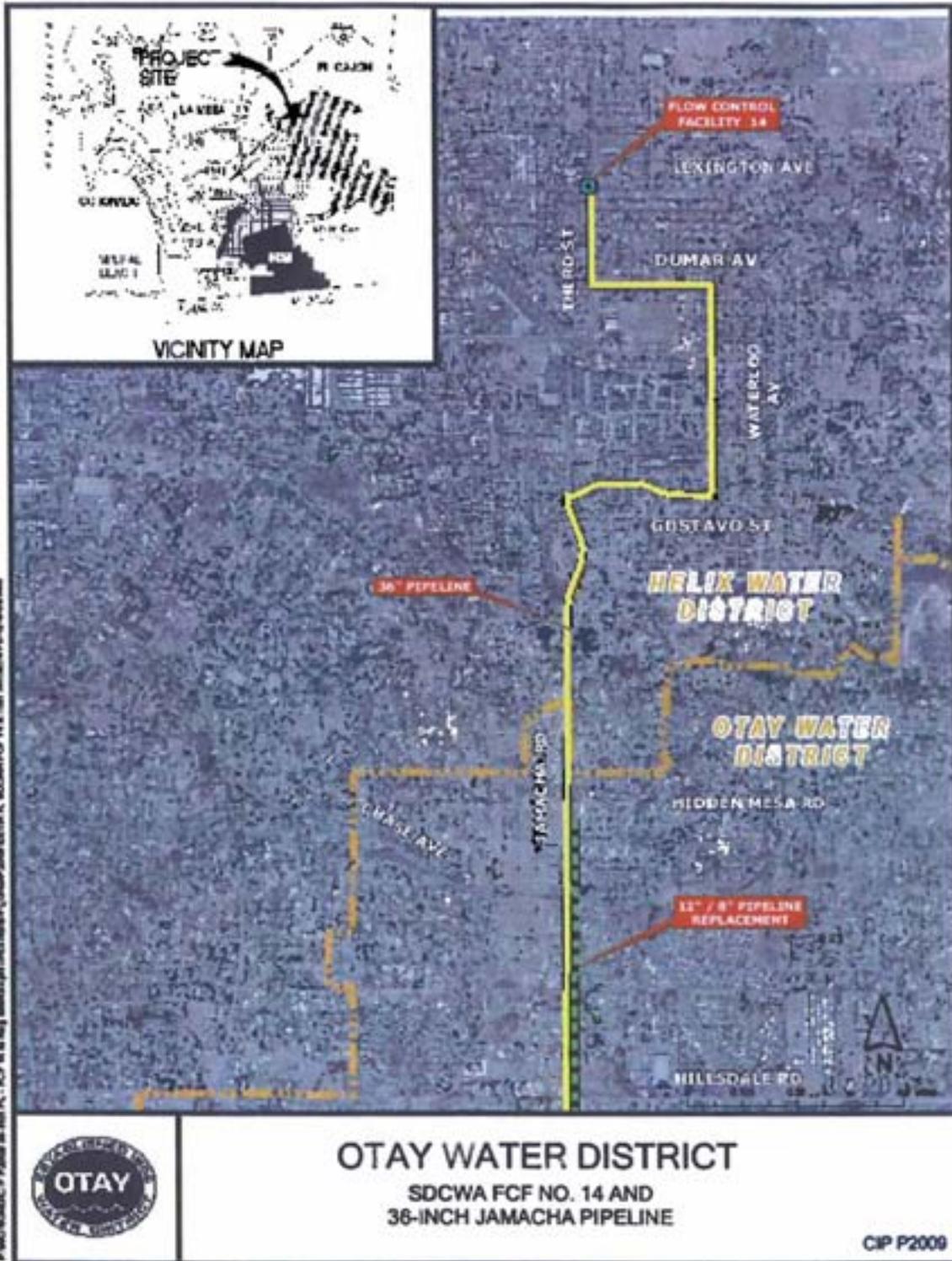
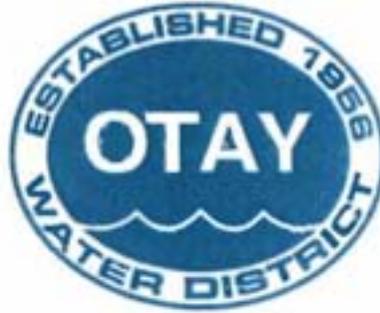


EXHIBIT A

EXHIBIT B



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*Certificate of Recognition*

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This certificate is awarded to

**CCL CONTRACTING INC.**

In recognition of CCL's hard work, professionalism, expertise, and outstanding performance in the completion of the Jamacha Pipeline Project.



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*Signature*

*Date*

# Quality Assurance Approval Sheet

Subject: Recognition to the Jamacha Pipeline  
Construction Team

Project No.: P2009-001103

Document Description: Staff Report for January 5, 2011 Board Meeting

Author:  12/2/10  
Signature Date

Ron Ripperger  
Printed Name

QA Reviewer:  12/2/10  
Signature Date

Gary Silverman  
Printed Name

Manager:  12/2/10  
Signature Date

Rod Posada  
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



## STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011	
SUBMITTED BY:	Kevin Cameron <i>KC</i> Assistant Civil Engineer I	PROJECT/ SUBPROJECT:	P2505-001103 P2506-001103	DIV. NO. 3
	Ron Ripperger <i>RR</i> Engineering Manager			
APPROVED BY: (Chief)	Rod Posada <i>R. Posada</i> Chief, Engineering			
APPROVED BY: (Asst. GM):	Manny Magaña <i>M. Magaña</i> Assistant General Manager, Engineering and Operations			
SUBJECT:	Award of a Construction Contract to Blastco, Inc. for the 657-1 & 657-2 Reservoir Exterior/Interior Coating and Upgrades Project			

**GENERAL MANAGER'S RECOMMENDATION:**

That the Otay Water District (District) Board of Directors (Board) award a construction contract to Blastco, Inc. (Blastco) and authorize the General Manager to execute an agreement with Blastco for the 657-1 & 657-2 Reservoir Exterior/Interior Coating and Upgrades Project in an amount not to exceed \$632,500 (see Exhibit A for project location).

**COMMITTEE ACTION:**

Please see Attachment A.

**PURPOSE:**

To obtain Board authorization for the General Manager to enter into a construction contract with Blastco for the 657-1 & 657-2 Reservoir Exterior/Interior Coating and Upgrades Project in an amount not to exceed \$632,500.

**ANALYSIS:**

The District's corrosion consultant, Schiff Associates (Schiff), completed a Corrosion Control Program (CCP) in June 2009 that addressed the installation, maintenance, and monitoring of corrosion protection systems for the District's steel reservoirs and buried

metallic piping. The CCP included a reservoir maintenance schedule that showed the 657-1 and 657-2 Reservoirs to be re-coated and updated to current code. The maintenance requirements include replacing anodes for the cathodic protection system, removing the existing exterior and interior coatings, and applying a new coating to the exterior and interior of each reservoir.

In addition to replacing the anodes and re-coating the reservoirs, structural upgrades are necessary to comply with the American Water Works Association (AWWA) and the Occupational Safety and Health Administration (OSHA) standards. An internal and external inspection of each reservoir was completed in August 2008 by Utility Services Company. The recommended structural upgrades, developed with input from engineering and operations staff, are as follows: new exterior ladder, new level indicators, new fall prevention devices on the interior ladders, additional manways for access, new anode access ports, new roof vents, new lanyard cables, and miscellaneous tank penetrations for chlorination and sampling. These upgrades will ensure compliance with AWWA and OSHA requirements as well as provide better access for Operations staff to maintain these facilities.

On October 27, 2010, Schiff performed an interior inspection on the 657-1 and 657-2 Reservoirs to assess the condition of the roof structure, analyze the coating condition, and reveal any changed conditions from the previous inspections. Schiff's inspection report found extensive corrosion on the rafters, and a leak in the elbow of the overflow pipe in the 657-1 Reservoir. These items were included in the contract documents.

Staff developed the contract documents and the project was advertised for bid on November 3, 2010 on the District's website and several other publications including the San Diego Union Tribune and San Diego Daily Transcript.

One (1) addendum was sent out to all bidders and planhouses to address questions and clarifications to the contract documents during the bidding period.

Bids were publicly opened on November 30, 2010, with the following results:

	<u>CONTRACTOR</u>	<u>TOTAL BID AMOUNT</u>	<u>CORRECTED BID AMOUNT</u>
1	Blastco, Inc.	\$632,500	-
2	Muehlan Marine, Inc.	\$633,500	-
3	Western Industrial, Inc.	\$638,645	\$638,780
4	RPI Coating, Inc.	\$685,000	-
5	Olympus and Associates Inc.*	\$786,582	-
6	Techno Coatings, Inc.	\$1,064,700	-

\*Bid opened on December 1, 2010.

The Engineer's Estimate is \$807,000.

Staff reviewed the bids submitted for conformance with the contract requirements and determined that Blastco was the lowest responsive and responsible bidder. Blastco holds both a Class A and Class C-33 Contractor's License which expires on Oct. 31, 2011. Overall, the reference checks indicated a good performance record on similar projects. Staff has verified that the bid bond provided by Blastco is valid. Staff will also verify that Blastco's Performance Bond is valid prior to execution of the contract.

The bid for Olympus and Associates Inc. was delivered to the District on time, but was not received by the Project Manager prior to the bid opening. Legal Counsel directed Staff to contact all bidders and invite them to witness the opening of Olympus' bid on December 1, 2010 at 3:00 p.m at District headquarters. The contractors elected to have the Project Manager call them with the bid results rather than attend the second bid opening.

**FISCAL IMPACT:**



Funding for the overall projects comes from two CIP projects, P2505, the 657-1 Reservoir Exterior/Interior Coating and Upgrades, and P2506, the 657-2 Reservoir Exterior/Interior Coating and Upgrades.

The total budget for CIP P2505, as approved in the FY 2011 budget, is \$375,000. Total expenditures, plus outstanding commitments and forecast, is \$375,000. See Attachment B-1 for budget detail.

The total budget for CIP P2506, as approved in the FY 2011 budget, is \$375,000. Total expenditures, plus outstanding commitments and forecast, is \$375,000. See Attachment B-2 for budget detail.

Staff included allowances in the bid sheet list for structural modifications and cell site equipment relocation for a total amount of \$50,000.

Based on a review of the financial budgets, the Project Manager has determined that each budget is sufficient to support the projects.

Finance has determined that 100% of the funding is available from the Replacement Fund for both CIP P2505 and P2506.

**STRATEGIC GOAL:**

This project supports the Operations Department Mission statement, "To provide all operations and maintenance services in the highest possible professional, efficient, safe, and cost effective manner to all internal and external customers, and to strive to continually improve the level of service this department provides."

**LEGAL IMPACT:** \_\_\_\_\_

None.



\_\_\_\_\_  
**General Manager**

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KC/RR/RP:jf

Attachments: Attachment A - Committee Action  
Attachment B-1 - Budget Detail for CIP P2505  
Attachment B-2 - Budget Detail for CIP P2506  
Exhibit A - Location Map



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b> P2505-001103 P2506-001103	Award of a Construction Contract to Blastco, Inc. for the 657-1 & 657-2 Reservoir Exterior/Interior Coating and Upgrades Project
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### COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

### NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



## ATTACHMENT B-1

**SUBJECT/PROJECT:** Award of a Construction Contract to Blastco, Inc. for the  
 P2505-001103 657-1 & 657-2 Reservoir Exterior/Interior Coating and  
 P2506-001103 Upgrades Project

Otay Water District  
 P2505 - 657-1 Reservoir Interior/Exterior Coating

Date Updated: November 30, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
375,000					
<b>Planning</b>					
Labor	822	822	-	822	
<b>Total Planning</b>	822	822	-	822	
<b>Design</b>					
Labor	13,508	13,508		13,508	
Service Contracts	143	143	-	143	SAN DIEGO UNION-TRIBUNE LLC
	38	38	-	38	SAN DIEGO DAILY TRANSCRIPT
<b>Total Design</b>	13,688	13,688	-	13,688	
<b>Construction</b>					
Labor	20,000	519	19,481	20,000	
Construction Contract	320,500	-	320,500	320,500	Blastco, Inc.
CM Contract	14,990	-	14,990	14,990	As-Needed CM
Project Closeout	5,000	-	5,000	5,000	
<b>Total Construction</b>	360,490	519	359,971	360,490	
<b>Grand Total</b>	375,000	15,030	359,971	375,000	



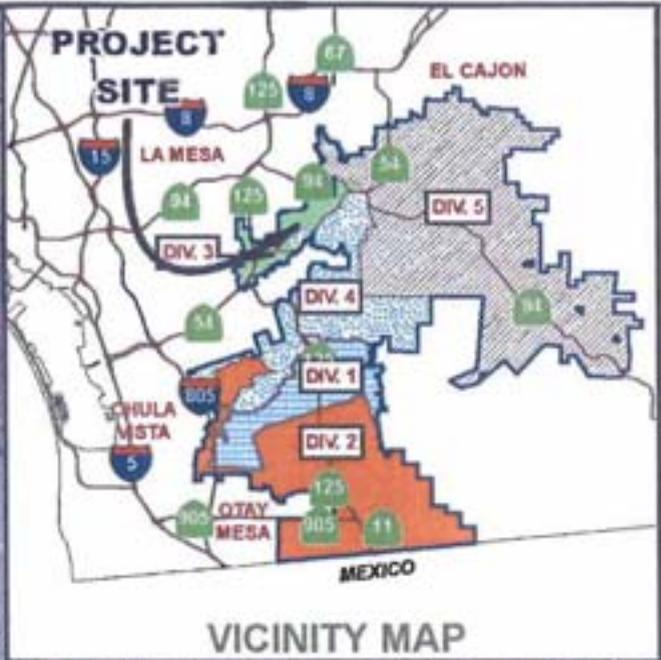
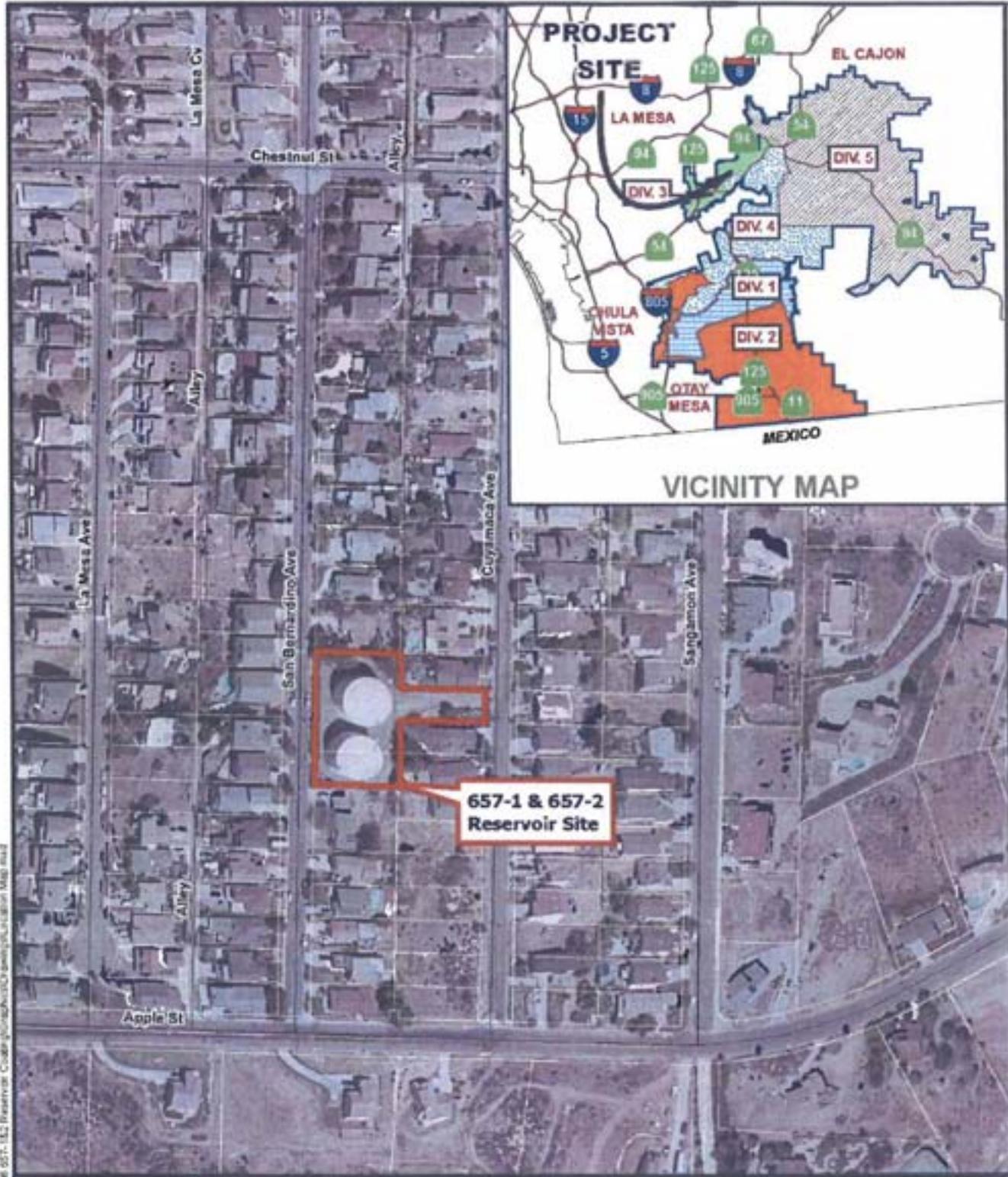
## ATTACHMENT B-2

**SUBJECT/PROJECT:** Award of a Construction Contract to Blastco, Inc. for the  
 P2505-001103 657-1 & 657-2 Reservoir Exterior/Interior Coating and  
 P2506-001103 Upgrades Project

Otay Water District  
 P2506 - 657-2 Reservoir Interior/Exterior Coating

Date Updated: November 30, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
375,000					
<b>Planning</b>					
Labor	569	569	-	569	
<b>Total Planning</b>	569	569	-	569	
<b>Design</b>					
Labor	12,933	12,933		12,933	
Service Contracts	143	143	-	143	SAN DIEGO UNION-TRIBUNE LLC
	38	38	-	38	SAN DIEGO DAILY TRANSCRIPT
<b>Total Design</b>	13,114	13,114	-	13,114	
<b>Construction</b>					
Labor	25,000	614	24,386	25,000	
Construction Contract	312,000	-	312,000	312,000	Blastco, Inc.
CM Contract	19,317	-	19,317	19,317	As-Needed CM
Project Closeout	5,000	-	5,000	5,000	
<b>Total Construction</b>	361,317	14,727	346,590	361,317	
<b>Grand Total</b>	375,000	28,410	346,590	375,000	



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**OTAY WATER DISTRICT**  
 657-1 (1.0 MG) & 657-2 (0.87 MG) RESERVOIRS  
 EXTERIOR/INTERIOR COATINGS & UPGRADES  
 SPRING VALLEY, CA

CIP # P2505 & P2506



**EXHIBIT A**

## Quality Assurance Approval Sheet

Subject: Award of a Construction Contract to Blastco, Inc.  
for the 657-1 & 657-2 Reservoir Exterior/Interior  
Coating and Upgrades Project

Project No.: P2505-001103  
P2506-001103

Document Description: Staff Report for the January 5, 2011 Board Meeting

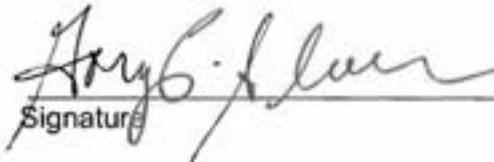
Author:

  
Signature

12/2/10  
Date

Kevin Cameron  
Printed Name

QA Reviewer:

  
Signature

12/2/10  
Date

Gary Silverman  
Printed Name

Manager:

  
Signature

12/2/10  
Date

Ron Ripperger  
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011
SUBMITTED BY:	Daniel Kay <i>DK</i> Associate Civil Engineer	PROJECT/ SUBPROJECT:	P2488/ DIV. 3 P2489- NO. 001103
	Ron Ripperger <i>RR</i> Engineering Manager		
APPROVED BY: (Chief)	Rod Posada <i>RP</i> Chief, Engineering		
APPROVED BY: (Asst. GM):	Manny Magaña <i>MM</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Award a Construction Contract to L.H. Woods & Sons, Inc. for the Del Rio Road & Gillispie Drive Emergency Interconnections Project		

**GENERAL MANAGER'S RECOMMENDATION:**

That the Otay Water District (District) Board of Directors (Board) award a construction contract to L.H. Woods & Sons Inc. (L.H. Woods) in the amount of \$379,000 for the Del Rio Road & Gillispie Drive Emergency Interconnections Project (see Exhibits A & B for project locations).

**COMMITTEE ACTION:** \_\_\_\_\_

Please see Attachment A.

**PURPOSE:**

To obtain Board authorization for the General Manager to enter into a construction contract with L.H. Woods for the Del Rio Road and Gillispie Drive Emergency Interconnection Project in an amount not to exceed \$379,000.

**ANALYSIS:**

The District has identified an opportunity and a beneficial need for the construction of two interconnections with Helix Water District (Helix).

The proposed interconnections are located on Del Rio Road and Gillispie Drive in Spring Valley. The project will consist of installing a vault, bi-directional meter, blow-offs, new telemetry, and new SCADA equipment at each location. The interconnections will benefit both Helix and the District by allowing water to be transferred interchangeably between each system in the event of an emergency situation. In previous outages and emergencies, similar interconnections have proven to provide increased reliability and flexibility.

The Board approved an agreement between Helix and the District at the April 7, 2010 Board meeting. Since the interconnections will benefit both Districts, the agreement states that Helix and the District will share equally the cost for design, construction, operation, and maintenance of the facilities. The District is the lead agency for the planning, design and construction of the interconnections.

The design for this project was performed in-house by District staff with an electrical consultant, Engineering Partners, Inc., providing the electrical and instrumentation drawings and specifications.

The project was advertised for bid on November 3, 2010 on the District's website and several other publications including the Union Tribune and San Diego Daily Transcript.

A non-mandatory Pre-Bid Meeting was held on November 16, 2010. A presentation was given by District staff to explain the project and discuss any questions or concerns from the contractors. There was one (1) contractor that attended the meeting and meeting minutes were published.

Subsequently, one (1) addendum was sent out to all bidders and planhouses to address questions and clarifications to the contract documents during the bidding period. Bids were publicly opened on November 30, 2010 with the following results:

<u>CONTRACTOR</u>	<u>TOTAL BID AMOUNT</u>
1. L.H. Woods & Sons Inc.	\$379,000.00
2. Arrieta Construction	\$428,748.38

The Engineer's Estimate is \$192,000.

The evaluation process included reviewing all bids submitted for conformance to the contract documents. The lowest bidder, L.H. Woods, submitted a responsible bid and holds a Class A Contractor's

license which expires on May 31, 2011. References were checked and L.H. Woods was found to be a highly rated company. Staff has verified that the bid bond provided by L.H. Woods is valid. Once L.H. Woods signs the contract, they will furnish the performance bond. Staff will verify the performance bond before the District executes the contract.

**FISCAL IMPACT:** 

The total budget for CIP P2488, as approved in the FY 2011 budget, is \$150,000.00. Total expenditures, plus outstanding commitments and forecast, are \$139,036. See Attachment B-1 for budget detail.

The total budget for CIP P2489, as approved in the FY 2011 budget, is \$150,000.00. Total expenditures, plus outstanding commitments and forecast, are \$136,257. See Attachment B-2 for budget detail.

Including the agreed upon 50% reimbursement from Helix for design and construction costs, the District's share will be within the existing FY 2011 budget. Based on a review of the financial budgets, the Project Manager has determined that each budget is sufficient to support the project.

Finance has determined that 40% of the funding is available from the Expansion Fund and 60% of the funding is from the Betterment Fund for both CIP P2488 and P2489.

**STRATEGIC GOAL:**

This project supports the District's Mission statement, "To provide the best quality of water and wastewater service to the customers of the Otay Water District in a professional, effective, and efficient manner," as well as the General Manager's vision, "...prepared for the future..." by guaranteeing the District will always be able to meet future water supply obligations and plan, design, and construct new facilities.

**LEGAL IMPACT:** \_\_\_\_\_

None.



**General Manager**

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DK/RR/RP:jf

Attachments:      Attachment A - Committee Action  
                         Attachment B-1 - Budget Detail for CIP P2488  
                         Attachment B-2 - Budget Detail for CIP P2489  
                         Exhibit A - Location Map for CIP 2488  
                         Exhibit B - Location Map for CIP 2489



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b> P2488/P2489-001103	Award a Construction Contract to L.H. Woods & Sons, Inc. for the Del Rio Road & Gillispie Drive Emergency Interconnections
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### COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

### NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



## ATTACHMENT B-1

Otay Water District  
P2488 - Del Rio Road Helix & Otay Agency Interconnection

Date Updated: November 23, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
<b>150,000</b>					
<b>Planning</b>					
Labor	1,314	1,314		1,314	
<b>Total Planning</b>	<b>1,314</b>	<b>1,314</b>	-	<b>1,314</b>	
<b>Design</b>					
Labor	36,915	36,915	-	36,915	
Consultant Contracts	5,950	5,950	-	5,950	MWH CONSTRUCTORS INC
	500	500	-	500	STEWART TITLE OF CA INC
	2,805	2,805	-	2,805	ENGINEERING PARTNERS INC, THE
Service Contracts	331	331	-	331	SAN DIEGO UNION-TRIBUNE LLC
Contracted Services	665	665	-	665	KIRK PAVING INC
Infrastructure Equipment & Materials	558	558	-	558	COUNTY OF SAN DIEGO - DPW
Reimbursement by Helix	(23,863)	-	(23,863)	(23,863)	HELIX WATER DISTRICT
<b>Total Design</b>	<b>23,862</b>	<b>47,725</b>	-	<b>47,725</b>	
<b>Construction</b>					
Labor	20,000	2,149	17,851	20,000	
Service Contracts	11,795	11,795	-	11,795	SAN DIEGO GAS & ELECTRIC
Construction Contract	185,925	-	185,925	185,925	L.H. WOODS & SONS
Reimbursement by Helix	(113,860)	-	(113,860)	(113,860)	HELIX WATER DISTRICT
Closeout	10,000	-	10,000	10,000	
<b>Total Construction</b>	<b>113,860</b>	<b>13,944</b>	<b>99,916</b>	<b>113,860</b>	
<b>Grand Total</b>	<b>139,038</b>	<b>62,982</b>	<b>76,053</b>	<b>139,036</b>	

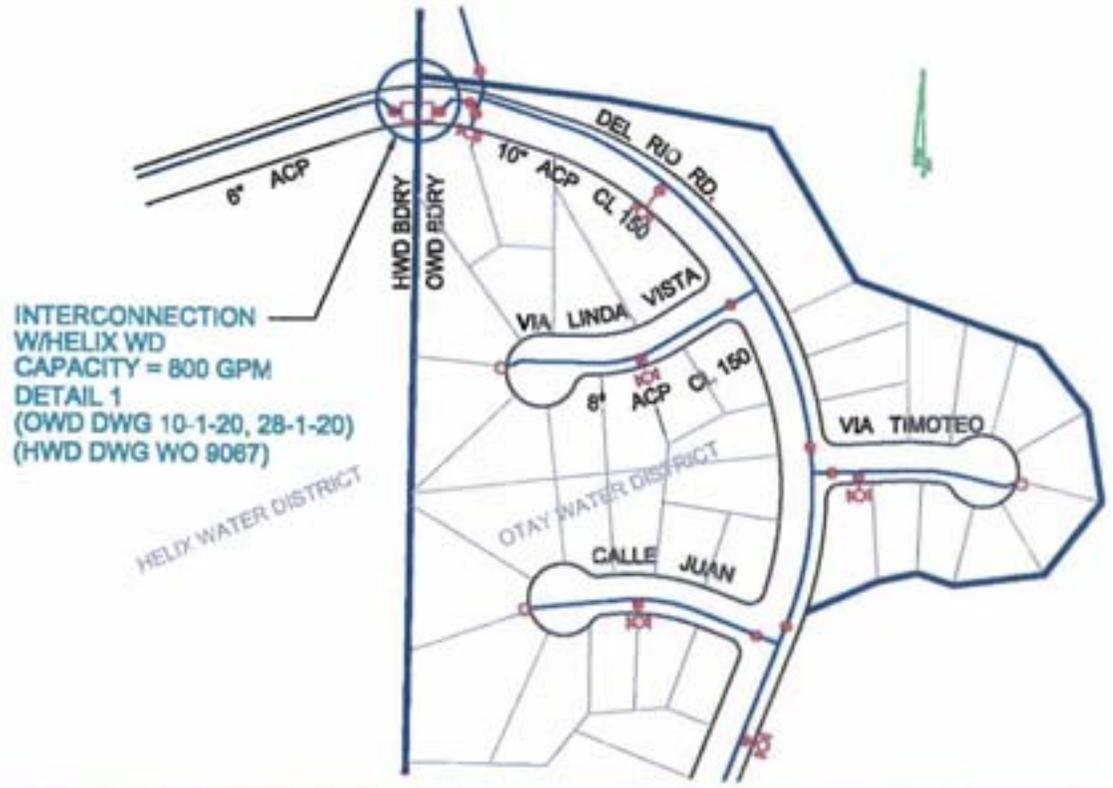
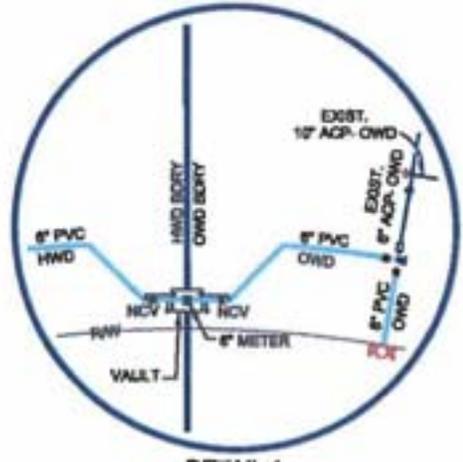
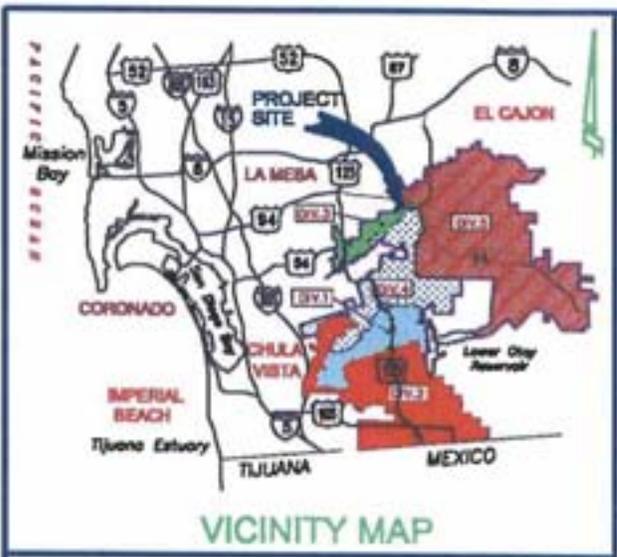


## ATTACHMENT B-2

Otay Water District  
P2489 - Gillespie Drive Helix & Otay Agency Interconnection

Data Updated: November 23, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
150,000					
<b>Planning</b>					
Labor	189	189	-	189	
Regulatory Agency Fees	100	100	-	100	PETTY CASH CUSTODIAN
<b>Total Planning</b>	289	289	-	289	
<b>Design</b>					
Labor	33,690	33,690	-	33,690	
Consultant Contracts	4,200	4,200	-	4,200	MWH CONSTRUCTORS INC
	2,805	2,805	-	2,805	ENGINEERING PARTNERS INC, THE
Construction Contracts	6,820	6,820	-	6,820	HELIX WATER DISTRICT
Professional Legal Fees	374	374	-	374	GARCIA CALDERON & RUIZ LLP
Reimbursement by Helix	(23,945)	-	(23,945)	(23,945)	HELIX WATER DISTRICT
<b>Total Design</b>	23,945	47,889	-	47,889	
<b>Construction</b>					
Labor	20,000	1,926	18,074	20,000	
Service Contracts	972	972	-	972	SAN DIEGO GAS & ELECTRIC
Construction Contract	193,075	-	193,075	193,075	L.H. WOODS & SONS
Reimbursement by Helix	(112,024)	-	(112,024)	(112,024)	HELIX WATER DISTRICT
Closeout	10,000	-	10,000	10,000	
<b>Total Construction</b>	112,023	2,898	109,125	112,023	
<b>Grand Total</b>	138,257	51,078	85,181	138,257	

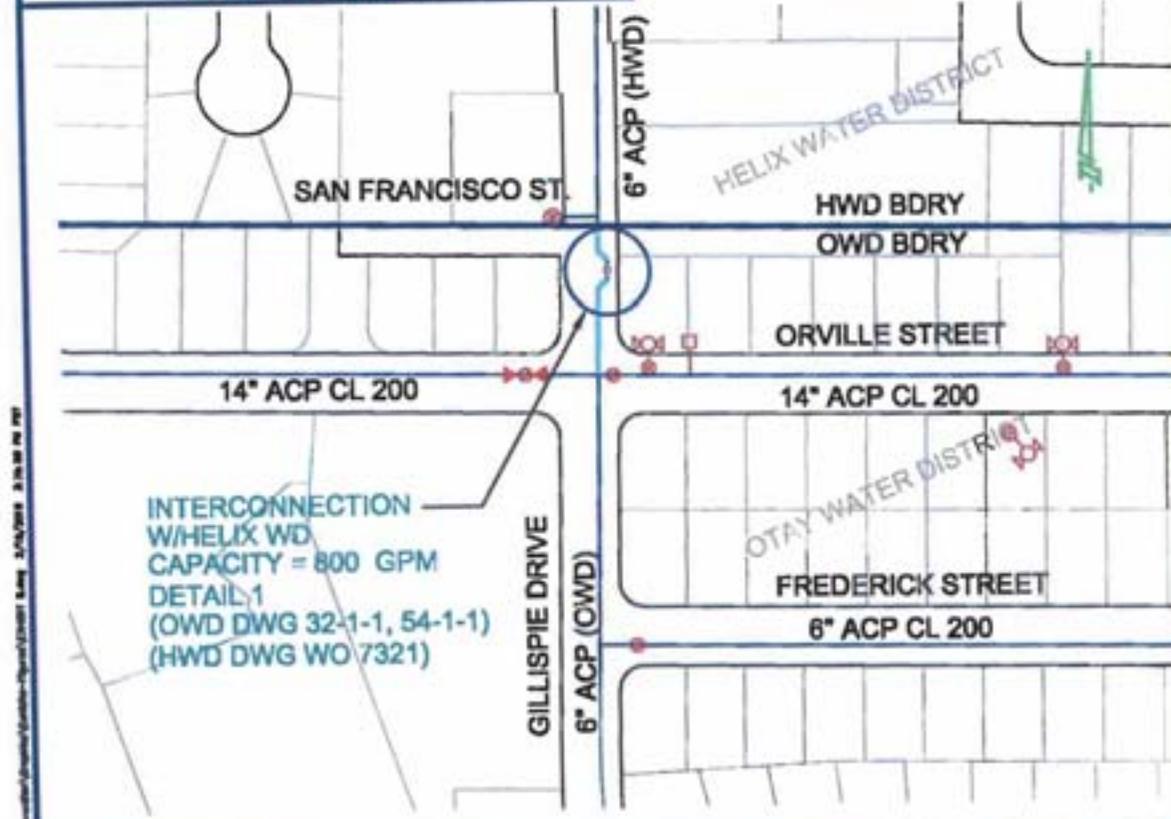
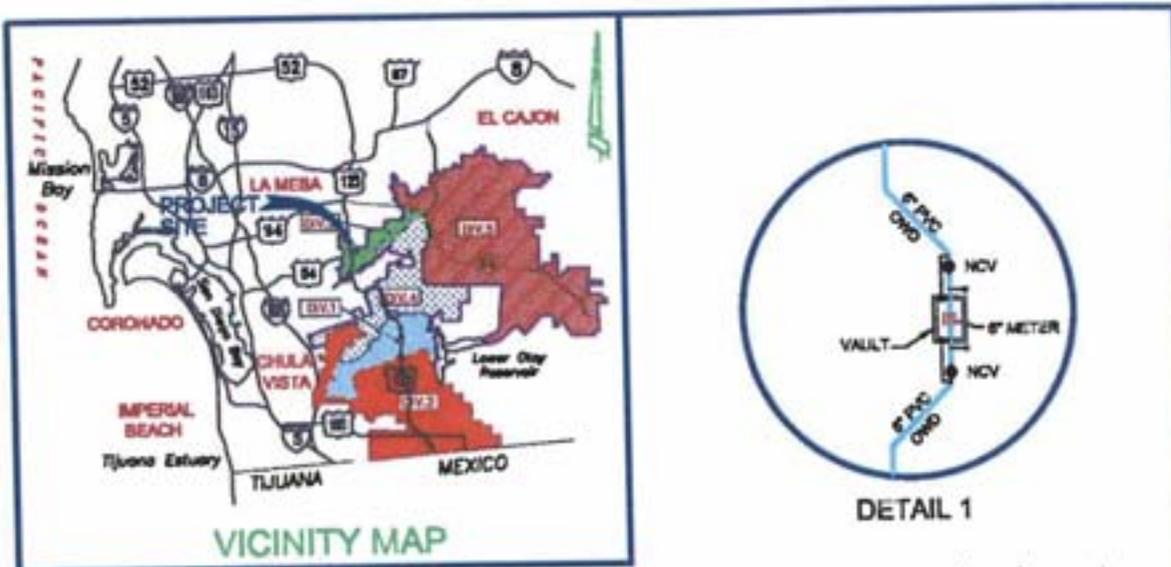


**OTAY WATER DISTRICT**  
**DEL RIO ROAD**  
**INTERCONNECTION**  
**WITH HELIX WATER DISTRICT**

P2488

**EXHIBIT A**

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 **OTAY WATER DISTRICT**

GILLISPIE DRIVE  
INTERCONNECTION  
WITH HELIX WATER DISTRICT

P2489

**EXHIBIT B**

## Quality Assurance Approval Sheet

Subject: Award a Construction Contract to  
L.H. Woods & Sons, Inc. for the  
Del Rio Road & Gillispie Drive  
Emergency Interconnections

Project No.: P2488-001103  
P2489-001103

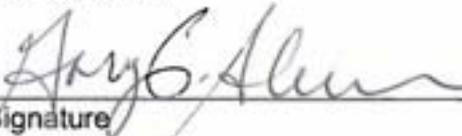
Document Description: Staff Report for the January 5, 2011 Board Meeting

Author:

 12/2/10  
Signature Date

Daniel Kay  
Printed Name

QA Reviewer:

 12/2/10  
Signature Date

Gary Silverman  
Printed Name

Manager:

 12/2/10  
Signature Date

Ron Ripperger  
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.

# AGENDA ITEM 6



## STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011
SUBMITTED BY:	James Peasley <i>JP</i> Engineering Manager	PROJECT No.	P2434- DIV.No. 2 001101
APPROVED BY: (Chief)	Rod Posada <i>R Posada</i> Chief, Engineering		
APPROVED BY: (Asst. GM):	Manny Magaña <i>M Magaña</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Change Order No. 1 to the Professional Engineering Services Contract with AECOM Technical Services, Inc. for the Rancho del Rey Groundwater Well Development Project		

### GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) approve Change Order No. 1 to the existing contract with AECOM Technical Services, Inc. (AECOM) in an amount not-to-exceed \$176,805 for the Rancho del Rey Groundwater Well Development (RDR Groundwater Well) Project (see Exhibit A for project location).

### COMMITTEE ACTION:

Please see Attachment A.

### PURPOSE:

To obtain Board authorization for the General Manager to execute Change Order No. 1 (see Exhibit B) to the existing contract with AECOM in an amount not-to-exceed \$176,805 for the RDR Groundwater Well Project.

### ANALYSIS:

The development and/or acquisition of potential groundwater supply projects by the District has been resurrected in response

to the regional water supply issues that have impacted water supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta and the spiraling retail water pricing pressures. Local ground water supply projects will allow for less reliance upon imported water, achieve a level of independence from regional wholesale water agencies, and diversify the District's water supply portfolio consistent with the District's March 2007 Integrated Water Resources Plan.

As a result, and in recognition of the need to develop sufficient alternative water supplies, the District took the next step towards development of a groundwater production well at the Rancho del Rey site. The Board awarded a professional engineering contract to AECOM for the RDR Groundwater Well Project on January 6, 2010 in the amount of \$1,561,625.

The purpose of the RDR Groundwater Well Project scope of work is to firmly establish the feasibility of developing a groundwater resource production system, including determining sustainable well yield, groundwater quality, and assessing any limitations or constraints that may arise. These items were accomplished with construction and testing of a full-scale production well and a multiple level monitoring well.

The RDR Groundwater Well Project scope of work accomplished the following:

- Regulatory and agency coordination, compliance, and permitting.
- Groundwater well water and brine disposal discharge analysis.
- Multiple level groundwater monitoring well installation.
- Planning, design, construction, and testing of a production well.
- Monitoring well and production well completion report.

The primary outcome of the RDR Groundwater Well Project is that the groundwater well is physically feasible and capable as a long-term (i.e., approximately 30 years) production system, with a maximum sustainable yield of about 700 acre-feet per year. The approximately 700 acre-feet per year of well yield can be used as feed water to a reverse osmosis treatment system to obtain a local potable water resource of about 500 to 600 acre-feet per year.

In response to the community concerns about noise and vibration levels, the District chose to modify the contract terms to:

1. Limit the days of work and work hours per day during the drilling and other operations at the project site.
2. Increase sound mitigation measures.
3. Extend the contract duration.

As a result of the reduced work schedule, the duration that the drilling subcontractor, AECOM, and equipment were on site increased. These changes resulted in a cost increase of \$302,213.

There were also cost savings that included reduced well casing size, reduced drill cuttings hauling and disposal, and conductor casing material type revision. These three items totaled a cost reduction of \$161,700.

In addition, there were other increased costs including labor to overcome sewer discharge permit obstacles, laboratory analyses for additional constituents, some new landscaping, and enhanced site erosion control totaling \$36,292.

District staff and AECOM worked with the drilling contractor to reduce their fees. For example, we were able to obtain a reduced fee for standby charges related to noise and vibration issues. AECOM also provided a discount on a portion of their labor costs.

Combining the increased costs for the drilling, laboratory, and other expenses along with the reductions, the net increase for this Change Order is \$176,805 or an 11.3% increase over the original contract amount.

**FISCAL IMPACT:**



The total budget for CIP Project P2434, Rancho del Rey Groundwater Well Development, as part of the approved FY 2011 CIP budget, is \$4,250,000. Expenditures to date are \$2,023,099. Total expenditures, plus outstanding commitments, including this contract, totals \$2,550,223. See Attachment B for budget detail.

The Project Manager anticipates that, based on the attached financial analysis, the CIP budget for P2434 will be sufficient to support the anticipated expenses payable to AECOM, including the requested change order.

It is important to note that the Project Manager has determined that the budget is not sufficient to cover the second phase of this CIP, the construction of a reverse osmosis treatment facility. This anticipated shortfall is being addressed in the staff report requesting authorization to issue a RFP for design of the second phase of the Rancho del Rey Well Project.

Finance has determined that 40% of the funding is available from the Expansion Fund and 60% of the funding is available from the Betterment Fund.

**STRATEGIC GOAL:**

The RDR Groundwater Well Development Project supports the District's Mission statement, "To provide the best quality of water and wastewater service to the customers of the Otay Water District, in a professional, effective, and efficient manner" and the Otay strategic goal, in planning for infrastructure and supply to meet current and future potable water demands.

**LEGAL IMPACT:** \_\_\_\_\_

None.



\_\_\_\_\_  
**General Manager**

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JP/RP:jf

Attachments: Attachment A - Committee Action  
Attachment B - Budget Detail  
Exhibit A - Location Map  
Exhibit B - Change Order No. 1



## ATTACHMENT A

SUBJECT/PROJECT: P2434-001101	Change Order No. 1 to the Professional Engineering Services Contract with AECOM Technical Services, Inc. for the Rancho del Rey Groundwater Well Development Project
----------------------------------	--

### COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

### NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



## ATTACHMENT B

SUBJECT/PROJECT:  P2434-001101	Change Order No. 1 to the Professional Engineering Services Contract with AECOM Technical Services, Inc. for the Rancho del Rey Groundwater Well Development Project
--------------------------------------	--

Date Updated: November 29, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
4,250,000					
<b>Planning</b>					
Labor	308,719	308,719		308,719	
Land	326,092	326,092	-	326,092	
Permits	125	125	-	125	CITY OF CHULA VISTA-DEPT. OF
Materials	1,348	1,348	-	1,348	VARIOUS
Rental	159	159	-	159	PENHALL COMPANY
Construction Costs	26,154	26,154	-	26,154	CHILDTIME CHILDCARE, INC.
Professional Legal Fees	4,829	4,829	-	4,829	GARCIA CALDERON & RUIZ LLP
Consultant Contracts	19,481	19,481	-	19,481	JONES & STOKES ASSOCIATES INC
	13,825	13,825	-	13,825	MWH CONSTRUCTORS INC
	1,100	1,100	-	1,100	SOUTHWESTERN COLLEGE
	3,065	3,065	-	3,065	SOUTHERN CALIFORNIA SOIL
	15,000	-	15,000	15,000	SEPARATION PROCESSES INC
	6,930	6,930	-	6,930	VALLEY CONSTRUCTION MANAGEMENT
	1,561,625	1,231,406	330,219	1,561,625	AECOM TECHNICAL SERVICES INC
Change Order No. 1	176,805	-	176,805	176,805	AECOM TECHNICAL SERVICES INC, C.O.#1
Service Contracts	5,100	-	5,100	5,100	S R BRADLEY & ASSOCIATES INC
	186	186	-	186	SAN DIEGO DAILY TRANSCRIPT
	624	624	-	624	UNION TRIBUNE PUBLISHING CO
	399	399	-	399	REPROHAUS CORP
	440	440	-	440	URBINA'S MASTER SWEEPING INC
	6	6	-	6	COUNTY OF SAN DIEGO
	134	134	-	134	COURIER EXPRESS, INC.
	205	205	-	205	USA SIGN CO.
	3,226	3,226	-	3,226	QUALITY ASSURANCE LABORATORY
	7,108	7,108	-	7,108	MULTI WATER SYSTEMS
	1,955	1,955	-	1,955	BARRETT CONSULTING GROUP
	5,665	5,665	-	5,665	EARTH TECH
	3,344	3,344	-	3,344	CITY OF CHULA VISTA
	16,714	16,714	-	16,714	BOYLE ENGINEERING CORPORATION
	112	112	-	112	MONTGOMERY WATSON LABORATORIES
	2,500	2,500	-	2,500	ANDREW A. SMITH COMPANY
	2,000	2,000	-	2,000	ENARTEC ENGINEERING PLANNING
	35,200	35,200	-	35,200	ALCEM FENCE COMPANY INC.
Regulatory Agency Fees	50	50	-	50	PETTY CASH CUSTODIAN
<b>Total Planning</b>	2,550,223	2,023,099	527,124	2,550,223	
<b>Grand Total</b>	2,550,223	2,023,099	527,124	2,550,223	

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**OTAY WATER DISTRICT**  
RANCHO DEL WAY PARKWAY, CHULA VISTA, CA  
RANCHO DEL REY GROUND WATER DEVELOPMENT

CIP P2434

**EXHIBIT A**

# EXHIBIT B

OTAY WATER DISTRICT

2554 SWEETWATER SPRINGS BLVD., SPRING VALLEY, CA. 91978, (619) 670-2222

## CONTRACT/P.O. CHANGE ORDER No. 1

PROJECT/ITEM: Rancho Del Rey Groundwater Well Development Project

CONTRACTOR/VENDOR: AECOM Technical Services, Inc. REF.CIP No.: P2434-001101

APPROVED BY: Board

REF. P.O. No: 713180

DATE: 01-05-11

### DESCRIPTION:

There are five items as part of this change order:

- 1) Increased cost due to shorten work days and hours per day.
- 2) Increased cost due to permits and analysis required.
- 3) Decrease in cost due to reduced hauling and disposal fees and other savings.
- 4) Decrease in cost due to reduced well casing size and conductor casing material change.
- 5) Increase contract duration by three months.

### REASON:

- 1) The contract terms were modified to accommodate the community concerns about noise and vibration levels. In order to accommodate the concerns, work days and hours were limited during the operation at the site. Also, sound mitigation measures were increased. The cost increase for modification to the contract is \$302,213.
- 2) Other costs, including labor to overcome sewer discharge permit obstacles, constituents' laboratory analysis, new landscaping, and enhanced site erosion control. The cost increase for these items is \$36,292.
- 3) A cost savings, which included reduced well casing size, reduced drill cuttings hauling and disposal, and conductor casing material type revision. These items totaled a cost savings of \$161,700.

### CHANGE P.O. TO READ:

Revise contract to add \$176,805 for a total contract amount of \$1,738,430.00.

Revise contract to extend contract duration by three months to March 31, 2011.

ORIGINAL CONTRACT/P.O. AMOUNT:	\$ 1,561,625.00
ADJUSTED AMOUNT FROM PREVIOUS CHANGE:	\$ 0.00
TOTAL COST OF THIS CHANGE ORDER:	\$ 176,805.00
NEW CONTRACT/P.O. AMOUNT IS:	\$ 1,738,430.00
ORIGINAL CONTRACT COMPLETION DATE:	12/31/10
CONTRACT/P.O. TIME AFFECTED BY THIS CHANGE:	90 days
REVISED CONTRACT COMPLETION DATE:	03/31/11

IT IS UNDERSTOOD WITH THE FOLLOWING APPROVALS, THAT THE CONTRACTOR/VENDOR IS AUTHORIZED AND DIRECTED TO MAKE THE HEREIN DESCRIBED CHANGES. IT IS ALSO AGREED THAT THE TOTAL COST FOR THIS CHANGE ORDER CONSTITUTES FULL AND COMPLETE COMPENSATION FOR OBLIGATIONS REQUIRED BY THE CONTRACT/P.O. ALL OTHER PROVISIONS AND REQUIREMENTS OF THE CONTRACT/P.O. REMAIN IN FULL FORCE AND EFFECT.

### CONTRACTOR/VENDOR:

SIGNATURE: \_\_\_\_\_

NAME : \_\_\_\_\_

TITLE: \_\_\_\_\_ DATE : \_\_\_\_\_

ADDRESS: \_\_\_\_\_

### STAFF APPROVALS:

PROJ. MGR : \_\_\_\_\_ Sr Eng (Int) \_\_\_\_\_ DATE: \_\_\_\_\_

DIV. MGR : \_\_\_\_\_ DATE: \_\_\_\_\_

CHIEF: \_\_\_\_\_ DATE: \_\_\_\_\_

ASST. GM : \_\_\_\_\_ DATE: \_\_\_\_\_

### DISTRICT APPROVAL:

GEN. MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

COPIES:  FILE (Orig.),  CONTRACTOR/VENDOR,  CHIEF-FINANCE,  INSPECTION,  ENGR. SECRETARY,  PROJECT BINDER

# CHANGE ORDER LOG

## Rancho Del Rey Groundwater Well Development Project

Consultant: AECOM Technical Services, Inc.

Project: P2434  
Subproject: 001101

C.O.	AMOUNT	APPROVED		DESCRIPTION	TYPE C.O.
		BY	DATE		
1	\$176,805.00	Board		Increase due to work days shortened, additional permits and analysis required, and extend completion date.	Owner
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					

Total C.O.'s To Date:	\$176,805.00	11.3%
Original Contract Amount:	\$1,561,625.00	
Current Contract Amount:	\$1,738,430.00	

Change Order Breakdown for the Month:

Month	Net C.O.\$	Limit	Authorization	C.O. %
		\$2,000	Insp	0.0%
		\$10,000	PM/Supervisor	0.0%
		\$20,000	Manager	0.0%
		\$25,000	Chief	0.0%
		\$35,000	AGM	0.0%
		\$50,000	GM	0.0%



AECOM  
3995 Via Oro Avenue  
Long Beach, CA 90810

562.420.2933 tel  
562.420.2915 fax

November 17, 2010

Mr. Jim Peasley  
Engineering Manager  
2554 Sweetwater Springs Blvd.  
Spring Valley, California 91978-2004

**Subject: Rancho del Rey Change Order**

Dear Mr. Peasley,

We appreciate the opportunity to meet with Mr. Posada and you this week regarding the Rancho del Rey well. Although there were several challenges to drilling and constructing the production well and monitoring well, the effort was successful. The wells have and will continue to provide important information into this valuable local water resource. The production well was completed deeper than originally planned and demonstrate the viability of producing water from the volcanic rock in addition to the overlying sediments. This letter explains the change order related to alterations which occurred during the course of the project. The change order covers the drilling and consulting fees. The major changes are summarized below:

**Major Cost Increases**

- **Increased Time** – Prior to the commencement of work (post-bid) Otay Water District decided to adjust the anticipated work schedule in an effort to address potential community relations concerns about noise. The City of Chula Vista allows for work to occur from 7am to 10pm Monday through Friday and 8am to 10pm on weekends before needing to invoke more stringent noise actions. The District made the decision to eliminate the weekend work schedule (except during well construction) and to reduce the number of hours onsite during the week so that all work would be completed by 7pm. In addition, the District also had concerns about large delivery vehicles moving around in the parking lot of the ChildTime daycare center during peak pick-up and drop-off periods. Accordingly, there were no deliveries made to the site before 9am or between the hours of 2pm to 6pm. The reduced work schedule increased the duration the drilling contractor and AECOM were onsite.

This resulted in additional costs for items like:

- Sound mitigation – \$142,213
- Labor - \$57,000
- Per Diem - \$49,000
- Prevailing wage surcharge - \$43,000
- Equipment rental (forklift, air-compressor, etc) - \$11,000

**Major Cost Savings**

- **Casing Size** – Following the construction of the monitoring well, we were able to evaluate and thus reduce the casing size of the production well from 18-inches in diameter to 12-inches.
  - This casing reduction resulted in a net savings of \$87,000
- **Waste Disposal** – Drill cuttings were originally intended to be disposed of by hauling them to a non-hazardous waste facility. The District was able to provide an nearby District-owned property to place the non-hazardous drill cuttings. This eliminated hauling the cuttings to a disposal site.
  - Net savings to the District – \$45,800
- **Casing Materials** – The bid package listed the conductor casing for the well to be stainless steel. However, because the casing is fully encapsulated in cement, it is well protected from corrosion. Therefore it was decided to use mild-steel casing for this section.
  - Net savings to the District -- \$28,900

Smaller additions and reductions occurred throughout the project including additional time acquiring the sewer discharge permit, additional laboratory expenses (increased number of constituents required for analysis), etc.

We have worked with the drilling contractor to reduce some of their fees. For example, we were able to obtain a reduced fee for standby issues due to noise issues. In addition, AECOM is providing a discount on the October invoice as a goodwill gesture.

Combining the increased costs for the drilling, laboratory and other expenses along with the reductions such as those discussed above, the net requested increase for this change order is \$176,805.

Yours sincerely,



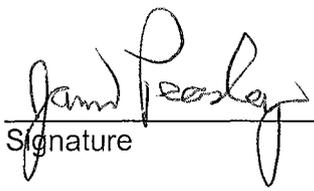
Ronald Sorensen  
Program Manager, Sr. Hydrogeologist  
ronald.sorensen@aecom.com

# Quality Assurance Approval Sheet

Subject: Change Order No. 1 to the Professional  
Engineering Services Contract with AECOM  
Technical Services, Inc. for the Rancho del Rey  
Groundwater Well Development Project

Project No.: P2434-001101

Document Description: Staff Report for the January 5, 2011 Board Meeting

Author:	 _____ Signature	<u>12/1/10</u> _____ Date
	James Peasley _____ Printed Name	
QA Reviewer:	 _____ Signature	<u>12/1/10</u> _____ Date
	Gary Silverman _____ Printed Name	
Manager:	 _____ Signature	<u>12/1/10</u> _____ Date
	Rod Posada _____ Printed Name	

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



## STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011	
SUBMITTED BY:	Ron Ripperger <i>[Signature]</i> Engineering Manager	PROJECT/ SUBPROJECT:	P2009- 001102	DIV. 5 NO.
APPROVED BY: (Chief)	Rod Posada <i>[Signature]</i> Chief, Engineering			
APPROVED BY: (Asst. GM):	Manny Magaña <i>[Signature]</i> Assistant General Manager, Engineering and Operations			
SUBJECT:	Change Order No. 2 to the Construction Management Services Contract with RBF Consulting for the 36-Inch Pipeline, SDCWA Otay FCF No. 14 to the Regulatory Site Project			

**GENERAL MANAGER'S RECOMMENDATION:**

That the Otay Water District (District) Board of Directors (Board) approves Change Order No. 2 to the existing contract with RBF Consulting (RBF) for construction management and inspection services for the 36-Inch Pipeline, SDCWA Otay FCF No. 14 to the Regulatory Site Project in an amount not to exceed \$101,075 (see Exhibit A for project location).

**COMMITTEE ACTION:** \_\_\_\_\_

Please see Attachment A.

**PURPOSE:**

To obtain Board authorization for the General Manager to execute Change Order No. 2 (see Exhibit B) to the contract with RBF in an amount not to exceed \$101,075.

**ANALYSIS:**

On January 16, 2008, the Board awarded a contract to RBF, to provide construction management and inspection services. RBF's scope of work initially included pre-construction support such as constructability reviews, public relations support, bidding support and construction management over a 24-month period. RBF's pre-construction efforts were increased due to the District's replacement of the design

consultant. Based on staff's recommendation, the General Manager executed Change Order No. 1 on June 15, 2010 in the amount of \$46,995 to provide funding for the additional scope of work.

After Change Order No. 1 was executed, it became necessary to extend the construction contract duration with CCL due to a variety of factors including coordination with their subcontractor to perform additional paving, modifications to the sampling system at the Regulatory Site Vault 7, and a longer timeframe than anticipated for flushing and completing bacteriological testing of the new pipeline. Change Order No. 2 documents the concentrated effort that was required by RBF staff to oversee CCL's final work items and to ensure the project was completed to the District's satisfaction. The contract was completed at the end of November and the project is ready to be accepted.

**FISCAL IMPACT:**



The total budget for CIP P2009, as approved in the FY 2011 budget, is \$21,000,000. RBF's original contract amount is \$1,088,785; with the approval of Change Order No. 2 their new contract amount will be \$1,236,855. Total CIP expenditures, plus outstanding commitments and forecast, including this Change Order, are approximately \$19,522,797.

The Project Manager anticipates that, based on the attached financial analysis, the CIP budget for P2009 will be sufficient to support this project. See Attachment B for details.

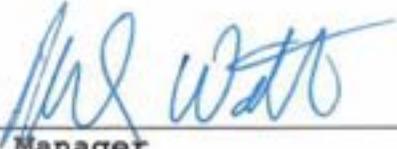
Finance has determined that 40% of the funding is available from the Expansion Fund and 60% of the funding is available from the Betterment Fund for CIP P2009.

**STRATEGIC GOAL:**

This project supports the District's Mission statement, "To provide the best quality of water and wastewater services to the customers of Otay Water District, in a professional, effective, and efficient manner." This project fulfills the two of the District's Strategic Goals, No. 1 - Community and Governance and No. 5 - Potable Water, by maintaining proactive and productive relationships with the project stakeholders, and by guaranteeing that the District will provide for current and future water needs.

**LEGAL IMPACT:** \_\_\_\_\_

None.



\_\_\_\_\_  
**General Manager**

P:\WORKING\CIP P2009 36-inch PL - FCF 14 to Reg Site\Staff Reports\BD 01-05-11, Staff Report, RBF CO#2, (RR-RP).doc

RR/RP:jf

Attachments      Attachment A - Committee Action  
Attachment B - Budget Detail  
Exhibit A - Project Location Map  
Exhibit B - Change Order No. 2



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b> P2009-001102	Change Order No. 2 to the Construction Management Services Contract with RBF Consulting for the 36-Inch Pipeline, SDCWA Otay FCF No. 14 to the Regulatory Site Project
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### COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

### NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



## ATTACHMENT B

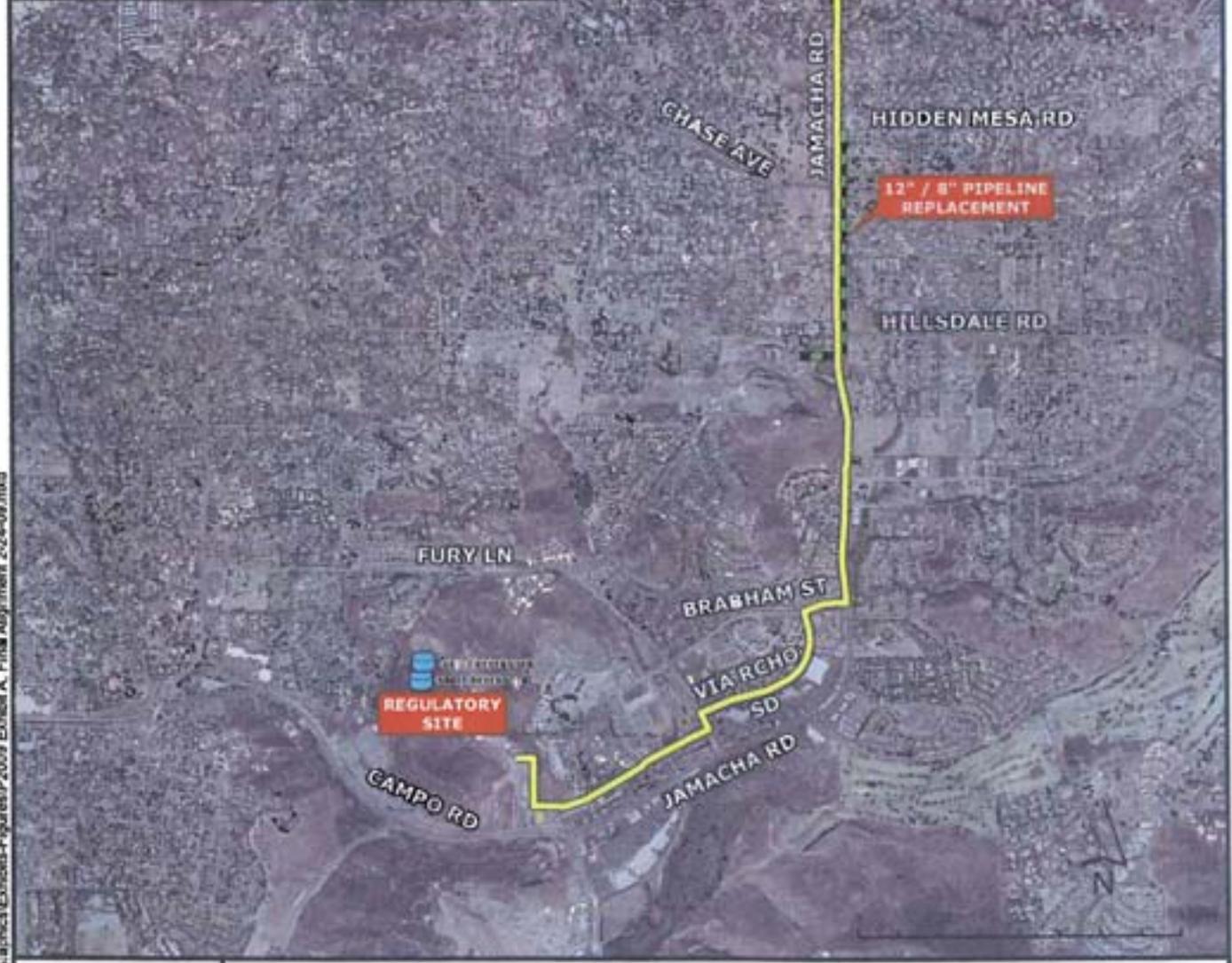
<b>SUBJECT/PROJECT:</b>  P2009-001102	Change Order No. 2 to the Construction Management Services Contract with RBF for the 36-Inch Pipeline, SDCWA Otay FCF No. 14 to the Regulatory Site Project
---	---

Otay Water District  
 P2009 - 36-Inch Pipeline from SDCWA Otay FCF No. 14 to the Regulatory Site

Date Updated: November 05, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
21,000,000					
<b>Planning</b>					
Labor	285,782	285,782	-	285,782	
Printing	593	593	-	593	OCB REPROGRAPHICS
	596	596	-	596	MAIL MANAGEMENT GROUP INC
Business Meetings	110	110	-	110	PETTY CASH CUSTODIAN
	84	84	-	84	US BANK CORPORATE PAYMENT
Postage	341	341	-	341	US POSTMASTER
Professional Legal Fees	5,595	5,595	-	5,595	BURKE WILLIAMS & SORENSEN LLP
	187,474	187,474	-	187,474	GARCIA CALDERON & RUIZ LLP
Other Legal Expenses	4,948	4,948	-	4,948	GARCIA CALDERON & RUIZ LLP
	(10,290)	(10,290)	-	(10,290)	WOODRUFF, SPRADLIN & SMART
Regulatory Agency Fees	1,927	1,927	-	1,927	COUNTY OF SAN DIEGO
	100	100	-	100	US FISH & WILDLIFE SERVICE
Consultant Contracts	1,080,288	1,080,288	-	1,080,288	INFRASTRUCTURE ENGINEERING
	25,684	25,684	-	25,684	JONES & STOKES ASSOCIATES INC
	1,100	1,100	-	1,100	SOUTHWESTERN COLLEGE (COC)
Service Contracts	398	398	-	398	UNION TRIBUNE PUBLISHING CO
	957	957	-	957	SAN DIEGO DAILY TRANSCRIPT
	350	350	-	350	RYAN BETHKE
	705	705	-	705	OLLI BROS
<b>Total Planning</b>	<b>1,587,141</b>	<b>1,587,142</b>	<b>-</b>	<b>1,587,142</b>	
<b>Design</b>					
Labor	691,627	691,627	-	691,627	
Mileage Reimbursement	69	69	-	69	PETTY CASH CUSTODIAN
Meals and Incidentals	63	63	-	63	PETTY CASH CUSTODIAN
Business Meetings	46	46	-	46	PETTY CASH CUSTODIAN
	215	215	-	215	US BANK CORPORATE PAYMENT
Professional Legal Fees	67,883	67,883	-	67,883	STEPHEN V MCCUE ESQ
	79,098	79,098	-	79,098	GARCIA CALDERON & RUIZ LLP
	153	153	-	153	R W BECK
Other Legal Expenses	5,581	5,581	-	5,581	GARCIA CALDERON & RUIZ LLP
	17,071	17,071	-	17,071	R W BECK
	1,671	1,671	-	1,671	SHELburnE SHERR COURT
Regulatory Agency Fees	271	271	-	271	COUNTY OF SAN DIEGO - DPW
Other Agency Fees	12,830	12,830	-	12,830	CITY OF EL CAJON
Consultant Contracts	99	99	-	99	PETTY CASH CUSTODIAN
	2,915	2,915	-	2,915	LEE & RO (As-Needed Design)
	3,656	3,656	-	3,656	RBF (As-Needed Drafting)
	1,050	1,050	-	1,050	SOUTHLAND TITLE
	1,640	1,640	-	1,640	CALTRANS
	527,826	527,826	-	527,826	LEE & RO INC
	<b>61,629</b>	<b>61,629</b>	<b>-</b>	<b>61,629</b>	C.O. #1

	13,440	13,440	-	13,440	SWINERTON MANAGEMENT
	4,744	4,744	-	4,744	WRA & ASSOCIATES INC
	41,513	41,513	-	41,513	SOUTHERN CALIFORNIA SOIL
	36,750	36,750	-	36,750	MWH CONSTRUCTORS INC
	4,900	4,900	-	4,900	KEN DAROIS
Miscellaneous Contracts	87	87	-	87	SAN DIEGO DAILY TRANSCRIPT
	93,000	93,000	-	93,000	SAN DIEGO COUNTY WATER
	107,138	101,801	5,337	107,138	HARRIS & ASSOCIATES INC
	28	28	-	28	SAN DIEGO COUNTY
	5,700	5,700	-	5,700	BELLA TERRA HOA
	700	700	-	700	SUZETTE C SWANGER
	3,000	3,000	-	3,000	RAYMOND KEITH HANNA
	229,800	229,800	-	229,800	GROSSMONT-CUYAMACA COMMUNITY
Service Contracts	7,500	7,500	-	7,500	KEAGY REAL ESTATE
	91	91	-	91	SAN DIEGO DAILY TRANSCRIPT
	244	244	-	244	UNION TRIBUNE PUBLISHING CO
	349	349	-	349	MCGRAW-HILL COMPANIES
	6,912	6,912	-	6,912	REPROHAUS CORP
Special Projects	48	48	-	48	SEDONA STAFFING SERVICES
<b>Total Design</b>	<b>2,031,334</b>	<b>2,025,996</b>	<b>5,337</b>	<b>2,031,334</b>	
<b>Construction</b>					
Labor	325,000	288,181	36,819	325,000	
Mileage Reimbursement	119	119	-	119	PETTY CASH CUSTODIAN
Meals and Incidentals	83	83	-	83	PETTY CASH CUSTODIAN
Business Meetings	150	150	-	150	US BANK CORPORATE PAYMENT
Postage	1,606	1,606	-	1,606	US POSTMASTER
Printing	2,814	1,139	1,675	2,814	MAIL MANAGEMENT GROUP INC
	141	141	-	141	US BANK CORPORATE PAYMENT
Regulatory Agency Fees	17,375	17,375	-	17,375	SAN DIEGO COUNTY WATER
	11,641	11,641	-	11,641	CITY OF EL CAJON
	88,279	5,100	83,179	88,279	HELIX WATER DISTRICT
Other Agency Fees	1,172	1,172	-	1,172	HELIX WATER DISTRICT
	88,725	-	88,725	88,725	HELIX WATER DISTRICT
	9,625	9,625	-	9,625	CITY OF EL CAJON
Consultant Contracts	1,088,785	1,088,785	-	1,088,785	RBF CONSULTING (CM)
	46,995	46,995	-	46,995	C.O. #1
	101,075	77,534	23,541	101,075	C.O. #2
	13,128	13,128	-	13,128	SOUTHERN CALIFORNIA SOIL
	30,000	29,171	829	30,000	MARSTON+MARSTON INC
	52,357	34,865	17,492	52,357	LEE & RO INC (Constr. Phase Services)
	252	252	-	252	SAN DIEGO NEIGHBORHOOD
Construction Contracts	527,000	527,000	-	527,000	SAN DIEGO COUNTY WATER
	12,869	12,869	-	12,869	SOUTHERN CALIFORNIA SOIL
	27,850	27,850	-	27,850	HELIX WATER DISTRICT
	13,680,525	12,439,847	1,240,678	13,680,525	CCL CONTRACTING
	(243,847)	(243,847)	-	(243,847)	C.O. #1
	(63,418)	(63,418)	-	(63,418)	C.O. #2
	(1,474,033)	-	(1,474,033)	(1,474,033)	C.O. #3
	1,485,918	1,233,364	252,554	1,485,918	CALIFORNIA BANK & TRUST
	49,901	49,501	-	49,901	COUNTY OF SAN DIEGO - DPW
	5,998	5,998	-	5,998	CLARKSON LAB & SUPPLY INC
	-	-	-	-	HARRIS & ASSOCIATES INC
Professional Legal Fees	83	83	-	83	GARCIA CALDERON & RUIZ LLP
Service Contracts	1,311	1,311	-	1,311	UNION TRIBUNE PUBLISHING CO
	266	266	-	266	MCGRAW-HILL COMPANIES
	450	450	-	450	REEL 'EM IN INC
	252	252	-	252	SAN DIEGO NEIGHBORHOOD NEWS
	1,769	1,769	-	1,769	MAIL MANAGEMENT GROUP INC
	121	121	-	121	SD DAILY TRANSCRIPT
Infrastructure Equipment & Mater	16,375	1,626	14,750	16,375	MESA LABORATORIES INC
Backfill	14,000	14,000	-	14,000	TC CONSTRUCTION INC
Inline Valve	1,609	1,609	-	1,609	FERGUSON WATERWORKS # 1082
<b>Total Construction</b>	<b>15,904,322</b>	<b>15,638,114</b>	<b>266,208</b>	<b>15,904,322</b>	
<b>Grand Total</b>	<b>19,522,797</b>	<b>19,251,252</b>	<b>271,545</b>	<b>19,522,797</b>	



**OTAY WATER DISTRICT**  
 PIPELINE 36-INCH,  
 SDCWA FCF NO. 14 TO REGULATORY SITE

CIP P2009

P:\WORKING\CIP P2009\G:\pics\Exhibits-Figures\P2009 Exhibit A, Final Alignment 2-24-09.mxd

**EXHIBIT A**

# EXHIBIT B

## OTAY WATER DISTRICT

2554 SWEETWATER SPRINGS BLVD., SPRING VALLEY, CA. 91978, (619) 670-2222

### CONTRACT/P.O. CHANGE ORDER No. 02

PROJECT/ITEM: Construction Management and Inspection Services for the 36-inch Pipeline from SDCWA No. 14 to Regulatory Site

CONTRACTOR/VENDOR: RBF Consulting

REF.CIP No.: P2009

APPROVED BY: Board

REF. P.O. No: 707935

DATE: 10-Nov-10

#### DESCRIPTION:

Increase Contract value for additional services per the attached request for contract amendment dated November 8, 2010.

#### REASON:

Resulting from added scope performed as a result of extending the duration of the construction contract additional services are necessary to provide required construction management and inspection services to complete.

#### CHANGE P.O. TO READ:

Revise contract to add \$101,075.00 for a total contract amount of \$1,236,855.00.

ORIGINAL CONTRACT/P.O. AMOUNT:	\$ 1,088,785.00
ADJUSTED AMOUNT FROM PREVIOUS CHANGE:	\$ 1,135,780.00
TOTAL COST OF THIS CHANGE ORDER:	\$ 101,075.00
NEW CONTRACT/P.O. AMOUNT IS:	\$ 1,236,855.00
ORIGINAL CONTRACT COMPLETION DATE:	01/31/10
CONTRACT/P.O. TIME AFFECTED BY THIS CHANGE:	No
REVISED CONTRACT COMPLETION DATE:	03/01/11

IT IS UNDERSTOOD WITH THE FOLLOWING APPROVALS, THAT THE CONTRACTOR/VENDOR IS AUTHORIZED AND DIRECTED TO MAKE THE HEREIN DESCRIBED CHANGES. IT IS ALSO AGREED THAT THE TOTAL COST FOR THIS CHANGE ORDER CONSTITUTES FULL AND COMPLETE COMPENSATION FOR OBLIGATIONS REQUIRED BY THE CONTRACT/P.O. ALL OTHER PROVISIONS AND REQUIREMENTS OF THE CONTRACT/P.O. REMAIN IN FULL FORCE AND EFFECT.

#### CONTRACTOR/VENDOR:

SIGNATURE: 

NAME: Wayne Papac

TITLE: Vice President DATE: 11-10-10

ADDRESS: 9755 Clairemont Mesa Blvd

San Diego, CA 92124

#### STAFF APPROVALS:

PROJ. MGR : \_\_\_\_\_ DATE: \_\_\_\_\_

DIV. MGR : \_\_\_\_\_ DATE: \_\_\_\_\_

CHIEF: \_\_\_\_\_ DATE: \_\_\_\_\_

ASST. GM : \_\_\_\_\_ DATE: \_\_\_\_\_

#### DISTRICT APPROVAL:

GEN. MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

COPIES:  FILE (Orig.),  CONTRACTOR/VENDOR,  CHIEF-ENGINEERING,  CHIEF-FINANCE,  ENGR. MGR.  
 ACCTS PAYABLE,  INSPECTION,  PROJ. MGR.,  ENGR. SECRETARY,  PURCHASING,  PROJECT BINDER

### CHANGE ORDER LOG

Construction Management and Inspection Services for the 36-inch Pipeline from SDCWA No. 14 to Regulatory Site  
 Consultant/Contractor RBF Consulting

Project: P2009  
 Subproject:

C.O.	AMOUNT	APPROVED		DESCRIPTION	TYPE C.O.
		BY	DATE		
1	\$46,995.00	GM	6/15/2010	Compensation for Additional Services during Pre-Construction	Owner
2	\$101,075.00	Board		Compensation for Additional Services as part of construction contract extension	Owner
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					

Total C.O.'s To Date:	\$148,070.00	13.6%
Original Contract Amount:	\$1,088,785.00	
Current Contract Amount:	\$1,236,855.00	

Change Order Breakdown for the Month:

Month	Net C.O.\$	Limit	Authorization	C.O. %
11/10	\$0.00	\$1,000	Insp	0.0%
		\$5,000	PM/Supervisor	0.0%
		\$10,000	Manager	0.0%
		\$15,000	Chief	0.0%
		\$20,000	AGM	0.0%
		\$50,000	GM	0.0%



OTAY WATER DISTRICT  
RECEIVED

2010 NOV -9 AM 10: 55

November 8, 2010

Otay Water District  
Attn: Ron Ripperger, PE, Project Manager  
2554 Sweetwater Springs Boulevard  
Spring Valley, CA 91978

Re: Request for Contract Amendment  
Construction Management and Inspection Services for the 36-inch Pipeline from  
SDCWA No. 14 to Regulatory Site (P-2009)

Dear Mr. Ripperger:

When our contract was issued in February of 2008, it was anticipated that construction operations would be complete in December of 2009. Due to changes in the engineering firm of record, delays were encountered resulting in a anticipated construction contract completion date of August 24, 2010 for which Contract Change Order No. 1 was issued. Due to Project requirements the actual construction completion was October 31, 2010, and formal administrative close-out shall be complete by November 30, 2010.

Our original negotiated budget for pre-construction support anticipated 7 months of services encompassing constructability reviews, public relations support and bidding support for a total of \$83,144.00. Resulting from extenuating circumstances surrounding the replacement of the original design firm our pre-construction efforts were increased to a total of 18 months with a total cost of \$272,191.25 resulting in a delta of \$189,047.25.

We have worked with District staff throughout the construction process to minimize costs, where possible, in an effort to mitigate the impacts of the additional pre-construction support. Our Change Order No.01 compensated us up to and including August 31, 2010, however, the Contractor did not complete the field work until October 31, 2010, and there remain continued administrative close-out activities and a small amount of field work to be completed by the end of November. In order to complete the remaining activities and recover costs from September 1, 2010 through completion and final deliverables please process a Contract Change Order for the following:

Task 1 – Construction Inspection	– James Bassett	339 hrs @	\$145/hr	=	\$49,155.00
Task 2 – Construction Management	– Wayne Papac	5 hrs @	\$180/hr	=	\$900.00
Task 2 – Construction Management	– Douglas Cook	232 hrs @	\$160/hr	=	\$37,120.00
Task 2 – Construction Management	– Ellen Buensuceso	132 hrs @	\$75/hr	=	\$9,900.00
Task 3 - ODC's		2 mo @	\$2,000.00	=	\$4,000.00
					=====
					\$101,075.00

PLANNING ■ DESIGN ■ CONSTRUCTION

9755 Clairemont Mesa Boulevard, San Diego, CA 92124-1324 ■ 858.614.5000 ■ Fax 858.614.5001

Offices located throughout California, Arizona & Nevada ■ www.RBF.com

printed on recycled paper

We respectfully request a contract FINAL amendment to add \$101,075.00 to our current contract to include completion of required services.

Respectfully submitted,



Wayne Papac  
Vice President / Project Manager  
*Authorized Officer*

## Quality Assurance Approval Sheet

Subject: Change Order No. 2 to the Construction  
Management Services Contract with RBF  
Consulting for the 36-Inch Pipeline, SDCWA  
Otay FCF No. 14 to the Regulatory Site Project

Project No.: P2009-001102

Document Description: Staff Report for January 5, 2011 Board Meeting.

Author:

Ron Ripperger  
Signature

11/30/10  
Date

Ron Ripperger  
Printed Name

QA Reviewer:

Gary Silverman  
Signature

11/30/10  
Date

Gary Silverman  
Printed Name

Manager:

Rod Posada  
Signature

12/1/10  
Date

Rod Posada  
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible, and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011	
SUBMITTED BY:	Ron Ripperger <i>[Signature]</i> Engineering Manager	PROJECT / SUBPROJECT:	P2009-001103	DIV. NO. 5
APPROVED BY: (Chief)	Rod Posada <i>[Signature]</i> Chief, Engineering			
APPROVED BY: (Asst. GM):	Manny Magaña <i>[Signature]</i> Assistant General Manager, Engineering and Operations			
SUBJECT:	Credit Change Order No. 3 to the Construction Contract with CCL Contracting Inc. for the Jamacha Road 36-Inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement Projects			

**GENERAL MANAGER'S RECOMMENDATION:**

That the Otay Water District (District) Board of Directors (Board) approves Credit Change Order No. 3 to the existing construction contract with CCL Contracting Inc. (CCL) for the Jamacha Road 36-Inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement Projects in the amount of <\$1,474,033.22> (see Exhibit A for project location.)

**COMMITTEE ACTION:**

Please see Attachment A.

**PURPOSE:**

To obtain Board authorization for the General Manager to execute Credit Change Order No. 3 (see Exhibit B) for <\$1,474,033.22> to the construction contract with CCL for the Jamacha Road 36-Inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement Projects.

**ANALYSIS:**

At the June 3, 2009 Board Meeting, CCL was awarded a construction contract for the 36-Inch Pipeline Project in the amount of

\$16,189,243. Project construction began in July 2009 and was completed in November 2010.

On January 6, 2010 the Board approved Credit Change Order No. 1 which provided for a change in installation methods of the 36-inch pipe under an existing riparian area within the southeasterly portion of Cuyamaca College due to differing site conditions. The original Bid Item No. 7 in the contract for P2009 included \$936,434 for a traditional tunnel operation. Change Order No. 1 modified this item to a jack and bore operation for a revised cost of \$692,587 resulting in a net change of <\$243,847>.

On July 7, 2010 the Board approved Credit Change Order No. 2 which provided for a variety of items including an increase in costs due to revising the location of airvac assemblies, removal of rocks and boulders encountered during the jack & bore operation within Cuyamaca College, and changing the specified spacers within the steel casing to redwood skids. In addition, the pipeline had to be realigned during construction due to conflicts with the new 12-inch pipe. This change order also included deletion of an allowance item for installation of a sound wall within Cuyamaca College of (\$200,000). The total cost for all the additive items was \$136,852. Including the credit for the sound wall allowance, Credit Change Order No. 2 provided a net reimbursement amount to the District of <\$63,418.11>.

Credit Change Order No. 3 is the final change order for the project essentially closing out the contract with CCL. This change order includes twenty-two (22) separate items consisting of one increase (Item No. 21) and twenty-one (21) deductions to the contract amount. In addition, Credit Change Order No. 3 extends the contract duration by fifty-three (53) days.

Item No. 21, valued at \$11,575.20, provides for the addition of a sample pump and associated mechanical and electrical work at Vault No. 7 at the Regulatory Site. The remaining twenty-one (21) items provide credits for various items such as reduced quantity of rock removal, dewatering to the storm drain, disposal of Class II regulated waste, reduced quantity of sewer lateral reconstruction, and other miscellaneous allowances added to the contract based on an independent risk analysis. The deductive items also include a credit back for allowances such as unknown utilities and paving. Exhibit B provides all the detail for this change.

**FISCAL IMPACT:** 

Funding for the overall project comes from CIP P2009, the 36-Inch pipeline installation. This Credit Change Order reduces the contract by <\$1,474,033.22>.

The total budget for CIP P2009, as approved in the FY 2011 budget, is \$21,000,000. Total expenditures, plus outstanding commitments and forecast including this Credit Change Order, are \$19,522,797. See Attachment B for budget detail.

The Project Manager anticipates that, based on the attached financial analysis, the CIP budget for P2009 will be sufficient to support this project.

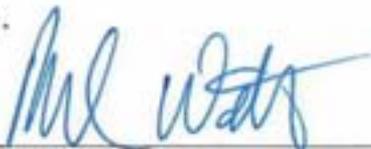
Finance has determined that 40% of the funding is available from the Expansion Fund and 60% of the funding is available from the Betterment Fund for CIP P2009.

**STRATEGIC GOAL:**

This project supports the District's Mission statement, "To provide the best quality of water and wastewater service to the customers of the Otay Water District, in a professional, effective, and efficient manner." This project fulfills two of the District's Strategic Goals, No. 1 - Community and Governance and No. 5 - Potable Water, by maintaining proactive and productive relationships with the project stakeholders and by guaranteeing that the District will provide for current and future water needs.

**LEGAL IMPACT:**

None.



\_\_\_\_\_  
General Manager

F:\WORKING\CIP P2009 36-inch PL - FCF 14 to Reg Site\Staff Reports\BD 01-05-11 , Staff Report, CCL CO#3, (RR-RP).doc

RR/RP:jf

Attachments: Attachment A - Committee Action  
Attachment B - Budget Detail  
Exhibit A - Project Location Map  
Exhibit B - Credit Change Order No. 3



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b>  P2009-001103	Credit Change Order No. 3 to the Construction Contract with CCL Contracting Inc. for the Jamacha Road 36-Inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement Projects
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### COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

### NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



## ATTACHMENT B

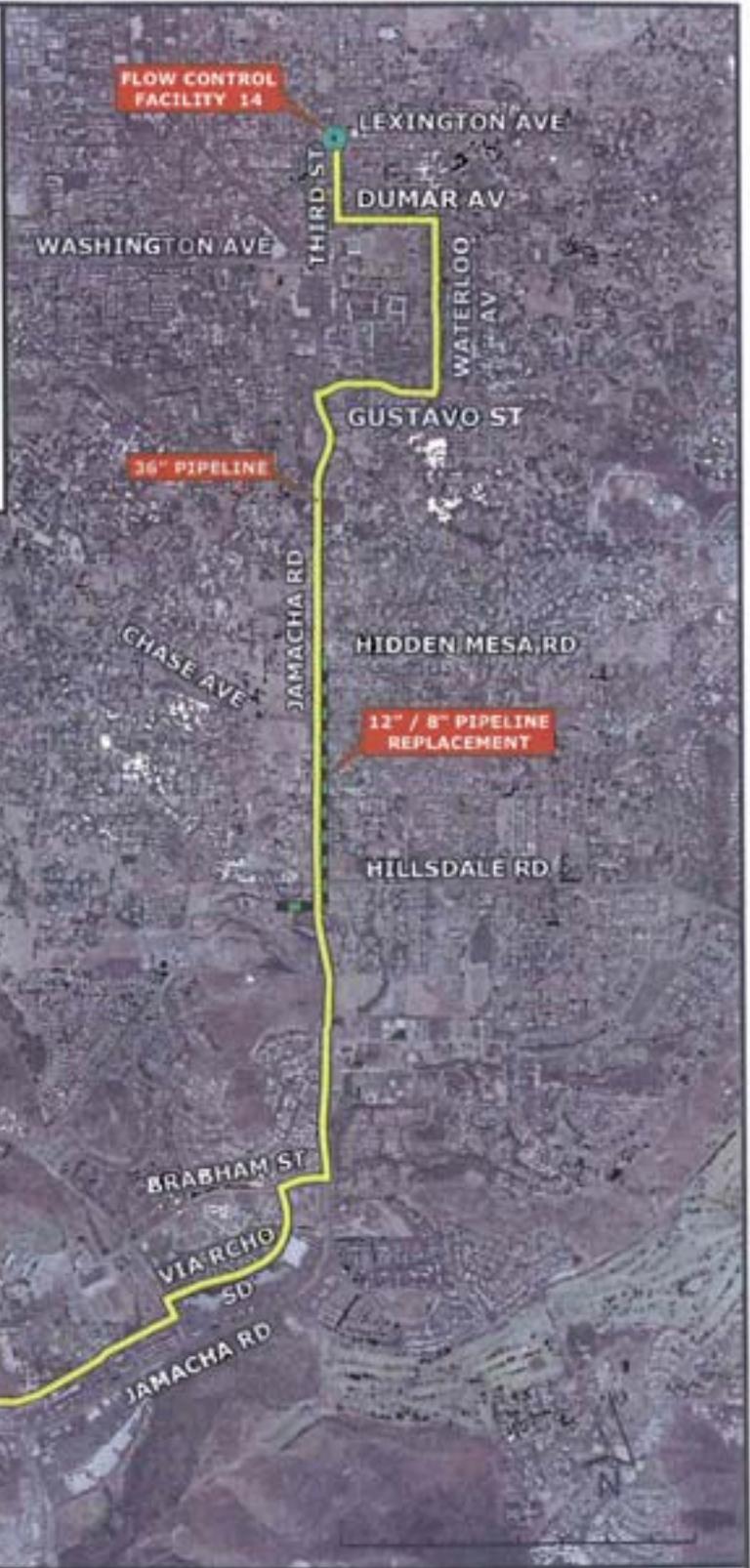
<b>SUBJECT/PROJECT:</b>  P2009-001103	Credit Change Order No. 3 to the Construction Contract with CCL Contracting Inc. for the Jamacha Road 36-Inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement Projects
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Otay Water District  
P2009 - 36-Inch Pipeline from SDCWA Otay FCF No. 14 to the Regulatory Site

Date Updated: November 05, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
21,000,000					
<b>Planning</b>					
Labor	285,782	285,782		285,782	
Printing	993	993	-	993	OCB REPROGRAPHICS
	596	596	-	596	MAIL MANAGEMENT GROUP INC
Business Meetings	110	110	-	110	PETTY CASH CUSTODIAN
	84	84	-	84	US BANK CORPORATE PAYMENT
Postage	341	341	-	341	US POSTMASTER
Professional Legal Fees	5,595	5,595	-	5,595	BURKE WILLIAMS & SORENSEN LLP
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Other Legal Expenses	4,948	4,948	-	4,948	GARCIA CALDERON & RUIZ LLP
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Regulatory Agency Fees	1,927	1,927	-	1,927	COUNTY OF SAN DIEGO
	100	100	-	100	US FISH & WILDLIFE SERVICE
Consultant Contracts	1,080,288	1,080,288	-	1,080,288	INFRASTRUCTURE ENGINEERING
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	1,100	1,100	-	1,100	SOUTHWESTERN COLLEGE (COC)
Service Contracts	398	398	-	398	UNION TRIBUNE PUBLISHING CO
	957	957	-	957	SAN DIEGO DAILY TRANSCRIPT
	350	350	-	350	RYAN BETHKE
	705	705	-	705	OLLI BROS
<b>Total Planning</b>	<b>1,587,141</b>	<b>1,587,142</b>	<b>-</b>	<b>1,587,142</b>	
<b>Design</b>					
Labor	691,627	691,627		691,627	
Mileage Reimbursement	69	69	-	69	PETTY CASH CUSTODIAN
Meals and Incidentals	63	63	-	63	PETTY CASH CUSTODIAN
Business Meetings	46	46	-	46	PETTY CASH CUSTODIAN
	215	215	-	215	US BANK CORPORATE PAYMENT
Professional Legal Fees	67,883	67,883	-	67,883	STEPHEN V MCCUE ESQ
	79,098	79,098	-	79,098	GARCIA CALDERON & RUIZ LLP
	153	153	-	153	R W BECK
Other Legal Expenses	5,581	5,581	-	5,581	GARCIA CALDERON & RUIZ LLP
	17,071	17,071	-	17,071	R W BECK
	1,671	1,671	-	1,671	SHELburne SHERR COURT
Regulatory Agency Fees	271	271	-	271	COUNTY OF SAN DIEGO - DPW
Other Agency Fees	12,830	12,830	-	12,830	CITY OF EL CAJON
Consultant Contracts	99	99	-	99	PETTY CASH CUSTODIAN
	2,915	2,915	-	2,915	LEE & RO (As-Needed Design)
	3,656	3,656	-	3,656	RBF (As-Needed Drafting)
	1,050	1,050	-	1,050	SOUTHLAND TITLE
	1,640	1,640	-	1,640	CALTRANS
	527,826	527,826	-	527,826	LEE & RO INC
	61,629	61,629	-	61,629	C.O. #1

	13,440	13,440	-	13,440	SWINERTON MANAGEMENT
	4,744	4,744	-	4,744	WRA & ASSOCIATES INC
	41,513	41,513	-	41,513	SOUTHERN CALIFORNIA SOIL
	36,750	36,750	-	36,750	MWH CONSTRUCTORS INC
	4,900	4,900	-	4,900	KEN DAROIS
Miscellaneous Contracts	87	87	-	87	SAN DIEGO DAILY TRANSCRIPT
	93,000	93,000	-	93,000	SAN DIEGO COUNTY WATER
	107,138	101,801	5,337	107,138	HARRIS & ASSOCIATES INC
	28	28	-	28	SAN DIEGO COUNTY
	5,700	5,700	-	5,700	BELLA TERRA HOA
	700	700	-	700	SUZETTE C SWANGER
	3,000	3,000	-	3,000	RAYMOND KEITH HANNA
	229,800	229,800	-	229,800	GROSSMONT-CUYAMACA COMMUNITY
Service Contracts	7,500	7,500	-	7,500	KEAGY REAL ESTATE
	91	91	-	91	SAN DIEGO DAILY TRANSCRIPT
	244	244	-	244	UNION TRIBUNE PUBLISHING CO
	349	349	-	349	MCGRAW-HILL COMPANIES
	6,912	6,912	-	6,912	REPROHAUS CORP
Special Projects	48	48	-	48	SEDONA STAFFING SERVICES
<b>Total Design</b>	<b>2,031,334</b>	<b>2,025,996</b>	<b>5,337</b>	<b>2,031,334</b>	
<b>Construction</b>					
Labor	325,000	288,181	36,819	325,000	
Mileage Reimbursement	119	119	-	119	PETTY CASH CUSTODIAN
Meals and Incidentals	83	83	-	83	PETTY CASH CUSTODIAN
Business Meetings	150	150	-	150	US BANK CORPORATE PAYMENT
Postage	1,606	1,606	-	1,606	US POSTMASTER
Printing	2,814	1,139	1,675	2,814	MAIL MANAGEMENT GROUP INC
	141	141	-	141	US BANK CORPORATE PAYMENT
Regulatory Agency Fees	17,375	17,375	-	17,375	SAN DIEGO COUNTY WATER
	11,641	11,641	-	11,641	CITY OF EL CAJON
	88,279	5,100	83,178	88,279	HELIX WATER DISTRICT
Other Agency Fees	1,172	1,172	-	1,172	HELIX WATER DISTRICT
	68,725	-	68,725	68,725	HELIX WATER DISTRICT
	9,625	9,625	-	9,625	CITY OF EL CAJON
Consultant Contracts	1,088,785	1,088,785	-	1,088,785	RBF CONSULTING (CM)
	46,995	46,995	-	46,995	C.O. #1
	101,075	77,534	23,541	101,075	C.O. #2
	13,128	13,128	-	13,128	SOUTHERN CALIFORNIA SOIL
	30,000	29,171	829	30,000	MARSTON+MARSTON INC
	52,357	34,865	17,492	52,357	LEE & RO INC (Constr. Phase Services)
	252	252	-	252	SAN DIEGO NEIGHBORHOOD
Construction Contracts	527,000	527,000	-	527,000	SAN DIEGO COUNTY WATER
	12,869	12,869	-	12,869	SOUTHERN CALIFORNIA SOIL
	27,850	27,850	-	27,850	HELIX WATER DISTRICT
	13,680,525	12,439,847	1,240,678	13,680,525	CCL CONTRACTING
	(243,847)	(243,847)	-	(243,847)	C.O. #1
	(63,418)	(63,418)	-	(63,418)	C.O. #2
	(1,474,033)	-	(1,474,033)	(1,474,033)	C.O. #3
	1,485,918	1,233,364	252,554	1,485,918	CALIFORNIA BANK & TRUST
	49,901	49,901	-	49,901	COUNTY OF SAN DIEGO - DPW
	5,998	5,998	-	5,998	CLARKSON LAB & SUPPLY INC
	-	-	-	-	HARRIS & ASSOCIATES INC
Professional Legal Fees	83	83	-	83	GARCIA CALDERON & RUIZ LLP
Service Contracts	1,311	1,311	-	1,311	UNION TRIBUNE PUBLISHING CO
	266	266	-	266	MCGRAW-HILL COMPANIES
	450	450	-	450	REEL 'EM IN INC
	252	252	-	252	SAN DIEGO NEIGHBORHOOD NEWS
	1,769	1,769	-	1,769	MAIL MANAGEMENT GROUP INC
	121	121	-	121	SD DAILY TRANSCRIPT
Infrastructure Equipment & Mate	16,375	1,626	14,750	16,375	MESA LABORATORIES INC
Backfill	14,000	14,000	-	14,000	TC CONSTRUCTION INC
Inline Valve	1,609	1,609	-	1,609	FERGUSON WATERWORKS # 1082
<b>Total Construction</b>	<b>15,904,322</b>	<b>15,638,114</b>	<b>266,208</b>	<b>15,904,322</b>	
<b>Grand Total</b>	<b>19,522,797</b>	<b>19,251,252</b>	<b>271,545</b>	<b>19,522,797</b>	



P:\WORKING\CIP P2009\Graphics\Exhibits\Figures\Figures\2009 Exhibit A Final Alignment 2-24-09.mxd



**OTAY WATER DISTRICT**  
 PIPELINE 36-INCH,  
 SDCWA FCF NO. 14 TO REGULATORY SITE

CIP P2009

**EXHIBIT A**

# EXHIBIT B

## OTAY WATER DISTRICT

2854 SWEETWATER SPRINGS BLVD., SPRING VALLEY, CA. 91978, (619) 670-2222

### CONTRACT/P.O. CHANGE ORDER No. 3

**PROJECT/ITEM:** Jamacha Rd 36-Inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement Project

**CONTRACTOR/VENDOR:** CCL Contracting

**REF.CIP No.:** P2009 / P2038

**APPROVED BY:** Board

**REF. P.O. No:** 710770

**REF. W.O. No.:**

**DATE:** 11/03/2010

#### DESCRIPTION:

See attached page 2 of 5 for continuation.

#### REASON:

See attached page 4 of 5 for continuation.

#### CHANGE P.O. TO READ:

Revise Contract to deduct \$1,474,033.22 and add 53 days time for a total Contract amount of \$14,407,944.27 with a Contract Duration of 493 Calendar Days.

ORIGINAL CONTRACT/P.O. AMOUNT:	\$	16,189,243.00
ADJUSTED AMOUNT FROM PREVIOUS CHANGE:	\$	15,881,977.49
TOTAL COST OF THIS CHANGE ORDER:	\$	(1,474,033.22)
NEW CONTRACT/P.O. AMOUNT IS:	\$	14,407,944.27
ORIGINAL CONTRACT COMPLETION DATE:		Aug 4, 2010
CONTRACT/P.O. TIME AFFECTED BY THIS CHANGE:		53 days
CONTRACT COMPLETION DATE:		Oct 15, 2010

IT IS UNDERSTOOD WITH THE FOLLOWING APPROVALS, THAT THE CONTRACTOR/VENDOR IS AUTHORIZED AND DIRECTED TO MAKE THE HEREIN DESCRIBED CHANGES. IT IS ALSO AGREED THAT THE TOTAL COST FOR THIS CHANGE ORDER CONSTITUTES FULL AND COMPLETE COMPENSATION FOR OBLIGATIONS REQUIRED BY THE CONTRACT/P.O. ALL OTHER PROVISIONS AND REQUIREMENTS OF THE CONTRACT/P.O. REMAIN IN FULL FORCE AND EFFECT.

#### CONTRACTOR/VENDOR:

*By the Secretary*  
TITLE: Secretary DATE: 11/5/10

ADDRESS: CCL Contracting  
1938 Don Lee Place, Escondido, CA 92029

#### STAFF APPROVALS:

PROJ. MGR. *[Signature]* DATE: 11/10/10  
DIV. MGR: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHIEF: \_\_\_\_\_ DATE: \_\_\_\_\_  
ASSIST G.M.: \_\_\_\_\_ DATE: \_\_\_\_\_

#### DISTRICT APPROVAL:

GEN. MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

COPIES:  FILE (Orig.)  CONTRACTOR/VENDOR  CHIEF-ENGINEERING  ASST CHIEF-FINANCE  ENGR. MGR.  
 ACCTS PAYABLE  INSPECTION  PROJ MGR  ENGR. SECRETARY  PURCHASING

**Description of Work**

<u>Description</u>	<u>Increase</u>	<u>Decrease</u>	<u>Time</u>
<u>Item No. 1:</u> This Change Order decreases the amount allocated for Bid Item 22, Rock Removal by \$133,332.00 to a new authorized amount of \$116,268.00. (Delete 4,166.63 CY at \$32 / CY)		\$133,332.00	0
<u>Item No. 2:</u> This Change Order decreases the amount allocated for Bid Item 23, Dewatering to Sewer System by \$40,000.00 to a new authorized amount of \$0.00. (Delete 5,000 LF at \$8 / LF)		\$40,000.00	0
<u>Item No. 3:</u> This Change Order decreases the amount allocated for Bid Item 24, Dewatering to Storm Drain by \$14,364.00 to a new authorized amount of \$12,636.00. (Delete 1,404 LF at \$9 / LF)		\$14,364.00	0
<u>Item No. 4:</u> This Change Order decreases the amount allocated for Bid Item 26, Unsuitable Soils by \$36,000.00 to a new authorized amount of \$0.00. (Delete 800 CY at \$45 / CY)		\$36,000.00	0
<u>Item No. 5:</u> This Change Order decreases the amount allocated for Bid Item 27, Regulatory Site Sample Line Allowance by \$7,651.24 to a new authorized amount of \$2,348.76.		\$7,651.24	0
<u>Item No. 6:</u> This Change Order decreases the amount allocated for Bid Item 28, Disposal of Class I Regulated Waste Material by \$25,000.00 to a new authorized amount of \$0.00. (Delete 50 TON at \$500 / TON)		\$25,000.00	0
<u>Item No. 7:</u> This Change Order decreases the amount allocated for Bid Item 29, Disposal of Class II Regulated Waste Material by \$30,000.00 to a new authorized amount of \$0.00. (Delete 100 TON at \$300 / TON)		\$30,000.00	0
<u>Item No. 8:</u> This Change Order decreases the amount allocated for Bid Item 30, Disposal of Class III Regulated Waste Material by \$20,000.00 to a new authorized amount of \$0.00. (Delete 200 TON at \$100 / TON)		\$20,000.00	0
<u>Item No. 9:</u> This Change Order decreases the amount allocated for Bid Item 31, Additional Potholing – Utilities No Shown on Drawings by \$98,700.00 to a new authorized amount of \$6,300.00. (Delete 141 EA at \$700 / EA)		\$98,700.00	0
<u>Item No. 10:</u> This Change Order decreases the amount allocated for Bid Item 32, Relocate/Reconstruct Sewer Laterals by \$84,000.00 to a new authorized amount of \$0.00. (Delete 70 EA at \$1,200 / EA)		\$84,000.00	0
<u>Item No. 11:</u> This Change Order decreases the amount allocated for Bid Item 33, Relocate/Reconstruct Water Laterals by \$16,000.00 to a new authorized amount of \$0.00. (Delete 40 EA at \$400 / EA)		\$16,000.00	0
<u>Item No. 12:</u> This Change Order decreases the amount allocated for Bid Item 34, Relocation of Pipeline Construction Operation by \$84,000.00 to a new authorized amount of \$0.00. (Delete 12 EA at \$12,000 / EA)		\$84,000.00	0

<u>Item No. 13:</u>	This Change Order decreases the amount allocated for Bid Item 35, Utility Under Crossings Not Identified on the Plans Greater Than 4-inches in Diameter by \$25,000.00 to a new authorized amount of \$0.00. (Delete 100 EA at \$250 / EA)	\$25,000.00	0
<u>Item No. 14:</u>	This Change Order decreases the amount allocated for Bid Item 37, Unknown or Unidentified Utilities Allowance by \$291,883.77 to a new authorized amount of \$208,116.23.	\$291,883.77	0
<u>Item No. 15:</u>	This Change Order decreases the amount allocated for Bid Item 38, SDCWA Periodic Shutdowns by \$50,000.00 to a new authorized amount of \$0.00. (Delete 10 Day at \$5,000 / Day)	\$50,000.00	0
<u>Item No. 16:</u>	This Change Order decreases the amount allocated for Bid Item 39, Grove Road Pipeline (Caltrans Portion) Allowance by \$50,000.00 to a new authorized amount of \$0.00.	\$50,000.00	0
<u>Item No. 17:</u>	This Change Order decreases the amount allocated for Bid Item 40, Agency Inspection and Permit Fees Allowance by \$162,307.00 to a new authorized amount of \$37,693.00.	\$162,307.00	0
<u>Item No. 18:</u>	This Change Order decreases the amount allocated for Bid Item 41, Additional Mandatory Night Shift Operations by \$100,000.00 to a new authorized amount of \$0.00. (Delete 40 Shifts at \$2,500 / Shift)	\$100,000.00	0
<u>Item No. 19:</u>	This Change Order decreases the amount allocated for Bid Item 42, Mobilization and Demobilization of Dewatering Water Treatment System Allowance by \$100,000.00 to a new authorized amount of \$0.00.	\$100,000.00	0
<u>Item No. 20:</u>	This Change Order decreases the amount allocated for Bid Item 43, Additional Paving Allowance by \$62,915.88 to a new authorized amount of \$37,084.12.	\$62,915.88	0
<u>Item No. 21:</u>	This Change Order provides for addition of a sample pump and associated mechanical and electrical work at Vault 7.	\$11,575.20	53
<u>Item No. 22:</u>	This Change Order provides for reimbursement for District costs of additional test/flushing water and bacteriological sampling costs pursuant to Section 15041 of the Contract.	\$54,454.53	
	<b>Sub Total Amount</b>	\$11,575.20	\$1,485,608.42 53
	<b>Total Net Change Order Amount</b>	<u>(\$1,474,033.22)</u>	

Revisions to: **BID SCHEDULE**

Item #	Description	Quantity	Unit	Unit Price	Amount
22	Rock Removal	3,633.37	CY	\$32.00	\$116,268.00
23	Dewatering to Sewer System	0	LF	\$8.00	\$0.00
24	Dewatering to Storm Drain	1,404	LF	\$9.00	\$12,636.00
26	Unsuitable Soils	0	CY	\$45.00	\$0.00
27	Regulatory Site Sample Line Allowance	1	LS	LS	\$2,348.76
28	Disposal of Class I Regulated Waste Material	0	CY	\$500.00	\$0.00

29	Disposal of Class II Regulated Waste Material	0	CY	\$300.00	\$0.00
30	Disposal of Class III Regulated Waste Material	0	CY	\$100.00	\$0.00
31	Additional Potholing – Utilities Not Shown on Drawings	9	EA	\$700.00	\$6,300.00
32	Relocate/Reconstruct Sewer Laterals	0	EA	\$1,200.00	\$0.00
33	Relocate/Reconstruct Water Laterals	0	EA	\$400.00	\$0.00
34	Relocation of Pipeline Construction Operation	0	EA	\$12,000.00	\$0.00
35	Utility Under Crossings Not Identified on the Plans Greater Than 4-inches in Diameter	0	EA	\$250.00	\$0.00
37	Unknown or Unidentified Utilities Allowance	1	LS	LS	\$208,116.23
38	SDCWA Periodic Shutdowns	0	Day	\$5,000.00	\$0.00
39	Grove Road Pipeline (Caltrans Portion)	1	LS	LS	\$0.00
40	Agency Inspection and Permit Fees	1	LS	LS	\$37,693.00
41	Additional Mandatory Night Shift Operations	0	Shifts	\$2,500.00	\$0.00
42	Mobilization and Demobilization of Dewatering Water Treatment System	1	LS	LS	\$0.00
43	Additional Paving	1	LS	LS	\$37,084.12

**Reason:**Item No. 1:

The Contract Bid Item No. 22, Rock Removal, quantity required a decrease due to field conditions.

Item No. 2:

The Contract Bid Item No. 23, Dewatering to Sewer System, quantity required a decrease due to field conditions.

Item No. 3:

The Contract Bid Item No. 24, Dewatering to Storm Drain, quantity required a decrease due to field conditions.

Item No. 4:

The Contract Bid Item No. 26, Unsuitable Soils, quantity required a decrease due to field conditions.

Item No. 5:

The Contract Allowance Bid Item, Item No. 27, Regulatory Site Sample Line Allowance, was utilized to the maximum practical extent in the performance of the contract work and is no longer required.

Item No. 6:

The Contract Bid Item No. 28, Disposal of Class I Regulated Waste Material, quantity required a decrease due to field conditions.

Item No. 7:

The Contract Bid Item No. 29, Disposal of Class II Regulated Waste Material, quantity required a decrease due to field conditions.

Item No. 8:

The Contract Bid Item No. 30, Disposal of Class III Regulated Waste Material, quantity required a decrease due to field conditions.

Item No. 9:

The Contract Bid Item No. 31, Additional Potholing – Utilities Not Shown on Drawings, quantity required a decrease due to field conditions.

Item No. 10:

The Contract Bid Item No. 32, Relocate/Reconstruct Sewer Laterals, quantity required a decrease due to field conditions.

Item No. 11:

The Contract Bid Item No. 33, Relocate/Reconstruct Water Laterals, quantity required a decrease due to field conditions.

Item No. 12:

The Contract Bid Item No. 34, Relocation of Pipeline Construction Operation, quantity required a decrease due to field conditions.

Item No. 13:

The Contract Bid Item No. 35, Utility Under Crossings Not Identified on the Plans Greater Than 4-inches in Diameter, quantity required a decrease due to field conditions.

Item No. 14:

The Contract Bid Item No. 37, Unknown or Unidentified Utilities Allowance, was utilized to the maximum practical extent in the performance of the contract work and is no longer required.

Item No. 15:

The Contract Bid Item No. 38, SDCWA Periodic Shutdowns, quantity required a decrease due to field conditions.

Item No. 16:

The Contract Bid Item No. 39, Grove Road Pipeline (Caltrans Portion) Allowance, was utilized to the maximum practical extent in the performance of the contract work and is no longer required.

Item No. 17:

The Contract Bid Item No. 40, Agency Inspection and Permit Fees Allowance, was utilized to the maximum practical extent in the performance of the contract work and is no longer required.

Item No. 18:

The Contract Bid Item No. 41, Additional Mandatory Night Shift Operations, quantity required a decrease due to field conditions.

Item No. 19:

The Contract Bid Item No. 42, Mobilization and Demobilization of Dewatering Water Treatment System Allowance, was utilized to the maximum practical extent in the performance of the contract work and is no longer required.

Item No. 20:

The Contract Bid Item No. 43, Additional Paving Allowance, was utilized to the maximum practical extent in the performance of the contract work and is no longer required.

Item No. 21:

Incorporation of the Sample Line downstream of the static mixer at Vault 7 installed as part of this project necessitated the need for an additional sample pump to allow for monitoring of the effectiveness of the new static mixer. This change is necessary to incorporate the needed additional sample pump and associated piping and electrical modifications at Vault 7.

Item No. 22:

The Contractor did not pass bacteriological testing by the second set of tests. Section 15041-3.6 of the Contract states re-disinfection and re-testing beyond the second set of samples shall be at the Contractor's expense. The District incurred costs for additional flushing/test water from SDCWA and Helix Water District in addition to charges for additional bacteriological tests. This change is necessary to allow the District to recover the additional expenditures incurred.

### CHANGE ORDER LOG

**Jamacha Rd 36-inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement**

CCL Contracting

P2009 / P2038

PO NO. 710770

C.O.	AMOUNT	APPROVED		DESCRIPTION	TYPE C.O.
		BY	DATE		
1	(\$243,847.40)	Board	1/6/2010	Differing Site Condition at Tunnel - Change Tunnel to Jack & Bore Operation	Differing Site Condition
2	(\$63,418.11)	Board	7/7/2010	Rock Encountered in Jack & Bore, Change Casing Spacer Detail, Conflicting Waterline, Change Manway Detail, Rain Days, Delete Soundwall Allowance, Time associated with field	Differing Site Condition and Owner Program Change
3	(\$1,474,033.22)	Board		Modifications to Vault 7 at the Regulatory Site, Credit for excess test water and bacteriological testing and closeout of remaining unused bid items.	Differing Site Condition and Owner Program Change
4					
5					
6					
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29					
30					
31					
32					
33					
34					
35					

Total C.O.'s To Date: (\$1,781,298.73) -11.0%

Original Contract Amount: \$16,189,243.00

Current Contract Amount: \$14,407,944.27

**Change Order Breakdown for the Month:**

Month	Net C.O.\$	Limit	Authorization	C.O. %
11/10		\$1,000	Insp	0.0%
		\$5,000	PM/Supervisor	0.0%
		\$10,000	Manager	0.0%
		\$15,000	Chief	0.0%
		\$20,000	AGM	0.0%
		\$50,000	GM	0.0%

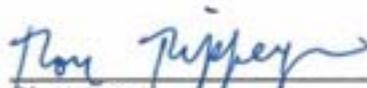
## Quality Assurance Approval Sheet

Subject: Credit Change Order No. 3 to the Construction Contract with CCL Contracting Inc. for the Jamacha Road 36-Inch Potable Water Pipeline and 12-Inch Potable Water Pipeline Replacement Projects

Project No.: P2009-001103

Document Description: Staff Report for January 5, 2011 Board Meeting

Author:

  
Signature

11-30-10  
Date

Ron Ripperger  
Printed Name

QA Reviewer:

  
Signature

11-30-10  
Date

Gary Silverman  
Printed Name

Manager:

  
Signature

12/1/10  
Date

Rod Posada  
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible, and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011		
SUBMITTED BY:	Gary Silverman <i>[Signature]</i> Senior Civil Engineer	PROJECT/ SUBPROJECT:	P2434- 001101	DIV. NO.	2, 4
	Ron Ripperger <i>[Signature]</i> Engineering Manager				
APPROVED BY: (Chief)	Rod Posada <i>[Signature]</i> Chief, Engineering				
APPROVED BY: (Asst. GM):	Manny Magaña <i>[Signature]</i> Assistant General Manager, Engineering and Operations				
SUBJECT:	Authorization to Issue a RFP for the Design of Phase 2 of the Rancho del Rey Well Project				

**GENERAL MANAGER'S RECOMMENDATION:**

That the Otay Water District (District) Board of Directors (Board) authorize staff to proceed with issuing a RFP for Phase 2 of the Rancho del Rey Well Project, which would include equipping the well and designing a wellhead treatment facility (see Exhibit A for project location).

**COMMITTEE ACTION:** \_\_\_\_\_

Please see Attachment A.

**PURPOSE:**

To obtain Board authorization for staff to proceed with issuing a RFP for Phase 2 of the Rancho del Rey Well Project, which would include equipping the well and designing a wellhead treatment facility.

**ANALYSIS:**

In 1997, the District purchased an existing 7-inch well and the surrounding property on Rancho del Rey Parkway (see Exhibit A) from

the McMillin Company with the intent to develop it as a source of potable water. A prior study had shown that groundwater in that location would support long-term pumping of about 390 gpm, but would require a larger well to achieve that flow. It was also known that treatment would be required to remove salts and boron, among other constituents, using reverse osmosis (RO) membranes and perhaps ion exchange.

In 2000, having received proposals for the design and construction of an RO treatment facility that far exceeded the allocated budget, the Board of Directors instructed staff to suspend the project until such time as it became economically viable.

In 2009, given the rising cost of imported water and the District's interest in securing its own water source for long-term supply reliability, the project was revisited. Local ground water supply projects will allow for less reliance upon imported water, achieve a level of independence from regional wholesale water agencies, and diversify the District's water supply portfolio consistent with the District's March 2007 Integrated Water Resources Plan. Toward this end, in January 2010, the Board authorized Phase 1 of the project, the drilling and development of the Rancho del Rey Well.

A new 12-inch production well was drilled 900-feet through the groundwater formation and into fractured bedrock below. It was screened with slotted, wire-wrapped stainless steel in multiple intervals to maximize production. Testing completed in September 2010, showed the long-term yield of the new well to be 450 gpm, higher than previous studies had estimated.

Before proceeding with equipping the well and installing wellhead treatment, staff contracted with Separation Processes, Inc. (SPI), a well-known membrane treatment firm, to conduct a detailed economic analysis. The purpose of the study was to confirm that the annualized unit cost of the new water source was economically viable. SPI, in their November 2010 study, estimated the unit cost of water to be \$1,510 per acre foot for the alternative that utilizes a seawater membrane for treating both salts and boron. The price includes all spent, committed, and projected future capital expenditures associated with the well project amortized over a 30-year useful life, plus anticipated annual operations and maintenance costs during that period. The Executive Summary of the SPI study is provided as Exhibit B.

When compared with the current imported treated water rate from San Diego County Water Authority (CWA), and with the knowledge that this rate will continually increase as Metropolitan Water District (MWD) and CWA raise their rates, the Rancho del Rey Well project appears to be economically viable. Exhibit C is a graph that compares the

CWA rate, which is projected to increase by about 10 percent per year each of the next 5 years, to the annualized cost of the Rancho del Rey Well, which can be expected to increase by about 2 percent per year over the same 5 year period. The graph shows that the well becomes the less costly source of water by FY 2014. Therefore, staff recommends that the Board authorize the issuance of a RFP to begin Phase 2 of this project.

In conjunction with the economic feasibility study, staff contracted with a local architect to prepare renderings of the proposed new treatment facility to show how it would fit on the site and be compatible with the neighborhood. The renderings were prepared based on a preliminary footprint layout prepared by SPI. The renderings and the layout are provided as Exhibit D and will also be presented via PowerPoint.

**FISCAL IMPACT:** 

The total budget for CIP P2434, as approved in the FY 2011 budget, is \$4,250,000. Total expenditures, plus outstanding commitments and forecast, is \$2,550,223. See Attachment B for budget detail.

Based on the \$3.5 million Phase 2 capital expenditure estimate in the SPI Study, the Project Manager has determined that the existing CIP budget will be insufficient to support the project once it is better defined through the design process. An anticipated supplemental funding of approximately \$2.0 million will be requested as part of the FY 2012 CIP budget.

With the shifting of certain CIP's into later years, Finance has determined that 40% of the funding is available from the Expansion Fund and 60% of the funding is available from the Betterment Fund.

**STRATEGIC GOAL:**

This project supports the District's Mission statement, "To provide the best quality of water and wastewater services to the customers of Otay Water District, in a professional, effective, and efficient manner." This project fulfills the District's Strategic Goals No. 1 - Community and Governance, and No. 5 - Potable Water, by maintaining proactive and productive relationships with the project stakeholders and by guaranteeing that the District will provide for current and future water needs.

**LEGAL IMPACT:** \_\_\_\_\_

None.



**General Manager**

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GS/RR:jf

- Attachments:
- Attachment A - Committee Action
  - Attachment B - Budget Detail
  - Exhibit A - Location Map
  - Exhibit B - SPI Study Executive Summary
  - Exhibit C - CWA vs. RDR Well Unit Cost Comparison
  - Exhibit D - PowerPoint Presentation of Architectural Renderings and Building Layout



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b> P2434-001101	Authorization to Issue a RFP for the Design of Phase 2 of the Rancho del Rey Well Project
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### COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

### NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



## ATTACHMENT B

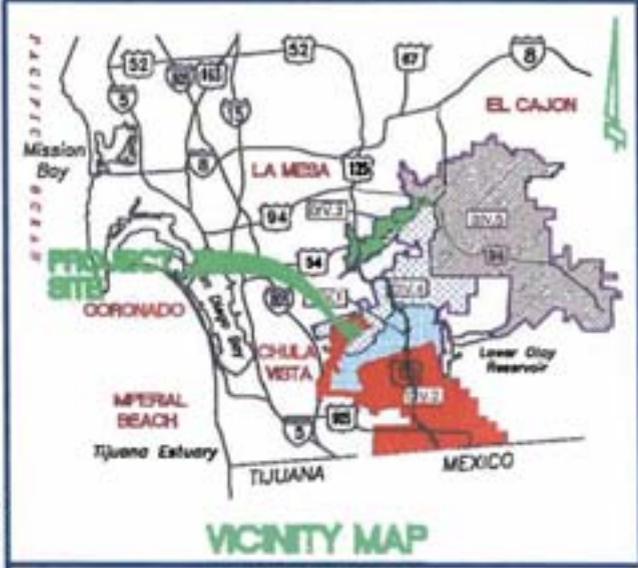
**SUBJECT/PROJECT:** Authorization to Issue a RFP for the Design of Phase 2 of the Rancho del Rey Well Project

P2434-001101

Date Updated: November 29, 2010

<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment &amp; Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
4,250,000					
<b>Planning</b>					
Labor	308,719	308,719		308,719	
Land	326,092	326,092	-	326,092	
Permits	125	125	-	125	CITY OF CHULA VISTA-DEPT. OF
Materials	1,348	1,348	-	1,348	VARIOUS
Rental	159	159	-	159	PENHALL COMPANY
Construction Costs	26,154	26,154	-	26,154	CHILDTIME CHILDCARE, INC.
Professional Legal Fees	4,829	4,829	-	4,829	GARCIA CALDERON & RUIZ LLP
Consultant Contracts	19,481	19,481	-	19,481	JONES & STOKES ASSOCIATES INC
	13,825	13,825	-	13,825	MWH CONSTRUCTORS INC
	1,100	1,100	-	1,100	SOUTHWESTERN COLLEGE
	3,065	3,065	-	3,065	SOUTHERN CALIFORNIA SOIL
	15,000	-	15,000	15,000	SEPARATION PROCESSES INC
	6,930	6,930	-	6,930	VALLEY CONSTRUCTION MANAGEMENT
	1,561,625	1,231,406	330,219	1,561,625	AECOM TECHNICAL SERVICES INC
Change Order No. 1	176,805	-	176,805	176,805	AECOM TECHNICAL SERVICES INC, C.O.#1
Service Contracts	5,100	-	5,100	5,100	S R BRADLEY & ASSOCIATES INC
	186	186	-	186	SAN DIEGO DAILY TRANSCRIPT
	624	624	-	624	UNION TRIBUNE PUBLISHING CO
	399	399	-	399	REPROHAUS CORP
	440	440	-	440	URBINA'S MASTER SWEEPING INC
	6	6	-	6	COUNTY OF SAN DIEGO
	134	134	-	134	COURIER EXPRESS, INC.
	205	205	-	205	USA SIGN CO.
	3,226	3,226	-	3,226	QUALITY ASSURANCE LABORATORY
	7,108	7,108	-	7,108	MULTI WATER SYSTEMS
	1,955	1,955	-	1,955	BARRETT CONSULTING GROUP
	5,665	5,665	-	5,665	EARTH TECH
	3,344	3,344	-	3,344	CITY OF CHULA VISTA
	16,714	16,714	-	16,714	BOYLE ENGINEERING CORPORATION
	112	112	-	112	MONTGOMERY WATSON LABORATORIES
	2,500	2,500	-	2,500	ANDREW A. SMITH COMPANY
	2,000	2,000	-	2,000	ENARTEC ENGINEERING PLANNING
	35,200	35,200	-	35,200	ALCEM FENCE COMPANY INC.
Regulatory Agency Fees	50	50	-	50	PETTY CASH CUSTODIAN
<b>Total Planning</b>	2,550,223	2,023,099	527,124	2,550,223	
<b>Grand Total</b>	2,550,223	2,023,099	527,124	2,550,223	

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**OTAY WATER DISTRICT**  
 RANCHO DEL WAY PARKWAY, CHULA VISTA, CA  
 RANCHO DEL REY GROUND WATER DEVELOPMENT

CIP P2434

**EXHIBIT A**

## EXHIBIT B



# RANCHO DEL REY WELLHEAD TREATMENT PROJECT

## FEASIBILITY STUDY

Prepared By:

Kevin L. Alexander, P.E.  
Separation Processes, Inc.  
3156 Lionshead Ave., Suite 2  
Carlsbad, CA 92010  
(760)400-3660



## EXECUTIVE SUMMARY

The Rancho del Rey Wellhead Treatment Facility (Project) will introduce a new potable water source to the Otay Water District's Central System. This project provides the District with a local source of water to augment other available sources of water, thereby increasing water supply reliability and increasing independence from regional wholesale water agencies.

The original Rancho del Rey Well, drilled in 1991, had an estimated capacity of approximately 300 gpm and was drilled in a zone of fractured sandstone. The original well water quality indicated elevated levels of TDS (2,250 mg/l), boron (2.67 mg/l), chloride (1,200 mg/l) and turbidity (2 NTU), among others.

Recently, a new well was installed on the same site, and the original well was abandoned. Initial tests indicate that the new well will have a safe yield of 450 gpm. A water quality analysis performed on water from the well in September 2010 indicates that the water quality is similar to the 1991 sample. Concentrations of key constituents include TDS (2,400 mg/l), boron (2.5 mg/l), chloride (1,100 mg/l), and silica, as SiO<sub>2</sub> (17 mg/l). Turbidity was reported at 2.7 NTU and the 15 minute silt density index (SDI) was above 5. It is expected that the turbidity level and SDI will decrease with additional pumping.

The final product water quality from the facility must meet the Federal and State regulatory limits. The presence of boron in the water, a constituent that is relatively difficult to treat, drives the treatment process development.

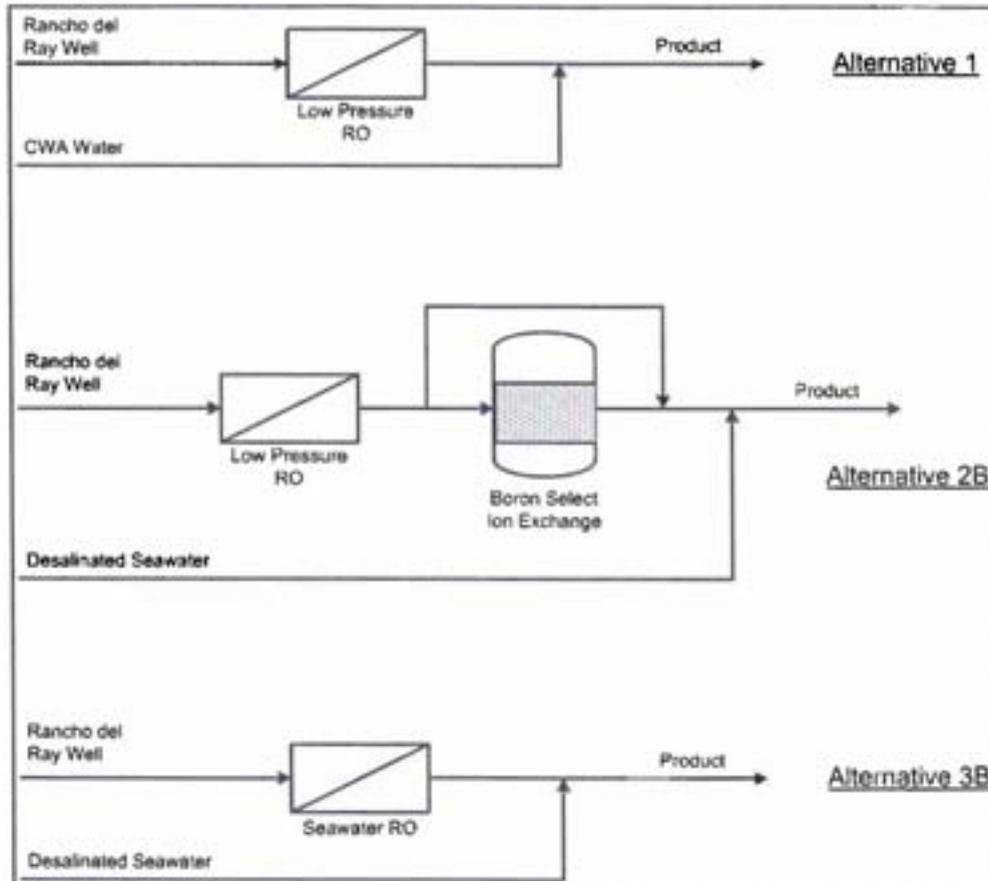
This feasibility study considered various treatment alternatives as indicated in Table ES-1. Each of the alternatives was developed to a level sufficient to understand the differences in the overall system configuration and cost to construct, operate and maintain.

**TABLE ES-1 – Rancho del Rey Wellhead Treatment Alternatives**

Alt.	Membrane	Ion Exchange	Blend Source	Boron Reduction Method	Stabilization Method	Final Boron Conc., mg/l	Blend Flow, gpm
1	Low Pressure	No	CWA	Blend	NaOH + Blend	0.8	1000
2a	Low Pressure	Yes	CWA	IX + Blend	NaOH + Blend	0.5	382
2b	Low Pressure	Yes	Desal	IX	NaOH + Blend	0.6	400
3a	Seawater	No	CWA	Membrane + Blend	NaOH + Blend	0.5	300
3b	Seawater	No	Desal	Membrane	NaOH + Blend	0.6	400

FIGURE ES-1 shows schematically three of the alternative process designs that were considered.

FIGURE ES-1 – Process Diagrams for Treatment Alternatives



Alternative 1 utilizes a low pressure reverse osmosis (RO) membrane to remove Total Dissolved Solids (TDS), however, the membrane is not capable of significant boron removal. Boron removal would be achieved by blending the RO product water with CWA water from the distribution system, which has a low boron concentration, to achieve the desired reduction. The blend also provides stabilization for protection from corrosion.

Alternative 2 utilizes the same low pressure RO membranes to remove TDS and adds an Ion Exchange (IX) system for removal of boron. In this alternative, the blend stream for corrosion stabilization may come from either CWA or from a future desalination facility in Mexico, which will likely be predominant in the distribution system once on-line.

Alternative 3 utilizes seawater membranes with higher salt rejection to remove both TDS and boron all in one step. This alternative also considers stabilizing for corrosion control with water from CWA or from the proposed desalination facility. The detailed economic feasibility study considering both operating and maintenance costs and capital costs to develop an annualized unit cost of producing water from the Rancho del Rey Well.

Table ES-2 shows a breakdown of operations and maintenance costs expressed as an annual expenditure (\$/year), as well as a unit cost (\$/AF) for treatment alternatives 1, 2B and 3B. Alternative 3B appears to be the least costly to operate despite the high cost of power for the high pressure seawater membrane, because it pumps a smaller blend stream than in Alternative 1 and doesn't have the higher chemical costs associated with the ion exchange unit in Alternative 2B.

**Table ES-2 Operations and Maintenance Costs for Treatment Alternatives**

O&M Item	Alternative 1		Alternative 2B		Alternative 3B	
	\$/yr	\$/AF	\$/yr	\$/AF	\$/yr	\$/AF
Equipment Power	\$229,807	\$393	\$190,622	\$326	\$227,403	\$389
Miscellaneous Energy	\$6,894	\$12	\$5,719	\$10	\$6,822	\$12
Chemical Costs	\$10,255	\$18	\$44,664	\$76	\$11,001	\$19
Concentrate Disposal	\$67,908	\$116	\$75,536	\$129	\$67,908	\$116
Operating Labor	\$83,220	\$142	\$83,220	\$142	\$83,220	\$142
Maintenance Labor	\$21,900	\$37	\$21,900	\$37	\$21,900	\$37
Maintenance Materials	\$47,461	\$81	\$47,387	\$81	\$41,461	\$71
Equipment Replacement	\$17,135	\$29	\$18,535	\$32	\$16,670	\$28
Miscellaneous	\$24,229	\$41	\$24,379	\$42	\$23,819	\$41
<b>Total</b>	<b>\$508,809</b>	<b>\$869</b>	<b>\$511,962</b>	<b>\$875</b>	<b>\$500,204</b>	<b>\$855</b>

The estimated capital costs for Alternatives 1, 2 and 3 are shown in Table ES-3. The A and B variations for Alternatives 2 and 3 do not differ from a capital cost perspective, so only one is shown. The capital costs include the complete system with well pumping, treatment processes, distribution system pumping, and building to house the facility. The building is estimated conservatively at 50 ft by 80 ft with a perimeter fence and access gates, sidewalks and a small parking area in the front of the building. The building architecture matches the architecture of the adjacent child care facility. Capital costs use various sources, including budgetary quotations for major equipment and reference data from similar recent projects in California, Utah, and Arizona.

Once again, Alternative 3 appears to be the least cost alternative from a capital perspective because it doesn't have the ion exchange unit of Alternative 2 and the product water pumping equipment is smaller and, therefore, less expensive.

**TABLE ES-3 Capital Costs for Treatment Alternatives**

Item	Unit	Alternative		
		1	2a or 2b	3a or 3b
Well Pump		\$82,000	\$82,000	\$82,000
Sulfuric Acid System		\$23,000	\$23,000	\$23,000
TI System		\$20,000	\$20,000	\$20,000
Cartridge Filter - Included in RO Train		\$0	\$0	\$0
RO Membrane Train		\$454,000	\$454,000	\$454,000
CIP System		\$41,000	\$41,000	\$41,000
Ion Exchange System		\$0	\$167,000	\$0
NaOCl System		\$20,000	\$20,000	\$20,000
Aqua Ammonia System		\$23,000	\$23,000	\$23,000
Blending System		\$15,000	\$15,000	\$15,000
NaOH System		\$22,000	\$22,000	\$22,000
Finished Water Pumping & Wetwell		\$321,000	\$281,000	\$281,000
Installation	15%	\$153,000	\$172,000	\$147,000
<b>Mechanical Total</b>		<b>\$1,174,000</b>	<b>\$1,320,000</b>	<b>\$1,128,000</b>
Building, 4,000 SF	\$150/SF	\$600,000	\$600,000	\$600,000
<b>Subtotal</b>		<b>\$1,774,000</b>	<b>\$1,920,000</b>	<b>\$1,728,000</b>
Site Work	7%	\$124,000	\$134,000	\$121,000
Building HVAC	3%	\$53,000	\$58,000	\$52,000
Plumbing	3%	\$53,000	\$58,000	\$52,000
Electrical, I&C	15%	\$266,000	\$288,000	\$259,000
<b>Subtotal</b>		<b>\$2,270,000</b>	<b>\$2,458,000</b>	<b>\$2,212,000</b>
Contingency	20%	\$454,000	\$492,000	\$442,000
Overhead and Profit	16%	\$363,000	\$393,000	\$354,000
Engineering	15%	\$341,000	\$369,000	\$332,000
<b>Total</b>		<b>\$3,428,000</b>	<b>\$3,712,000</b>	<b>\$3,340,000</b>

Table ES-4 combines the capital and O&M costs and expresses them as an annualized unit costs in terms of dollars per acre-foot (\$/AF).

**TABLE ES-4 Alternative Annualized Unit Costs of Producing Water from the Rancho del Rey Well**

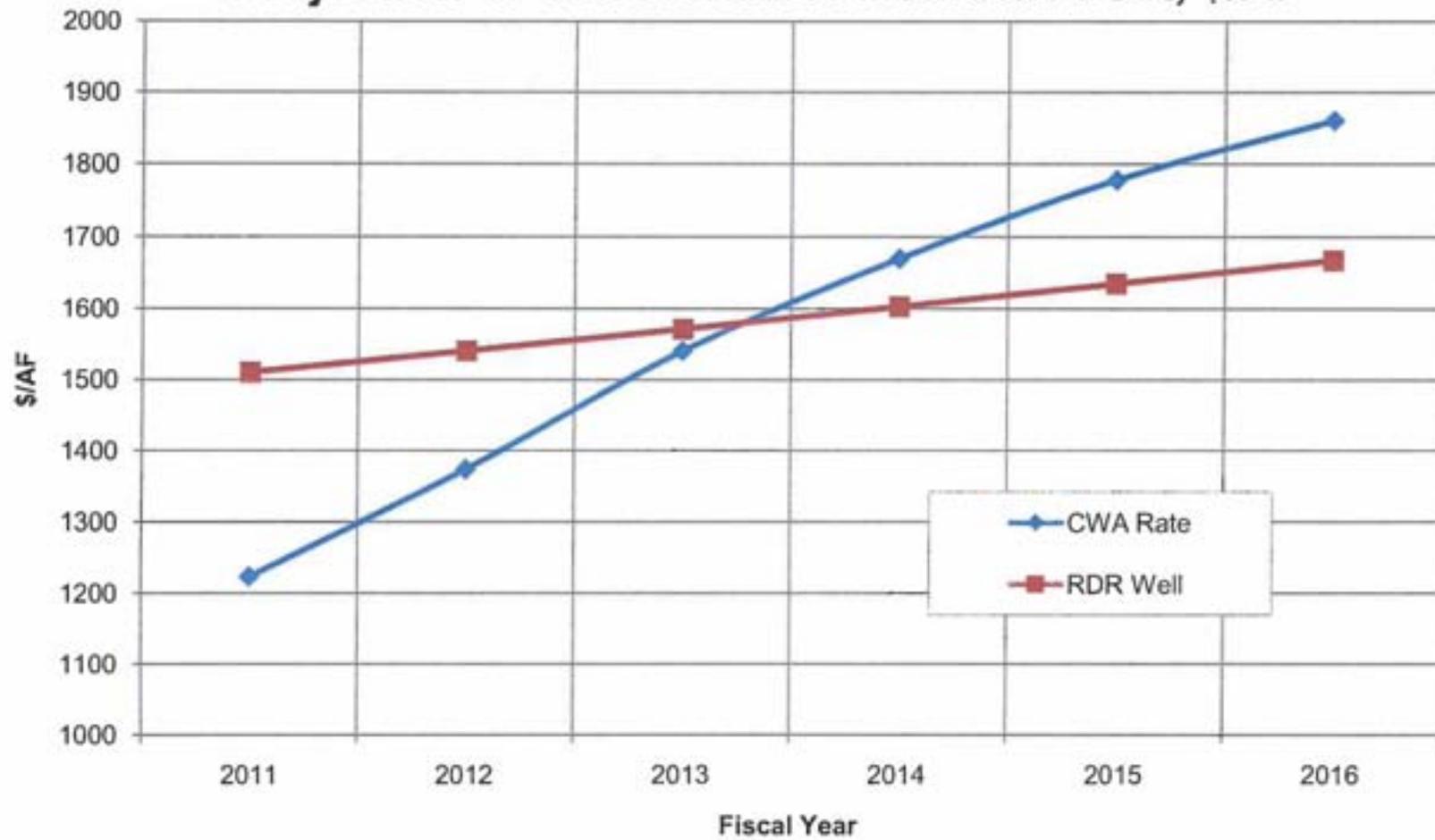
Description	Annualized Unit Costs, \$/AF
Alternative 1-LP RO with CWA	\$1,525
Alternative 2B-LP RO with IX & Desal	\$1,530
Alternative 3B-HP RO with Desal	\$1,510

The unit costs are FY 2011 numbers developed based on a 30-year useful life of the facility with a discount rate of 4.5%, chemical costs from vendor quotes and other facilities, power costs based on \$0.11 per kW-hr, labor for operating and maintenance, and repair and replacement. The facility is assumed to be a base load facility and will operate 95% of the time.

#### **Conclusion**

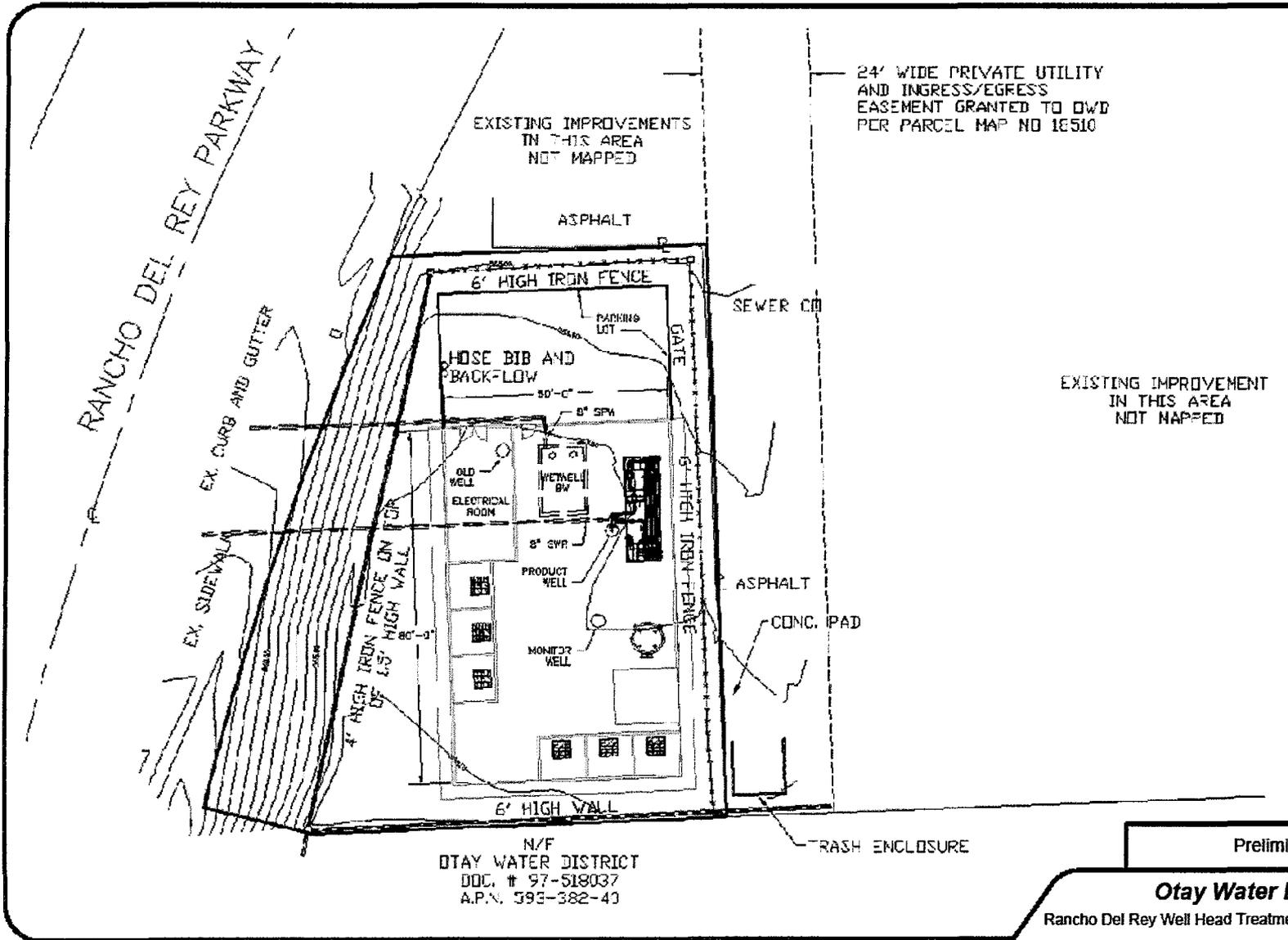
After a thorough review of the treatment alternatives, including the capital, operating and maintenance costs, it is recommended that the Otay Water District consider Alternative 3B as the preferred alternative. It is the least costly, would provide high quality drinking water over the life of the project, and would be relatively easy to operate.

**Exhibit C**  
**Projection of CWA vs. RDR Well Unit Cost, \$/AF**



# Exhibit D

Notes





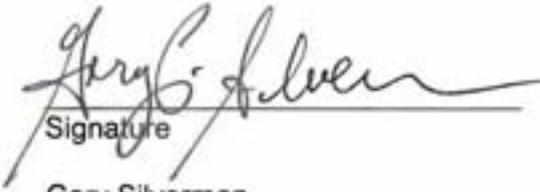


## Quality Assurance Approval Sheet

Subject: Authorization to Issue a RFP for the Design of  
the Rancho del Rey Well Project

Project No.: P2434-001101

Document Description: Staff Report for January 5, 2011 Board Report

Author:  12/1/10  
Signature Date  
Gary Silverman  
Printed Name

QA Reviewer:  12/1/10  
Signature Date  
Bob Kennedy  
Printed Name

Manager:  12/1/10  
Signature Date  
Ron Ripperger  
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	January 5, 2011
SUBMITTED BY:	Bob Kennedy <i>BK</i> Associate Civil Engineer	W.O./G.F. No.:	D0790- DIV. NO. 2 090070/ 090076
	Ron Ripperger <i>RR</i> Engineering Manager		
APPROVED BY: (Chief)	Rod Posada <i>Rod Posada</i> Chief, Engineering		
APPROVED BY: (Asst. GM)	Manny Magaña <i>M Magaña</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Approval of Water Supply Assessment and Verification Reports (November 2010) for the Otay Ranch Village 8 West Project and for the Otay Ranch Village 9 Project		

**GENERAL MANAGER'S RECOMMENDATION:**

That the Otay Water District (District) Board of Directors (Board) approve the following Water Supply Assessments and Verification Reports (WSA&V), as required by Senate Bills 610 and 221 (SB 610 and SB 221):

1. Water Supply Assessment and Verification Report dated November 2010 for the Otay Ranch Village 8 West Project development proposal (see Exhibit A for project location), and
2. Water Supply Assessment and Verification Report dated November 2010 for the Otay Ranch Village 9 Project development proposal (see Exhibit B for project location).

**COMMITTEE ACTION:**

Please see Attachment A.

**PURPOSE:**

To obtain Board approval of the November 2010 WSA&V for both the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project, as required by SB 610 and SB 221.

**ANALYSIS:**

The City of Chula Vista submitted a request for a WSA&V report to the District pursuant to SB 610 and SB 221. SB 610 and SB 221 require that, upon the request of the city or county, a water purveyor, such as the District, prepare a water supply assessment and verification report to be included in the California Environmental Quality Act (CEQA) environmental documentation. These requests were received by the District on October 19, 2010.

SB 610 requires a city or county to evaluate whether water supplies will be sufficient to meet the projected water demand for certain "projects" that are otherwise subject to the requirement of the CEQA. SB 610 provides its own definition of "project" in Water Code Section 10912.

SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are planned to be available for certain residential subdivisions of property prior to approval of the tentative map. The requirements of SB 610 and SB 221 are addressed by the November 2010 WSA&V Reports for both projects. The WSA&V Reports were prepared by the District in consultation with Dexter Wilson Engineering, Inc., the San Diego County Water Authority (Water Authority), and the City of Chula Vista (City).

Prior to transmittal to the City, the WSA&V Reports must be approved by the Board of Directors. An additional explanation of the intent of SB 610 and SB 221 is provided in Exhibit C, the Otay Ranch Village 8 West Project WSA&V Report is provided as Exhibit D, and the Otay Ranch Village 9 Project WSA&V Report is provided as Exhibit E.

For both the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project, the City is the responsible land use agency that requested the SB 610 and SB 221 water supply assessment and verification report from the District. The requests for the WSA&V Reports, in compliance with SB 610 and SB 221 requirements, was made by the City because both projects meet or exceed one or both of the following SB 610 and SB 221 criteria:

- A proposed residential development of more than 500 dwelling units.

- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A mixed-use project that includes one or more of the land uses specified in SB 610.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The proposed development within Village 8 West consists of 2,050 mixed density residential units, retail commercial, a middle school, an elementary school, a community purpose facility, parks, and open space. The project surrounds the City of San Diego's South San Diego Reservoir, which will remain in place. See Exhibit A for the project location.

The proposed developments within Village 9 Project consists of 4,000 mixed density residential units, retail commercial, an elementary school, community purpose facilities, parks, and open space. See Exhibit B for Project Location.

The request for compliance with SB 221 requirements was made by the City because both projects exceed the SB 221 criteria of a proposed residential development subdivision of more than 500 dwelling units.

The Village 8 West project and the Village 9 Project are included within a land use planning document known as the Otay Ranch General Development Plan/Sub-regional Plan (Otay Ranch GDP). The County of San Diego and City of Chula Vista jointly prepared and adopted the Otay Ranch GDP. Both projects are located within what is defined as the Otay River Parcel of the Otay Ranch GDP. Both projects are part of the designated 14 villages and 5 planning areas within the Otay Ranch GDP area. The Chula Vista City Council and the San Diego County Board of Supervisors adopted the Otay Ranch GDP on October 28, 1993, which was accompanied by a Program Environmental Impact Report EIR-90-01 (SCH #89010154). The Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project entitlement approval are dependent on the City's eventual adoption of their Sectional Planning Area Plans (SPA). The Land Offer Agreement between the City and the Otay Land Company, per document recorded April 24, 2008 as document No. 2008-0218696, forms the basis for the SPA entitlement densities and intensities of development for both projects.

Pursuant to SB 610 and SB 221, the WSA&V Reports incorporate by reference the current Urban Water Management Plans and other water resources planning documents of the District, the Water Authority, and the Metropolitan Water District of Southern California (Metropolitan). The District prepared the WSA&V Reports in consultation with Dexter Wilson Engineering, Inc., which demonstrates and documents that sufficient water supplies are planned for and are intended to be made available over a 20-year planning horizon under normal supply conditions and in single and multiple-dry years to meet the projected demand of the Otay Ranch Village 8 West Project, the Otay Ranch Village 9 Project, and other planned development projects within the District.

The expected demand for the Otay Ranch Village 8 West Project is 881 acre-feet per year. As originally included in the District's Water Resources Master Plan, dated October 2008 and approved by the District on February 2010, the projected demand for this property was 734 acre-feet per year. This is an increase of 147 acre-feet per year due to the increase in development intensity. The 2009 WRMP, updated November 2010, was revised to include this increase in demand. The projected recycled water demand for the proposed project is approximately 154 acre-feet per year, representing 17 percent of the total water demand.

The expected demand for the Otay Ranch Village 9 Project is 1,507 acre-feet per year. As originally included in the District's Water Resources Master Plan, the projected demand for this property was 1,312 acre-feet per year. This is an increase of 195 acre-feet per year due to the increase in development intensity. The 2009 WRMP, updated November 2010, was revised to include this increase in demand. The projected recycled water demand for the proposed project is approximately 130 acre-feet per year, representing 8 percent of the total water demand.

Metropolitan's Integrated Water Resource Plan (IRP) identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. Metropolitan's 2010 update to the IRP (2010 IRP Update) includes a planning buffer supply to mitigate against the risk associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. As part of the implementation of the

planning buffer, Metropolitan periodically evaluates supply development to ensure that the region is not under- or over-developing supplies. If managed properly, the planning buffer, along with other alternative supplies, will help to ensure the Southern California region, including San Diego County, will have adequate supplies to meet future demands.

The County Water Authority Act, Section 5, Subdivision 11, states the Water Authority, "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs."

The intent of the SB 610 and SB 221 legislation is that the land use agencies and the water agencies are coordinating their efforts in planning for new development and thus planning for sufficient water supplies to meet the needs.

As per the requirements of SB 610 and SB 221, if the water supply assessment and verification finds that the supply is sufficient, then the governing body of the water supplier (District) must approve the water supply assessment and verification report and deliver it to the lead agency (City) within 90 days.

Pursuant to SB 610, if the water supply assessment finds overall supplies are insufficient, the water supplier shall provide to the lead agency "its plans for acquiring additional water supplies, setting forth measures that are being undertaken to acquire and develop those water supplies," and the water supplier governing body must approve the assessment and deliver it to the lead agency within 90 days. If the water supplier does conclude that additional water supplies are required, the water supplier should indicate the status or stage of development of the actions identified in the plans it provides. Identification of a potential future action in such plans does not by itself indicate that a decision to approve or to proceed with the action has been made.

Once either of the two actions listed above are accomplished, the District's SB 610 water supply assessment responsibilities are complete.

As per the requirements of SB 221, if the water supply verification finds overall supplies are insufficient - "the lead agency may bridge any gap from verification's "insufficient" determination with additional supplies not accounted for by the water supplier, based on substantial evidence and findings on record." And the water supplier governing body must approve the

verification and deliver it to the lead agency within the 90 days, unless a 30 day extension is granted. In bridging any sufficiency gap, whether before or after issuance of verification, the lead agency may coordinate with others to identify and secure sources of supply. The lead agency may also place a condition on the tentative map to comply with a water supply sufficiency requirement.

Once the actions listed above are accomplished the District's SB 221 water supply verification responsibilities are complete.

SB 610 and SB 221 provides that if the SB 610 and SB 221 water supply assessment and verification report is not received by the lead agency from the water supplier within the prescribed 90-day period, and any requested time extension, The lead agency may seek legal relief, such as writ of mandamus.

Water supply agencies throughout California continue to face climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court ruling regarding the Sacramento-San Joaquin Delta issues. Challenges such as these are always present. The regional water supply agencies, the Water Authority, Metropolitan, and the District nevertheless fully intend to have sufficient, reliable supplies to serve the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project.

With the initiation of the South Bay Water Reclamation Plant (SBWRP) recycled water supply on May 18, 2007, the District has reduced the annual take of potable water from the Water Authority, once used to supplement the recycled water supply shortfall, in excess of 3,200 acre-feet per year. The District is also working on several other local water supply projects that are in various stages of development. The additional demand from both the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project estimate of an additional 342 acre-feet per year potable water demand is about 11 percent of the potable water saved with the SBWRP supply start-up.

In addition, several other planned local water supply projects could provide water to the District. The Rancho del Rey Groundwater Well is expected to provide 500 to 600 acre-feet per year. The Rosarito Ocean Desalination Project is expected to provide 24,000 to 50,000 acre-feet per year. The Otay Mesa Lot 7 Groundwater Well is expected to provide 400 to 500 acre-feet per year.

The WSA&V Reports demonstrate that the District, the Water Authority, and Metropolitan have all developed plans and are implementing projects, programs, and/or procedures to ensure that there will be adequate supplies to serve the proposed Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project along with existing and other planned users. In addition, the supplies necessary to serve the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project along with existing and other projected future users have been identified in the WSA&V Reports for the Projects. The actions necessary and status to develop these supplies have also been documented in the various planning documents and in the Otay Ranch Village 8 West Project WSA&V Report and the Otay Ranch Village 9 Project WSA&V Report.

**FISCAL IMPACT:**



The District has been reimbursed \$8,120 for all costs associated with the preparation of the Otay Ranch Village 8 West Project WSA&V Report and the Otay Ranch Village 9 Project WSA&V Report. The reimbursement was accomplished via a \$20,000 deposit the project proponents placed with the District.

**STRATEGIC GOAL:**

The preparation and approval of the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project WSA&V Reports supports the District Mission statement, "To provide the best quality of water and wastewater services to the customers of the Otay Water District, in a professional, effective, and efficient manner" and the District's Strategic Goal, in planning for infrastructure and supply to meet current and future potable water demands.

**LEGAL IMPACT:**

\_\_\_\_\_

Approval of a WSA&V Reports for the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Projects in form and content satisfactory to the Board of Directors would allow the District to comply with the requirements of Senate Bill 610 and 221.



**General Manager**

P:\WORKING\MO D0790-Otay Land Company\Staff Report\RD 01-05-11, Otay Ranch Village 8 West & Village 9 WSA&V (BK-RR).doc

BK/RR:jf

- Attachments:
- Attachment A - Committee Action
  - Exhibit A - Location Map for the Otay Ranch Village 8 West Project
  - Exhibit B - Location Map for Otay Ranch Village 9 Project
  - Exhibit C - Explanation of intent of the SB 610 and SB 221 for the Otay Ranch Village 8 West Project
  - Exhibit D - Explanation of intent of the SB 610 and SB 221 for the Otay Ranch Village 9 Project
  - Exhibit E - Otay Ranch Village 9 Project WSA&V Report



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b>  D0790- 090070/090076	Approval of Water Supply Assessment and Verification Reports (November 2010) for the Otay Ranch Village 8 West Project and for the Otay Ranch Village 9 Project
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### COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010. The Committee supported Staff's recommendation.

### NOTE:

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.





## **EXHIBIT C**

### **Background Information**

The Otay Water District (District) prepared the November 2010 Water Supply Assessment and Verification Reports (WSA&V) for both the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project at the request of the City of Chula Vista (City). The District received the City's written request for both projects on October 19, 2010. The Otay Land Company, the developer of the Project, submitted an entitlement application to the City for both the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project. The Owner of both properties is the Homefed Corporation, a Delaware Corporation and the parent company to the Otay Land Company, a Delaware Limited Liability Company.

Both the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project are located within the jurisdictions of the District, the San Diego County Water Authority (Water Authority), and the Metropolitan Water District of Southern California (Metropolitan). See Exhibit A and B for project locations. To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the District, Water Authority, and Metropolitan.

Both the Village 8 West Project and the Otay Ranch Village 9 Project are included within a land use planning document known as the Otay Ranch General Development Plan/Sub-regional Plan (Otay Ranch GDP). The County of San Diego and City of Chula Vista jointly prepared and adopted the Otay Ranch GDP. Both projects are located within what is defined as the Otay River Parcel of the Otay Ranch GDP. The project is a part of the designated 14 villages and five planning areas within the Otay Ranch GDP area. Both the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project entitlement approval are dependent on the City's eventual adoption of their Sectional Planning Area Plans (SPA). The Land Offer Agreement between the City and the Otay Land Company per document recorded April 24, 2008 as document No. 2008-0218696 forms the basis for the SPA entitlement densities and intensities of development for both projects.

The WSA&V Reports were prepared by the District in consultation with Dexter Wilson Engineering, Inc., the Water Authority, and the City of Chula Vista pursuant to Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10910, 10911, 10912, and 10915 referred to as Senate Bill (SB) 610 and Government Code Sections 65867.5, 66455.3, and 66473.7 referred to as SB 221. SB 610 and SB 221 amended state law, effective January 1, 2002, intending to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the California Environmental Quality Act (CEQA) environmental documentation and approval process of certain proposed projects. SB 221 requires affirmative written

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supplies are to be available for certain residential subdivision of property prior to approval of a Tentative Map. The requirements of SB 610 and SB 221 are addressed in the November 2010 WSA&V Report for the Otay Ranch Village 8 West Project and the Village 9 Project.

The Otay Ranch Village 8 West proposed development concept for the approximately 320.1 acre project consists of 2,050 mixed density residential units, retail commercial, a middle school, an elementary school, a community purpose facility, parks, and open space. The project surrounds the City of San Diego South San Diego Reservoir which will remain in place.

The Otay Ranch Village 9 Project proposed development concept for the approximately 323 acre Project consists of 4,000 mixed density residential units, retail commercial, an elementary school, community purpose facilities, parks, and opens space.

The expected demand for the Otay Ranch Village 8 West Project is 881 acre-feet per year. This is 147 acre-feet per year higher than the demand estimate in the District's 2009 WRMP. The expected demand for the Otay Ranch Village 9 Project is 1,507 acre-feet per year. This is 195 acre-feet per year higher than the demand estimate in the 2009 WRMP. The Otay Land Company retained PBS&J to update the 2009 WRMP to include the entitlement densities and intensities of development proposed for both projects. The District's 2009 WRMP updated November, 2010 now includes the demand estimate for both projects in the District's demand projections that was forwarded to the Water Authority for inclusion in their UWMP update.

SANDAG and the City of Chula Vista have also confirmed the Land Offer Agreement that forms the basis for these SPA entitlements was included in the Series 12 update that has been forwarded to both Metropolitan and the Water Authority for their future UWMP updates. The Series 12 update was also available to Metropolitan for their use in preparing the demand projections for their 2010 IRP Update.

The District currently depends on the Water Authority and the Metropolitan for all of its potable water supplies and regional water resource planning. The District's Urban Water Management Plan (UWMP) relies heavily on the UWMP's and Integrated Water Resources Plans (IRPs) of the Water Authority and Metropolitan for documentation of supplies available to meet projected demands. These plans are developed to manage the uncertainties and variability of multiple supply sources and demands over the long term through preferred water resources strategy adoption and resource development target approvals for implementation.

The new uncertainties that are significantly affecting California's water resources include:

- A Federal Court ruling that sets operational limits on Sacramento-San Joaquin Delta pumping from December to June to protect the Delta smelt. Water

agencies are still trying to determine what effect the ruling will have on state water project deliveries. Actual supply curtailments for Metropolitan are contingent upon fish distribution, behavioral patterns, weather, Delta flow conditions, and how water supply reductions are divided between state and federal projects.

- Extended drought conditions.

These uncertainties have rightly caused concern among Southern California water supply agencies regarding the validity of the current water supply documentation.

Metropolitan's 2010 IRP acknowledges that significant challenges in some resource areas will likely require changes in strategies and implementation approaches in order to reach long-term IRP water supply targets. Significant progress in program implementation is being realized in most resource areas. However, a further examination of the uncertainty of State Water Project supplies, among other uncertainties, will be required to assess the ability of achieving the long-term IRP targets.

Metropolitan is currently involved in several proceedings concerning Delta operations to evaluate and address environmental concerns. In addition, at the State level, the Delta Vision and Bay-Delta Conservation Plan processes are defining long-term solutions for the Delta.

Neither the Water Authority nor Metropolitan has stated that there is insufficient water for future planning in Southern California. Each agency is in the process of reassessing and reallocating their water resources.

Under preferential rights, Metropolitan can allocate water without regard to historic water purchases or dependence on Metropolitan. Therefore, the Water Authority and its member agencies are taking measures to reduce dependence on Metropolitan through development of additional supplies and a water supply portfolio that would not be jeopardized by a preferential rights allocation. For Fiscal Year 2006 the Water Authority's preferential right was 16.56% of Metropolitan's supply.

In the Water Authority's 2005 UWMP, they had already planned to reduce reliance on Metropolitan supplies to 372,922 acre feet per year by 2030, which is a 28% reduction from the Fiscal Year 2005 Water Authority purchase from Metropolitan. This reduction is planned to be achieved through diversification of their water supply portfolio. This reduction would more than compensate for the Metropolitan predicted reduction in water supply available from the State Water Project, which could be an overall 2% cutback in Metropolitan total supplies in 2025.

The Water Authority's Drought Management Plan (May 2006) provides the Water Authority and its member agencies with a series of potential actions to engage when faced with a shortage of imported water supplies due to prolonged drought

conditions. Such actions help avoid or minimize impacts of shortages and ensure an equitable allocation of supplies throughout the San Diego County region.

The District Board of Directors should acknowledge the ever-present challenge of balancing water supply with demand and the inherent need to possess a flexible and adaptable water supply implementation strategy that can be relied upon during normal and dry weather conditions. The responsible regional water supply agencies have, and will continue to adapt, their resource plans and strategies to meet climatological, environmental, and legal challenges so that they may continue to provide water supplies to their service areas. The regional water suppliers (i.e., the Water Authority and Metropolitan), along with the District, fully intend to maintain sufficient reliable supplies through the 20-year planning horizon under normal, single, and multiple dry year conditions to meet projected demand of the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project, along with existing and other planned development projects within the District's service area.

If the regional water suppliers determine additional water supplies will be required or in this case, that water supply portfolios need to be reassessed and redistributed with the intent to serve the existing and future water needs throughout Southern California, the agencies must indicate the status or stage of development of actions identified in the plans they provide. Metropolitan's 2010 IRP Update will then cause the Water Authority to update its IRP and UWMP, which will then provide the District with the necessary water supply documentation. Identification of a potential future action in such plans does not by itself indicate that a decision to approve or to proceed with the action has been made. The District's Board approval of the Otay Ranch Village 8 West Project WSA&V Report and the Otay Ranch Village 9 Project WSA&V Report does not in any way guarantee water supply to these projects.

Alternatively, if the WSA&V Report is written to state that water supply is or will be unavailable, the District must include in the assessment, a plan to acquire additional water supplies. At this time, the District should not state there is insufficient water supply.

So the best the District can do right now is to state the current water supply situation clearly, indicating intent to provide supply through reassessment and reallocation by the regional, as well as, the local water suppliers. In doing so, it is believed that the Board has met the intent of the SB 610 statute, that the land use agencies and the water agencies are coordinating their efforts in planning water supplies for new development.

With District Board approval of the Otay Ranch Village 8 West Project WSA&V Report and the Otay Ranch Village 9 Project WSA&V Report, the project proponents can proceed with the draft EIR CEQA review process and water supply issues will be addressed in the EIRs, consistent with the WSA&V Report.

The District, as well as others, can comment on the draft EIRs with recommendations that water conservation measures and actions be employed on both projects.

Some recent actions regarding water supply assessments and verification reports by entities within Southern California are as follows:

- City of San Diego approved water supply assessment reports for both the La Jolla Crossings Project and the Quarry Falls Project in September 2007.
- Padre Dam Municipal Water District approved a water supply assessment report for the City of Santee's Fanita Ranch development project in April 2006. In October 2007 a follow-up letter was prepared stating the current uncertainties associated with the regional water supply situation. However, the letter concludes that sufficient water exists over the long run in reliance upon the assurances, plans, and projections of the regional water suppliers (Metropolitan and Water Authority).
- The District unanimously approved in July 2007 the Eastern Urban Center Water Supply and Assessment Report. The Board also approved the Judd Company Otay Crossings Commerce Park WSA Report on December 5, 2007 and the Otay Ranch L.P. Otay Ranch Preserve and Resort project Water Supply Assessment and Verification Report on February 4, 2009.
- The District is working on a water supply assessment report for the City of San Diego – Tijuana Cross Border Facility. Staff is also working with the City of San Diego on a WSA for Scenario 3B Otay Mesa Community Plan Update. The Pio Pico Power Plant on Alta Road within the County of San Diego may also require a WSA for the temporary use of potable water to serve the power plant.

Water supplies necessary to serve the demands of the proposed Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project, along with existing and other projected future users, as well as the actions necessary to develop these supplies, have been identified in the water supply planning documents of the District, the Water Authority, and Metropolitan.

The WSA&V Reports includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, or agreements relevant to the identified water supply needs for each project. The WSA&V Reports demonstrates and documents that sufficient water supplies are planned and are intended to be available over a 20-year planning horizon, under normal conditions and in single- and multiple-dry years to meet the projected demand of the Otay Ranch Village 8 West Project, the Otay Ranch Village 9 Project, and the existing and other planned development projects within the District.

Accordingly, after approval of a WSA&V Report for the Otay Ranch Village 8 West Project and the WSA&V Report for the Otay Ranch Village 9 Project by the District's Board of Directors, the WSA&V Reports may be used to comply with the requirements of the legislation enacted by Senate Bills 610 as follows:

Senate Bill (SB) 610 Water Supply Assessment: The District's Board of Directors approved WSA&V Report may be incorporated into the California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) compliance process for the Otay Ranch Village 8 West Project and the EIR Compliance process for the Otay Ranch Village 9 Project as a water supply assessment and verification report consistent with the requirements of the legislation enacted by SB 610. The City, as lead agency under the CEQA for the Otay Ranch Village 8 West Project EIR and the Otay Ranch Village 9 Project EIR, may cite the approved WSA&V Report as evidence that a sufficient water supply is planned and intended to be available to serve the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project.

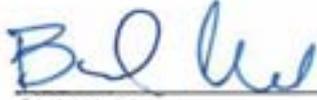
Senate Bill (SB) 221 Water Supply Verification: The District's Board of Directors approved WSA&V Report may be incorporated into the City's Tentative Map approval process for the Otay Ranch Village 8 West Project and the Otay Ranch Village 9 Project as a water supply verification report, consistent with the requirements of the legislation enacted by SB 221. The City, within their process of approving the Otay Ranch Village 8 West and Otay Ranch Village 9 Project's Tentative Maps, may cite the approved WSA&V Report as verification of intended sufficient water supply to serve the Project.

## Quality Assurance Approval Sheet

Subject: Approval of Water Supply Assessment and Verification Reports (November 2010) for the Otay Ranch Village 8 West Project and for the Otay Ranch Village 9 Project

Project No.: D0738-090062

Document Description: Staff Report for January 5, 2011 Board Meeting

Author:	 Signature	<u>12/2/10</u> Date
	<u>Bob Kennedy</u> Printed Name	
QA Reviewer:	 Signature	<u>12/2/10</u> Date
	<u>Daniel Kay</u> Printed Name	
Manager:	 Signature	<u>12/2/10</u> Date
	<u>Ron Ripperger</u> Printed Name	

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.

# Otay Water District Board of Directors Meeting

January 5, 2011

## Water Supply Assessment & Verification Reports for Otay Ranch Village 8 West and Village 9 Projects SB 610 & 221 Compliance



Image U/S Geological Survey  
© 2010 NESI  
© 2010 Google

32°36'21.26" N 115°58'05.79" W elev. 169 m



Eye alt. 3.06 km



## Background

- **Senate Bills 610 and 221 became effective on January 1, 2002, with the primary intent to improve the link between water supply availability and land use decisions.**
- **SB 610 Water Supply Assessment (WSA):**
  - **Requires water purveyor to prepare a Water Supply Assessment report for inclusion in land use agency CEQA documentation.**
- **SB 221 Water Supply Verification:**
  - **Requires the water purveyor to prepare written Verification that sufficient water supplies are planned to be available.**
- **The Otay Ranch Village 8 West and Village 9 SB 610 and 221 Water Supply Assessment and Verification Reports (WSA&V).**
  - **Board approval required for submittal of the WSA&V Reports to the City of Chula Vista.**

# Otay Ranch Village 8 West Project Description

- ❑ 2,050 Dwelling Units
- ❑ 300,000 Sq.Ft. Retail/Commercial
- ❑ Elementary & Middle School ~ 32.4 Ac.
- ❑ Community Facility
- ❑ 28 Ac. Parks

## Demand Estimate

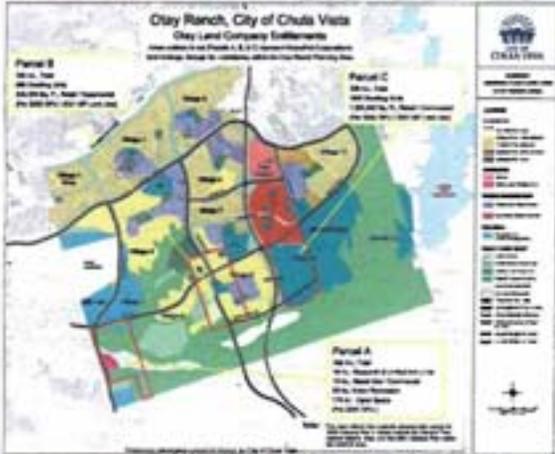
- ❑ 881 AFY Potable Water (147 AFY above current approved land use)
- ❑ 154 AFY Recycled Water (17% of demand)

Legend - Transect : Zone

	T-1: Open Space Preserve (OP)
	T-1: Open Space Slope (OS)
	T-2: Neighborhood Edge (NE)
	T-2: Neighborhood General (NG)
	T-3: Neighborhood Center (NC)
	T-4: Town Center (TC)
	SD: Park (P)
	SD: Community Purpose Facility (CPF)
	SD: Reservoir (R)







**SANDAG**  
 BOARD OF DIRECTORS  
 FEBRUARY 26, 2010

**2010 REGIONAL URBAN WATER MANAGEMENT PLAN**

**2010 REGIONAL URBAN WATER MANAGEMENT PLAN**  
 Approved by the Board of Directors on February 26, 2010

The Board of the 2010 Regional Urban Water Management Plan is in receipt of a report from the planning. The Board is not intended as a guarantee for future growth. The Board is intended to provide future development patterns based on regional projections and local data.

The 2010 Regional Urban Water Management Plan is one of the first steps in preparing the 2010 Regional Water Management Plan (RMP), and is not subject to the requirements of the Regional Water Management Plan (RMP). It is a preliminary step in the process of preparing the RMP, and is not intended to be used to evaluate future development and water resource planning throughout the region. It is intended to provide information and guidance regarding the RMP, and to provide a framework for the Board's consideration of the RMP.

The 2010 Regional Urban Water Management Plan is a preliminary study and report that provides information and guidance on future planning and development. It is not intended to be used as a basis for making decisions on future development or for making commitments or obligations during the planning process. The information and guidance provided in this report are intended to provide a high-level overview of the report and to provide information on the report's findings.

In addition to the report, the Board is also receiving information on the report's findings and is intended to provide information on the report's findings.



**Otay Water District  
 Water Resources Master Plan Update**

OTAY WATER DISTRICT

Approved by Otay Water District  
 on February 3, 2010

INTEGRATED WATER RESOURCES PLAN  
 Report No. 7234  
 Final Draft

**2010  
 UPDATE**

**DRAFT**

THE METROPOLITAN WATER DISTRICT  
 OF SOUTHERN CALIFORNIA

**2010 REGIONAL URBAN  
 WATER MANAGEMENT PLAN**

THE METROPOLITAN WATER DISTRICT  
 OF SOUTHERN CALIFORNIA

Prepared by:  
 METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
 Water Resource Management Group  
 100 North Alameda Street

2005

2005 REGIONAL URBAN WATER MANAGEMENT PLAN

## **Water Supply Assessment & Verification Reports**

- **The regional and local water supply agencies acknowledge the challenges of supply and fully intend to develop sufficient reliable supplies to meet demands.**
- **Water suppliers recognize additional water supplies are necessary and portfolios need to be reassessed and redistributed with intent to serve existing and future needs.**
- **Metropolitan has updated its IRP to account for the Delta and other potential supply impact issues.**

# **Water Supply Assessment & Verification Reports**

- **The state of the current water supply situation is documented in the WSA&V Reports with the intent that the water agencies plan to develop sufficient water supplies to meet demands.**
- **Staff believes that the Board has met the intent of SB 610 and 221 statutes in that:**
  - 1) Land use agencies and water suppliers have demonstrated strong linkage.**
  - 2) The Otay Ranch Village 8 West Project and Village 9 Project WSA&V Reports clearly document the current water supply situation.**

# Water Supply Assessment & Verification Reports

- **Based on existing documentation, the WSA&V Reports demonstrate and document that sufficient water supplies are planned for and are intended to be acquired.**
- **The WSA&V Reports document the planned water supply projects and the actions necessary to develop the supplies.**
- **Water supply for the Otay Ranch Village 8 West and Village 9 Projects, and for existing and future developments within the District for a 20-year planning horizon, under normal and in single and multiple dry years, are planned for and are intended to be made available.**

# Otay Water District Planned Local Water Supply Projects

- **Rancho del Rey Groundwater Well (500-600 AFY)**
- **Rosarito Ocean Desalination Project (24,000-50,000 AFY)**
- **Otay Mesa Lot 7 Groundwater Well (300-400 AFY)**

Imagery © 2010 U.S. Geological Survey  
© 2010 MEGI  
© 2010 Google

© 2010 Google

10

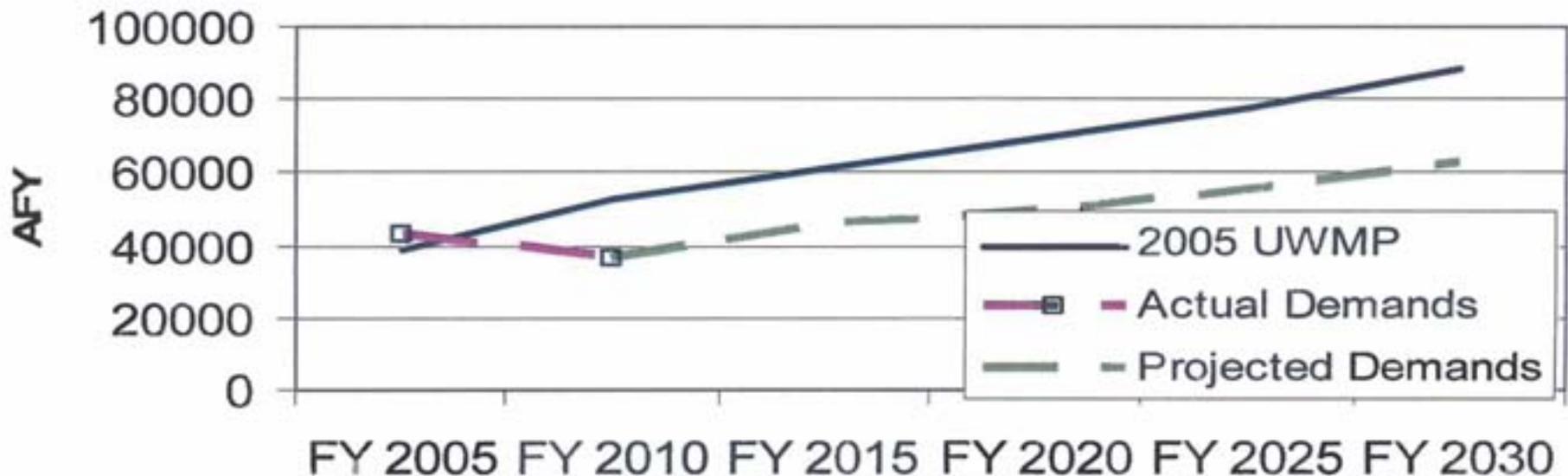
32°36'21.26" N 118°56'58.79" W elev. 169 m

Eye alt. 3.00 km

## Projected Balance of Potable Water Supplies and Demands Normal Year Conditions (acre feet)

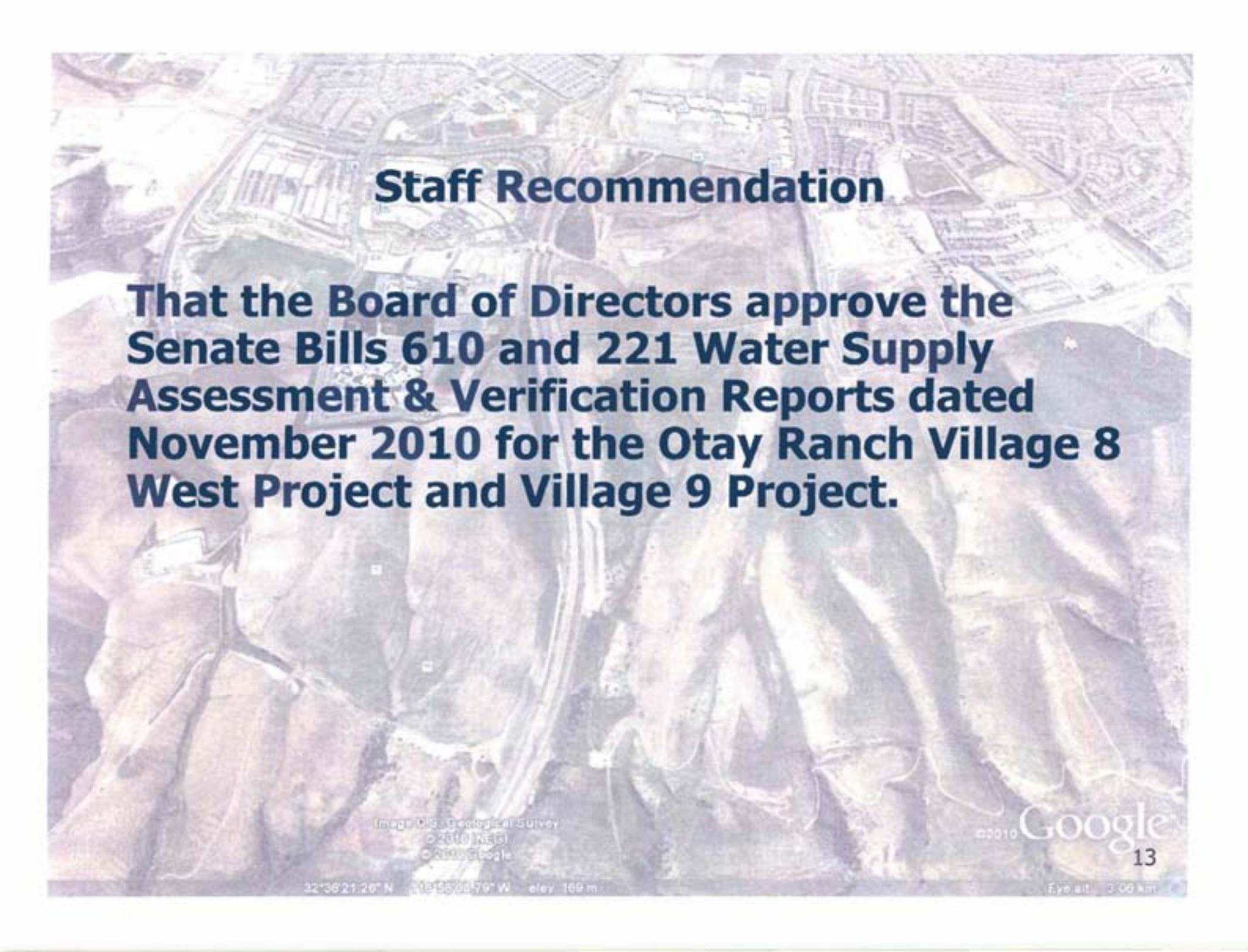
Description	FY 2010	FY 2015	FY 2020	FY 2025	FY 2030
Water Authority Supply	45,772	52,349	59,799	66,560	75,108
Recycled Water Supply	4,040	4,684	5,430	6,294	7,297
Groundwater Supply	0	0	0	0	0
Total Required Supply	49,812	57,033	65,229	72,854	82,405
Total Projected Demand	49,812	57,033	65,229	72,854	82,405

### Actual Demand vs. 2005 UWMP



## Conclusion

- **Water demand and supply forecasts are included in the planning documents of Metropolitan, Water Authority, and the Otay Water District.**
- **Actions necessary to develop the identified water supplies are documented.**
- **The Otay Ranch Village 8 West Project and Village 9 Project WSA&V Reports demonstrate and document that sufficient water supplies are planned for and are intended to be available over the next 20 years.**
- **Metropolitan has updated its IRP to address Delta issues and other potential water supply impacts.**

An aerial satellite view of a city and surrounding hills. The city is visible in the upper half, with a grid of streets and buildings. The lower half shows rolling hills with some vegetation and a few structures. The text is overlaid on the image.

## **Staff Recommendation**

**That the Board of Directors approve the Senate Bills 610 and 221 Water Supply Assessment & Verification Reports dated November 2010 for the Otay Ranch Village 8 West Project and Village 9 Project.**

# Questions?



Imagery © Geological Survey  
© 2010 Intel  
© 2010 Google

32°38'21.26" N 105°58'00.79" W elev. 169 m



14

Eye alt. 3.06 km

# AGENDA ITEM 11



## STAFF REPORT

TYPE MEETING:	Engineering, Operations, and Water Resources Committee	MEETING DATE:	December 7, 2010
SUBMITTED BY:	Ron Ripperger <i>[Signature]</i> Engineering Manager	CIP./G.F. NO:	Various
		DIV. NO.	All
APPROVED BY: (Chief):	Rod Posada <i>[Signature]</i> Chief, Engineering		
APPROVED BY: (Asst. GM):	Manny Magana <i>[Signature]</i> Assistant General Manager, Engineering and Operations		
SUBJECT:	Informational Item - Development of CIP Project Budgets		

### GENERAL MANAGER'S RECOMMENDATION:

That the Finance, Admin, and Communications Committee accept this Informational Item for review and receives a summary via a PowerPoint presentation (see Attachment B).

### COMMITTEE ACTION: \_\_\_\_\_

Please see Attachment A.

### PURPOSE:

To update the Finance, Admin, and Communications Committee about the process used to develop CIP project budgets.

### ANALYSIS:

This Staff Report was prepared as a response to Board members' inquiries about how budgets are prepared for CIP projects. For every CIP project, excluding capital purchases, the budget development process for each individual CIP starts at the Planning Phase. The Water Resources Master Plan (WRMP), the Sub Area Master Plan (SAMP), and Integrated Water Resources Plan (IRP) identify all the projects to be included in the CIP

budget. At this stage, a very preliminary budget is established. The next stage in the process is the preparation of a Preliminary Design Report (PDR) which is developed to set the framework for design. Staff estimates the project budget, based on preliminary information about the project scope and industry construction data for unit costs, e.g., cost per lineal foot of pipe or cost per square foot of building. That information is included in the CIP budget for that fiscal year's budget cycle.

During the design process, the design engineer produces estimated construction costs for each CIP project at 30%, 60%, 90%, and 100% design milestones. These estimates are more precise because there is a clearer picture of the size and configuration of the project and the potential challenges on issues and impacts, such as environmental, freeway crossings, major utilities, tunneling, etc. Again, these adjusted numbers are reviewed and vetted to fine-tune the number in the CIP budget. During the design phase, larger projects also go through value engineering and constructability reviews to further refine the construction cost estimate and total budget. Staff also includes contingencies in earlier budgets in the project. Contingencies are used to cover for unidentified items that occur during the planning, design, and construction phases. The industry standard for contingencies is 5-10%.

When the project is 100% designed, staff performs a detailed risk analysis review and potential risks are identified and incorporated in the bid sheet as allowances. The purpose of allowances is to control budget, plus provide a mechanism to pay the contractor in the event a particular bid item is needed. Samples of allowances are: excavation of hazardous wastes or rock material, potholing for unknown utilities, crossing of unknown utilities, etc. The revised construction cost estimate, with allowances, is incorporated into the CIP project budget in the next budget cycle.

After the project is bid, the contract is awarded to the lowest responsible bidder. At this point, with an actual construction contract amount known, staff again adjusts the CIP budget. If the lowest bid exceeds the estimated budget, staff would request a budget adjustment to the Board of Directors at the time of the contract award.

During construction, the estimated line items are adjusted, depending on actual conditions encountered in the field. Allowances may or may not be used during the construction

period. If they are used, a staff report is prepared for Board consideration. At the end of construction, a final construction contract budget reconciliation is also prepared for Board consideration.

To better illustrate the process, staff selected three recent CIP projects that are at different levels of completion to show how budgets were adjusted and to reflect changes over time when construction costs were known. These budgets are compared to the actual construction costs for each project. Please note that the costs shown for each phase of a project include staff time, consultants, and contractor's costs.

**1. 1296-3 2MG Concrete Reservoir (P2143)**

This project was completed in FY 2011.

Budget								
	FY 2008	%	FY 2009	%	FY 2010	%	FY 2011	%
Planning	\$244,000	7%	\$266,000	7%	\$266,000	7%	\$276,000	8%
Design	\$365,000	11%	\$398,000	11%	\$398,000	11%	\$422,000	12%
Construction	\$2,731,000	82%	\$2,739,000	75%	\$2,739,000	75%	\$2,842,000	80%
Contingency	\$0	0%	\$237,000	7%	\$237,000	7%	\$0	0%
<b>Total:</b>	<b>\$3,340,000</b>	<b>100%</b>	<b>\$3,640,000</b>	<b>100%</b>	<b>\$3,640,000</b>	<b>100%</b>	<b>\$3,540,000</b>	<b>100%</b>

**Engineer's Estimate**

Preliminary	\$2,700,000
30%	\$2,700,000
60%	\$3,000,000
100%	\$2,945,000

Seven construction bids: **Lowest:** \$2,373,220  
**Highest:** \$3,399,000

**Original Construction Contract**

Original Contract w/o allowances	\$2,198,220	93%
Allowances	\$175,000	7%
<b>Total Contract:</b>	<b>\$2,373,220</b>	<b>100%</b>

**Actual Construction Contract Costs**

Bid Items Only (Construction Cost)	\$2,198,220.00	
Change Orders	\$65,680.30	3%
Credit Change Orders	(\$87,067.40)	(4%)
Allowances	\$175,000.00	8%
Credit for Allowances	(\$175,000.00)	(8%)
<b>Actual Construction Contract Costs:</b>	<b>\$2,176,832.90</b>	

2. PL-36-Inch, SDCWA Otay FCF No. 14 to Regulatory Site (P2009) and PL-12-Inch, 978 Zone, Jamacha, Hidden Mesa, and Chase Upsize and Replacements (P2038)

The construction of the project was completed in FY 2011. However, litigation remains before the project can be closed out.

Budget								
	FY 2008	%	FY 2009	%	FY 2010	%	FY 2011	%
Planning	\$1,660,000	8%	\$1,440,000	6%	\$2,100,000	9%	\$1,680,000	7%
Design	\$1,320,000	7%	\$1,540,000	7%	\$2,080,000	8%	\$2,150,000	9%
Construction	\$17,070,000	85%	\$20,854,000	85%	\$19,763,000	80%	\$19,557,000	84%
Contingency	\$40,000	0%	\$566,000	2%	\$757,000	3%	\$0	0%
<b>Total:</b>	<b>\$20,090,000</b>	<b>100%</b>	<b>\$24,400,000</b>	<b>100%</b>	<b>\$24,700,000</b>	<b>100%</b>	<b>\$23,387,000</b>	<b>100%</b>

Engineer's Estimate

Preliminary (IEC)	\$20,817,901
30% (IEC)	\$25,187,543
60% (IEC)	\$33,347,363
100% (IEC)	\$32,932,034
100% (Lee & Ro)	\$22,785,743
Amended (Lee & Ro)	\$23,125,248

Twelve construction bids: Lowest: \$16,189,243  
Highest: \$28,798,380

Original Construction Contract

Original Contract w/o allowances	\$14,490,243	90%
Allowances	\$1,699,000	10%
<b>Total Contract:</b>	<b>\$16,189,243</b>	<b>100%</b>

Actual Construction Contract Costs

Bid Items Only (Construction Cost)	\$14,490,243.00	
Change Orders	\$148,157.09	1%
Credit Change Orders	(\$521,997.93)	(4%)
Allowances	\$1,699,000.00	12%
Credit for Allowances	(\$1,407,457.89)	(10%)
<b>Actual Construction Contract Costs:</b>	<b>\$14,407,944.27</b>	

**3. North District - South District Interconnection System (P2511)**

The PDR for this project was completed in FY 2010. The Board recently awarded the design of this project in Fiscal 2011. This project is expected to be completed in FY 2015.

Budget		
	FY 2011	%
Planning	\$1,300,000	3%
Design	\$3,000,000	8%
Construction	\$33,000,000	89%
Contingency	\$0	0%
<b>Total:</b>	<b>\$37,300,000</b>	<b>100%</b>

To derive an estimated budget for the CIP, staff took industry costs per lineal foot of pipe and per square feet of pump station. In addition, the engineering firm who prepared the PDR provided a preliminary cost analysis that was used in developing the budget. During design, the budget will be adjusted when more design information such as alignment, Caltrans crossings, and tunneling become available.

**FISCAL IMPACT:**



None.

**STRATEGIC GOAL:**

The CIP supports the District's Mission statement, "To provide the best quality of water and wastewater service to the customers of the Otay Water District, in a professional, effective, and efficient manner," and the District's Strategic Goal, in planning for infrastructure and supply to meet current and future potable water demands.

**LEGAL IMPACT:**

\_\_\_\_\_

None



\_\_\_\_\_  
**General Manager**

F:\CIP\Development of Budget for Individual CIP's\Engineering Committee Meeting 12-07-10, Staff Report, Information Item - Development of CIP Project Budgets. (RR-RP).doc

RR/RP:jf

Attachments: Attachment A - Committee Action  
Attachment B - Presentation



## ATTACHMENT A

<b>SUBJECT/PROJECT:</b>  Various	Informational Item - Development of CIP Project Budgets
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**COMMITTEE ACTION:**

The Engineering, Operations, and Water Resources Committee reviewed this item at a meeting held on December 7, 2010.

## Quality Assurance Approval Sheet

Subject: Informational Item – Development of CIP Project Budgets

Project No.: Various

Document Description: Staff Report for Engineering, Operations, and Water Resources Committee Meeting on December 7, 2010

Author: Ron Ripperger 12/2/10  
Signature Date

Ron Ripperger  
Printed Name

QA Reviewer: D. Kay 12/2/10  
Signature Date

Daniel Kay  
Printed Name

Manager: Rod Posada 12/2/10  
Signature Date

Rod Posada  
Printed Name

The above signatures attest that the attached document has been reviewed and to the best of their ability the signers verify that it meets the District quality standard by clearly and concisely conveying the intended information; being grammatically correct and free of formatting and typographical errors; accurately presenting calculated values and numerical references; and being internally consistent, legible and uniform in its presentation style.

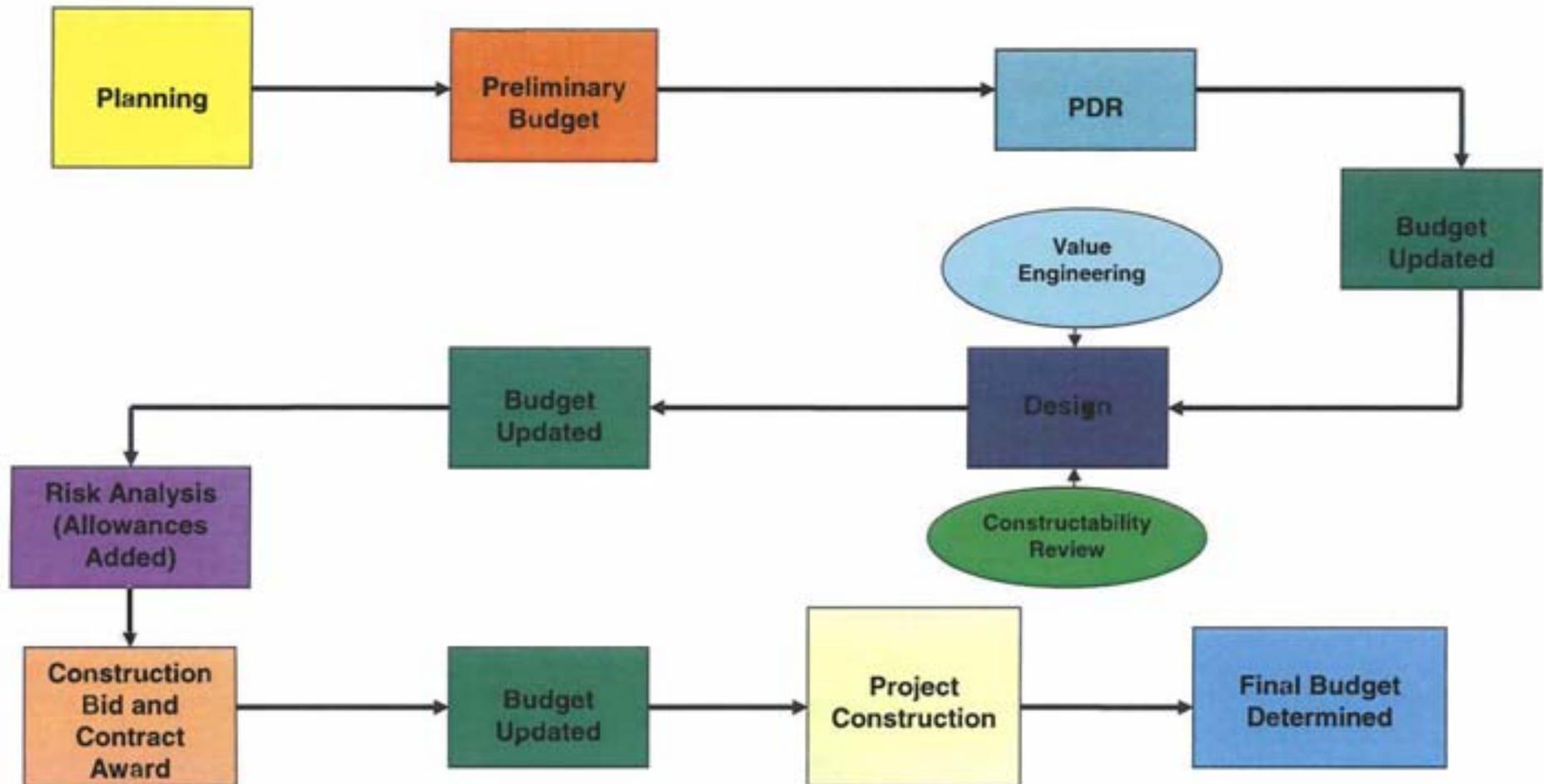


**ENGINEERING, OPERATIONS AND  
WATER RESOURCES  
COMMITTEE MEETING  
DECEMBER 7, 2010**

**DEVELOPMENT OF CIP PROJECT  
BUDGETS**

**ENGINEERING DEPARTMENT**

# Project Budget Development Process



## Budget Parameters

- Budgets are adjusted when more precise information is known. Time span is several years.
- Initial estimates are based on industry construction unit cost.
- There are lots of variables and unknowns that impact project budgets: alignment, utility crossings, freeway crossings, environmental constraints, tunneling, contaminated/hazardous materials, and agency requirements.
- Contingencies are used to cover unidentified items during planning, design, and construction.
- Allowances are incorporated through a risk analysis process and used to control budget.
- The Board gets routinely notified about changes in the CIP budget, and every time that an authorization exceeds the General Manager's authority.

## Sample Projects

### 1296-3 2MG Concrete Reservoir (P2143)

#### BUDGET

	FY 2008	FY 2009	FY 2010	FY 2011
	\$3,340,000	\$3,640,000	\$3,640,000	\$3,540,000
CONTINGENCY	0%	7%	7%	0%

ENGINEER'S ESTIMATES: \$2,700,000 - \$2,945,000

SEVEN CONSTRUCTION BIDS: \$2,373,220 - \$3,399,000

#### ACTUAL CONSTRUCTION CONTRACT COSTS

Bid Items Only (Construction Cost)	\$2,198,220.00	
Change Orders	\$65,680.30	3%
Credit Change Orders	(\$87,067.40)	(4%)
Allowances	\$175,000.00	8%
Credit for Allowances	(\$175,000.00)	(8%)
Actual Construction Contract Costs:	\$2,176,832.90	

## Sample Projects

**PL-36-Inch, SDCWA Otay FCF No. 14 to Regulatory Site (P2009) and PL-12-Inch, 978 Zone, Jamacha, Hidden Mesa, and Chase Upsize and Replacements (P2038)**

### BUDGET

	FY 2008	FY 2009	FY 2010	FY 2011
	\$20,090,000	\$24,400,000	\$24,700,000	\$23,387,000
CONTINGENCY	0%	2%	3%	0%

**ENGINEER'S ESTIMATES: \$20,817,901- \$23,125,248**

**TWELVE CONSTRUCTION BIDS: \$16,189,243 - \$28,798,380**

### ACTUAL CONSTRUCTION CONTRACT COSTS

Bid Items Only (Construction Cost)	\$14,490,243.00	
Change Orders	\$148,157.09	1%
Credit Change Orders	(\$521,997.93)	(4%)
Allowances	\$1,699,000.00	12%
Credit for Allowances	(\$1,407,457.89)	(10%)
<b>Actual Construction Contract Costs:</b>	<b>\$14,407,944.27</b>	

## Sample Projects

### North District – South District Interconnection System (P2511)

#### BUDGET

	FY 2011
	\$37,300,000
CONTINGENCY	0%

This budget was derived from industry costs per lineal foot of pipe and per square feet of pump station.

# QUESTIONS?