

- Engineering Services Key Activities for the Month of July 2008

Summary

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Attachments

Monthly Progress Report of Construction and Procurement Contracts for June 2008.

Detailed Report

This report details key engineering activities for the month of July 2008.

Recent Events:

Chino Hills Earthquake: There was no major damage to Metropolitan facilities due to the 5.4 magnitude earthquake which occurred on Tuesday, July 29th. Metropolitan’s Emergency Operations Center at Eagle Rock and all Incident Command Centers were activated shortly after the earthquake. Metropolitan response crews detected a small leak along the North Orange County Feeder (Figure 1), while minor damage was reported at the Diemer and Weymouth treatment plants. On the Orange County Feeder, water was found leaking from an air release structure downstream of the Weymouth plant in La Verne. As a precaution, staff reduced the flow rate in the 12-mile pipeline, which extends from the Weymouth plant to the Orange County Reservoir. The damage had no negative effect on plant operations or on water quality. All other plants reported no damage.

The earthquake was felt at the Inland Feeder/Arrowhead West Tunnel site, but crews continued with no delays.



Figure 1: Water leak on Orange County Feeder

Recent Events (cont.):

Engineering Student Intern Program: Each year, the Engineering Services Section recruits students to participate in this year-round program, which is designed to provide college undergraduate students the opportunity to augment their studies with practical work experience in the water industry (Figure 2). Colleges that have been represented include: Cal Poly Pomona; California State University campuses at Los Angeles, Long Beach, and Northridge; University of California at Los Angeles; and the University of Southern California. Currently, eleven students are assisting with short and long-term capital projects.



Figure 2: Kevin Riley, CSU Long Beach student at work

Skinner Oxidation Retrofit Program (ORP): The liquid oxygen (LOX) storage tanks for the Skinner ORP were delivered and set on their foundations (Figure 3). Each tank is 65 feet in length, 12 feet in diameter, and can hold 37,000 gallons of LOX. The tanks were fabricated in Minnesota and shipped by rail to Carson, CA. The tanks were then transferred to trucks for delivery to the Skinner site. Adjacent to the tanks are the vaporizers which convert the liquid oxygen to gaseous oxygen prior to entering the ozone generators. Installation of the Liquid Oxygen Tanks is on the critical path for the completion of Skinner ORP construction, which is approximately 84 percent complete.



Figure 3: LOX tank being placed on foundation

Supply and Delivery Reliability:

Inland Feeder Program: The program consists of 44 miles of pipeline and tunnels that will enable Metropolitan to convey up to 1,000 cubic feet per second of State Water Project supplies from the Devil Canyon Second Afterbay to Diamond Valley Lake. Eight of nine construction contracts have been completed thus far. Recent activities include the following:

- Arrowhead East Tunnel (AET) – Mining was completed on Friday, May 2nd. During July, the contractor continued dismantling and removing the tunnel boring machine (TBM), trailing gear, and utilities from the tunnel (Figure 4), and cleaned the tunnel invert. Installation of the pipe liner will commence in early August. During pipeline installation, the contractor will continue grouting operations, as necessary, to further eliminate water intrusion into the tunnel.
- Arrowhead West Tunnel (AWT) – The TBM advanced 555 feet in June and another 405 feet through July 30th. During July, the TBM continued mining the final curve portion of this tunnel. Early in the month, mining conditions remained challenging due to weak ground conditions consisting of crushed rock and clay seams. By mid-July, the TBM moved past this zone and mining conditions improved. The total length of tunnel mined is 19,414 feet (98 percent of the tunnel’s length) with 470 feet remaining. Staff anticipates that mining will be completed by late-summer 2008. The contractor continued constructing the Devil Canyon portal site, which will be the receiving location for the TBM once the mining is completed.



Figure 4: Removal of the tunnel boring machine from Arrowhead East Tunnel

Supply and Delivery Reliability (cont.):

Rialto Pipeline Improvements: This program will enable continued operation of the Rialto Pipeline for isolated reaches during scheduled or emergency repairs. This program is being implemented in three phases. Recent activities include the following:

- Phase I – Construction of two isolation valve structures within the cities of Rancho Cucamonga and Claremont was completed in July 2007.
- Phase II – Installation of the 96-inch sectionalizing valves in Rancho Cucamonga and Claremont was completed in May 2008. Construction of the bulkhead isolation structure in the city of Upland (Figure 5) is approximately 85 percent complete and is scheduled to be completed by September 2008.
- Phase III – Final design of the Live Oak Pumpback System is 25 percent complete and is scheduled to be completed by December 2008.

The program is on schedule to be completed in fiscal year 2009/10 and is within budget.



Figure 5: Construction of the bulkhead isolation structure in the city of Upland

Supply and Delivery Reliability (cont.):

Skinner Water Treatment Plant Expansion No. 4: This program includes construction of a new 110-mgd water treatment module (Module No. 7) and supporting facilities. The new 110-mgd water treatment module was constructed and placed in operation on July 5th. The work remaining includes the washwater reclamation plant and pump station. This work is planned to be completed under multiple construction contracts.

- Washwater Reclamation Plant No. 3 and a coal removal structure were completed in December 2006, while Module No. 7 commenced service in July 2007. Construction of the Chemical Systems Modifications was completed in October 2007. All chemical systems have been placed into service.
- Reclaimed washwater pumping station construction is 84 percent complete and is scheduled to be completed by May 2009 (Figure 6).

The program is on schedule to be completed in fiscal year 2008/09 and is within budget.



Figure 6: Reclaimed washwater pumping station

Infrastructure Reliability:

Conveyance and Distribution System Rehabilitation: This program was initiated to maintain reliable deliveries through specific repair and rehabilitation projects on Metropolitan’s pipelines, reservoirs, and control structures. The program currently contains 75 projects, of which 39 have been completed. Recent activities include the following:

- St. Johns Canyon Channel – Bids were received on May 20, 2008. A request to the Board to award a construction contract is scheduled for August 2008.
- Lake Skinner East Bypass Screen Rehabilitation – Bids were received on July 15, 2008. A request to the Board to award a construction contract is scheduled for August 2008 (Figure 7).
- Olinda Pressure Control Facility Pavement Repair – Bids were received on July 24, 2008. A construction contract will be awarded under the General Manager’s authority in August 2008.
- Garvey Reservoir Automated Data Collection Acquisition System Upgrade – Final design is 70 percent complete and is scheduled to be completed by September 2008.
- OC-44 Service Connection Road Improvements – Final design is 40 percent complete and is scheduled to be completed by September 2008.
- Box Springs Feeder Repair – This project is being completed in three phases. Phase I was completed in January 2007. Phase II will replace three distressed prestressed concrete cylinder pipe segments with welded steel pipe. Final design is 75 percent complete and is scheduled to be completed by September 2008.
- OC-71 Service Connection Repair – Final design was completed in July 2008. A request to authorize construction by Metropolitan forces is scheduled for August 2008. Construction is scheduled to be completed by December 2008.

The program is on schedule to be completed in fiscal year 2018/19 and is within budget.



Figure 7: Lake Skinner East Bypass screening structure

Infrastructure Reliability (cont.):

CRA Pumping Plant Reliability Program: This program was established to maintain reliability of the Colorado River Aqueduct (CRA) pumping plants and support facilities. The program currently contains 11 projects, of which 4 have been completed. Recent activities include the following:

- Desert Water Tank Access and Safety Improvements – This project will improve access to the water tanks located in the hills above the pumping plants (Figure 8). Final design is scheduled to be completed by August 2008.
- Intake Pumping Plant Instrumentation Replacement and Automation – This project is being executed in two phases. Phase I construction, which includes the automation and modification of Pump No. 1, is approximately 72 percent complete and is scheduled to be completed by April 2009. Phase II will include automation of the remaining eight pumps at Intake Pumping plant; final design is scheduled to commence in July 2009.
- Suction/Discharge Line Expansion Joints – This project will rehabilitate leaking joints at delivery and suction lines at all five CRA pumping plants. Preliminary design is 70 percent complete and scheduled to be completed by December 2008.

The program is on schedule to be completed in fiscal year 2010/11 and is within budget.



Figure 8: Difficult access paths at Hinds Pumping Plant to be improved with new stairways and footpaths

Infrastructure Reliability (cont.):

Diemer Water Treatment Plant Improvements Program: This program was initiated to maintain reliability and to improve operating efficiency of the Diemer plant through specific improvements projects. The program currently contains 33 projects, of which 5 have been completed. Recent activities include the following:

- Diemer North Access Road – Final design is approximately 25 percent complete and is scheduled to be completed by early 2009.
- Hatch Covers Replacement – Construction is scheduled to be completed by September 2008 (Figure 9).
- Washwater Tank Pump Replacement – Construction is complete.
- Finished Water Reservoir Seismic Upgrade – Seismic and geotechnical investigations are complete. Preliminary design is scheduled to be completed by August 2008. A request to the Board to authorize final design is scheduled for October 2008.
- East Washwater Tank Seismic Upgrade – Seismic and geotechnical analyses are complete. A constructability review was conducted in July 2008, and preliminary design is scheduled to be completed in August 2008. A request to the Board to authorize final design is scheduled for October 2008.
- Filter Outlet Conduit Seismic Upgrade – This study is 70 percent complete. A request to the Board to authorize geotechnical investigations is scheduled for October 2008.

The program is on schedule to be completed in fiscal year 2015/16 and is within budget.



Figure 9: Existing hatch cover to be replaced

Infrastructure Reliability (cont.):

Weymouth Water Treatment Plant Improvements Program: This program was initiated to maintain reliability and to improve operating efficiency of the Weymouth plant through specific improvement projects. These improvements are also critical in upgrading the plant facilities and processes in preparation for construction of the Weymouth Oxidation Retrofit project. The program currently contains 39 projects, of which 9 have been completed. Recent activities include the following:

- Weymouth Coagulant Tank Farm – A construction contract was awarded in June 2008 and construction commenced in July 2008.
- Weymouth Electrical Upgrade Project – Final design is 45 percent complete and is scheduled to be completed by April 2009.
- Inlet Conduit Relocation and Rapid Mix Project – Final design is 40 percent complete and is scheduled to be completed by January 2009.
- Weymouth Perimeter Improvements – The Weymouth perimeter improvements will be constructed in several phases. Construction of Phase I improvements along the west plant boundary and Phase II improvements along the north and south plant boundaries is complete. Phase III includes modifications to the Wheeler Gate entrance; final design is 95 percent complete and is scheduled to be completed by August 2008. A request to the Board to award a Phase III construction contract is planned for October 2008.
- Junction Structure Seismic Upgrades – This project will repair leaky valves and provide seismic upgrades for the Junction Structure. Final design is 5 percent complete and is scheduled to be completed by March 2009.
- Plant Operations & Maintenance Center – Construction is 70 percent complete and is scheduled to be completed by October 2008 (Figure 10).
- Washwater Reclamation Reliability Upgrades – Preliminary design of reliability upgrades to the washwater reclamation facility is 10 percent complete and is scheduled to be completed by December 2008.

The program is on schedule to be completed in fiscal year 2012/13 and is within budget.



Figure 10: Weymouth Operations and Maintenance Center

Water Quality:

Distribution System – Treated Water Cross Connection Prevention Program: This program will relocate air release and vacuum valves on treated-water feeders from their current location in subsurface vaults to new above-ground configurations to eliminate potential cross connections at approximately 300 sites. The program is being executed in four phases under 12 separate construction contracts, with approximately 75 sites per phase.

Figure 11 shows artwork to be mounted on a valve enclosure in the city of San Dimas to conform to the area’s “old western village” theme.

- Phase I – Construction contracts 1, 2 and 3 (74 sites) are complete.
- Phase II – Construction contracts 4, 5, and 6 (87 sites) were awarded in May and June 2008. Notices to Proceed were issued to all contractors in July 2008. Construction is scheduled to be completed by May 2009.
- Phase III – Final design of contracts 7, 8 and 9 (75 sites) is complete. Advertisement for bids is scheduled for December 2008.
- Phase IV – Final design of contracts 10, 11, and 12 (65 sites) is approximately 70 percent complete and is scheduled to be completed by December 2008.

The program is on schedule to be completed in fiscal year 2012/13 and is within budget.



Figure 11: Art work (left) to be mounted on enclosure (right) in the City of San Dimas

Water Quality:

Oxidation Retrofit Program: This program was established to add ozone to provide disinfection, to control tastes and odors, and to reduce the level of disinfection by-products in the finished water at all five of Metropolitan's treatment plants. Ozone will enable Metropolitan to meet state and federal drinking water regulations. Recent activities include the following:

- **Mills Plant** – A construction contract to add two new ozone contactors to upgrade the plant's ozonation system capacity to 326 mgd is approximately 48 percent complete and is scheduled to be completed by July 2009. Fabrication of additional ozone equipment is 6 percent complete and is scheduled to be completed by September 2009.
- **Jensen Plant** – The plant's ozone system became fully operational in July 2005.
- **Skinner Plant** – Construction is approximately 84 percent complete and is scheduled to be completed by mid-2009 (Figure 12).
- **Weymouth Plant** – This program consists of multiple staged construction contracts. Final design of a new plant inlet conduit, which will relocate the existing conduit from beneath the Administration Building to the location of the planned ozone contactors, is 10 percent complete and is scheduled to be completed by December 2008. The Weymouth ozone facilities are currently scheduled to be completed by 2014; staff is assessing opportunities to complete the facilities earlier.
- **Diemer Plant** – In July, the Board awarded a contract to construct the Diemer ozone facilities. Notice to proceed was issued in August 2008.



Figure 12: Skinner ozonation facilities construction

Regulatory:

Chlorine Containment and Handling Facilities: This program includes design and construction of facilities to handle and contain chlorine to prevent a chlorine leak and to ensure compliance with security and safety regulations. Recent activities include the following:

- Diemer, Weymouth, and Skinner Plants – The Diemer, Weymouth, and Skinner projects were completed in 2002, 2005, and 2008, respectively.
- Jensen Plant – Construction of the chlorine containment facility is 93 percent complete and is scheduled to be completed by September 2008. Figure 13 shows railroad track construction for the facility.
- Mills Plant – Construction and start-up testing of the southern portion of the chlorine containment facility is complete. Construction of the northern portion is expected to be completed in September 2008. Overall, the project is 97 percent complete.
- Chemical Unloading Facility (CUF) – A request to the Board to authorize preliminary design of a dechlorination system and chlorine containment facility at CUF is scheduled for August 2008. Preliminary design is scheduled to be completed by March 2009 and July 2009, respectively.

The program will be completed in fiscal year 2011/12 and is within budget.



Figure 13: Jensen Chlorine Unloading Facility

Energy Management: This initiative was established to coordinate all energy-related activities to enable Metropolitan to design and operate its facilities in the most energy-efficient and cost-effective manner. Four primary goals of the program are to: 1) identify Metropolitan’s greenhouse gas emissions inventory; 2) implement additional renewable energy production; 3) reduce energy consumption; and 4) develop and implement comprehensive strategies to manage power resources in the most cost-effective manner. Recent activities include the following:

- **Greenhouse Gas Emissions Inventory** – Metropolitan’s emissions inventories for calendar years 2005 and 2006 were completed. Metropolitan’s reports were verified by a third-party consultant and are now available to the public through the California Climate Action Registry. Data-gathering for Metropolitan’s 2007 emissions inventory is complete and undergoing internal review, prior to verification by the consultant.
- **Renewable Energy Projects** – A construction contract was awarded in July 2008 for the first Metropolitan solar energy project, to be constructed at the Skinner plant. The project is scheduled to be completed by April 2009. Preliminary design of the Weymouth Solar Power Generation Facility is 5 percent complete and is being coordinated with the plant’s electrical rehabilitation project.
- **Energy Policy Principles** – Updated draft Energy Policy Principles were presented to the Board in July for review prior to seeking formal adoption.



Figure 14: A typical solar facility at Nellis Air Force Base, Nevada



**MONTHLY PROGRESS REPORT
OF CONSTRUCTION AND PROCUREMENT CONTRACTS
June 2008**
(Progress Through June 25, 2008)

Summary of Progress		
	Construction	Related Procurement
Number of Contracts	21	4
Total Bid Amount of Contracts in Progress	\$ 803,907,750	\$ 45,501,420
Number of Contracts Awarded This Month	4	0
Total Bid Amount of Contracts Awarded This Month	\$ 35,976,100	\$ -
Contract Gross Earnings This Month*	\$ 16,819,120	\$ -

**Note: Earnings reflected in this report represent the value of the work performed by the contractor through the 25th day of the month. Earnings include contract retention and other similar deductions from amounts earned by the contractor but otherwise required to be withheld by Metropolitan by law or by contract. Further, payments are made in the month following the performance of the work. For these reasons, contract payments reflected in Metropolitan's financial system will be less than the earnings shown in this report until the final payment has been made to the contractor.*

Contracts Awarded This Month

Contract No. 1662, Sepulveda Feeder Repair at 3 Sites, in the amount of \$1,630,000, was awarded to Kiewit Pacific Co. The project consists of pipeline repairs at three separate sites on the Sepulveda Feeder located in the Brentwood area of Los Angeles, Culver City, and Ladera Heights.

Contract No. 1663, Perris Valley Pipeline South Reach, in the amount of \$22,300,000, was awarded to Oscar Renda Contracting, Inc. The project consists of constructing approximately 4 miles of 97-inch diameter fabricated steel pipeline with Service Connections EM-24 and WR-35.

Contract No. 1664, F. E. Weymouth Water Treatment Plant Coagulant Tank Farm Modifications, in the amount of \$10,437,000, was awarded to Orion Construction Corporation. The project consists of retrofitting the existing alum/ferric storage and feed facilities, installation of a new roof canopy over the existing coagulant tank farm, construction of modifications to the alum/ferric tank farm, installation of a new polymer tank farm, demolition and removal of the existing storage building, carbon tank facility, and mechanical maintenance shop (Building No. 6), and an underground storage tank.

Contract No. 1665, Air Release and Vacuum Valve Relocation for Treated Water Pipelines - Construction Package No. 6, in the amount of \$1,609,100, was awarded to Cora Constructors, Inc. The project consists of removal of existing subsurface vacuum and air release valves; abatement of lead and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Brea, Buena Park, Fullerton, Placentia, Stanton, and Yorba Linda.

Contracts Completed This Month

Contract No. 1631, Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program, was completed on June 3, 2008, and the notice of completion was recorded on July 3, 2008.

Contract No. 1640, Air Release and Vacuum Valve Relocation for Treated Water Pipelines - Construction Package No. 1, was completed on June 12, 2008, and the notice of completion was recorded on June 24, 2008.

Contract No. 1656, Diamond Valley Lake Security and Wildlife Protection Fencing and Road, was completed on June 16, 2008, and the notice of completion was recorded on June 25, 2008.

Summaries/Status of Contracts

The summaries/status of current construction and construction-related procurement contracts are provided on the following pages.

Summary of Construction Contracts (Page 1 of 2)

Cont. No.	Spec. No.	Feature	Contractor	Contract Amount	Earnings This Month	Earnings To Date	Net Extra Work To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		Inland Feeder Contract		Projected Cost to Complete							
1542	1437	Arrowhead Tunnels Project ¹	J. F. Shea Const Inc/Kenny Const Co., JV	\$ 397,000,000	\$ 5,187,102	\$ 289,437,996	N/A	8/2/02	9/15/10	9/10	73%
		Inland Feeder Totals		\$ 397,000,000	\$ 5,187,102	\$ 289,437,996	\$ -				
		Other Contracts		Bid Amount							
1609	1483	Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3	Shimmick Construction/Obayashi Corp., JV	\$ 184,650,000	\$ 2,838,720	\$ 162,994,130	\$ 4,448,951	7/28/05	5/5/09	5/09	86%
1628	1517	Henry J. Mills Water Treatment Plant Chemical System Upgrades	J. R. Filanc Construction Co., Inc.	\$ 19,914,600	\$ 652,965	\$ 18,627,640	\$ 422,339	5/2/06	7/22/08	9/08 ²	92%
1631	1535	Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program	Kiewit Pacific Co.	\$ 70,516,455	\$ 174,500	\$ 71,084,075	\$ 1,122,330	5/15/06	6/3/08	6/08	100%
1633	1516A	Joseph Jensen Water Treatment Plant Jensen Chlorine Containment and Fluoride Project	Brutoco Engineering & Construction, Inc.	\$ 19,988,000	\$ 681,516	\$ 19,407,583	\$ 785,354	8/29/06	10/3/08	10/08	93%
1640	1542	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No.1	Steve P. Rados, Inc.	\$ 2,806,400	\$ 37,665	\$ 2,885,692	\$ 115,292	12/18/06	6/12/08	6/08	100%
1649	1559	F. E. Weymouth Water Treatment Plant Operations and Maintenance Building	Brutoco Engineering & Construction, Inc.	\$ 9,030,000	\$ 771,138	\$ 6,270,220	\$ 54,769	7/13/07	7/10/08	9/08 ²	69%
1650	1549	Henry J. Mills Water Treatment Plant Ozone Contactors 3 and 4	C.W. Roen Construction Co.	\$ 14,556,000	\$ 515,330	\$ 6,462,698	\$ 28,437	7/25/07	6/11/09	6/09	44%
1651	1589	Perris Valley Pipeline North Reach	W.A. Rasic Construction Co., Inc.	\$ 39,250,000	\$ 4,213,957	\$ 28,096,998	\$ 41,373	8/7/07	9/23/08	2/09 ³	72%
1653	1568	CRA Reliability Program Phase 6	Abhe & Svoboda, Inc.	\$ 3,382,110	\$ 458,360	\$ 779,735	\$ -	10/8/07	5/8/09	5/09	23%

¹ Earnings for this project are as of May 25, 2008.

² Time extension pending.

³ Contractor's progress is behind schedule. Water deliveries are anticipated to begin by November 2008.



Summary of Construction Contracts (Page 2 of 2)

Cont. No.	Spec. No.	Feature	Contractor	Contract Amount	Earnings This Month	Earnings To Date	Net Extra Work To Date	Start Date	Contract Completion Date	Estimated Completion Date	Estimated Percent Complete
		Other Contracts (cont'd)		Bid Amount							
1654	1565	Rialto Pipeline Improvements Phase II	Brutoco Engineering & Construction, Inc.	\$ 2,147,500	\$ 241,000	\$ 2,018,500	\$ -	10/8/07	9/12/08	9/08	94%
1656	1581	Diamond Valley Lake Security and Wildlife Protection Fencing and Road	Lightning Fence Co., Inc.	\$ 511,500	\$ 70,505	\$ 487,500	\$ (24,000)	2/21/08	6/16/08	6/08	100%
1657	1579	Robert B. Diemer Water Treatment Plant Hatch Covers Replacement	Cora Constructors, Inc.	\$ 332,932	\$ -	\$ -	\$ -	4/10/08	8/18/08	8/08	0%
1658	1601	F.E. Weymouth Water Treatment Plant Administration Building HVAC Controls Upgrade	Air-Ex Air Conditioning, Inc.	\$ 67,053	\$ -	\$ -	\$ -	6/23/08	10/16/08	10/08	0%
1659	1584	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 4	Spiniello Companies	\$ 1,447,500	\$ -	\$ -	\$ -	6/13/08	5/27/09	5/09	0%
1660	1597	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 5	Zusser Company, Inc.	\$ 1,278,500	\$ -	\$ -	\$ -	6/20/08	6/3/09	6/09	0%
1661	1439A	Robert B. Diemer Water Treatment Plant West Washwater Tank Refurbishment	Abhe & Svoboda, Inc.	\$ 1,053,100	\$ -	\$ -	\$ -	6/13/08	1/20/09	1/09	0%
1662	1635	Sepulveda Feeder Repair at 3 Sites	Kiewit Pacific Co.	\$ 1,630,000	\$ 976,362	\$ 976,362	\$ -	6/9/08	7/11/08	7/08	60%
1663	1608	Perris Valley Pipeline, South Reach	Oscar Renda Contracting, Inc.	\$ 22,300,000	\$ -	\$ -	\$ -	7/28/08	12/2/09	12/09	0%
1664	1574	F.E. Weymouth Water Treatment Plant Coagulant Tank Farm Modifications	Orion Construction Corp.	\$ 10,437,000	\$ -	\$ -	\$ -	6/30/08	11/3/10	11/10	0%
1665	1598	Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 6	Cora Constructors, Inc.	\$ 1,609,100	\$ -	\$ -	\$ -	7/2/08	6/15/09	6/09	0%
				\$ 406,907,750	\$ 11,632,018	\$ 320,091,133	\$ 6,994,845				
Total Value of Construction Contracts in Progress				\$ 803,907,750	\$ 16,819,120	\$ 609,529,129	\$ 6,994,845				



Summary of Construction and Procurement Contracts Completed This Month Pending Final Payment

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Estimated Final Earnings	Estimated Total Net Value of Extra Work	Date Work Accepted	Date Notice of Completion Recorded	Date Final Payment Due
1631	1535	Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program	Kiewit Pacific Co.	\$ 70,516,455	\$ 71,084,075	\$ 1,122,330	6/3/08	7/3/08	8/2/08
1640	1542	Air Release and Vacuum Valve Relocation for Treated Water Pipelines - Construction Package No. 1	Steve P. Rados, Inc.	\$ 2,806,400	\$ 2,885,692	\$ 115,292	6/12/08	6/24/08	8/11/08
1656	1591	Diamond Valley Lake Security and Wildlife Protection Fencing and Road	Lightning Fence Co., Inc.	\$ 511,500	\$ 487,500	\$ (24,000)	6/16/08	6/25/08	8/15/08

Summary of Procurement Contracts

Cont. No.	Spec. No.	Feature	Contractor	Bid Amount	Earnings This Month	Earnings to Date	Starting Date	Delivery Date	Remarks
1582	1480	Oxygen/Ozone System Equipment for the Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program	Ozonias North America	\$ 8,409,000	\$ -	\$ 6,205,194	6/22/04	12/30/09	Payments on this contract are made quarterly
1622	1515A	Oxygen/Ozone System Equipment for the Robert B. Diemer and F. E. Weymouth Water Treatment Plants Oxidation Retrofit Program	Ozonias North America	\$ 15,733,300	\$ -	\$ 6,300,761	2/2/06	6/3/10	Payments on this contract are made quarterly
1645	1547	Steel Pipe and Fittings for Perris Valley Pipeline	Northwest Pipe Company	\$ 17,955,170	\$ -	\$ 10,697,060	3/5/07	11/1/08	
1655	1604	Henry J. Mills Water Treatment Plant Ozone System Reliability Upgrade Equipment	Ozonias North America	\$ 3,403,950	\$ -	\$ -	1/17/08	12/18/09	Payments on this contract are made quarterly
Total Value of Procurement Contracts in Progress				\$ 45,501,420	\$ -	\$ 23,203,015			

Contract No. 1542 Specifications No. 1437 Contractor: J. F. Shea Const Inc/Kenny Const Co., JV	Inland Feeder Program Arrowhead Tunnels Project
Scope of Work: The project consists of purchasing two tunnel boring machines (TBMs); excavating two 12-foot interior finished diameter tunnels; constructing three portal structures; furnishing and installing a precast concrete segmental liner and a final liner for the Arrowhead West tunnel. Project modified to a cost reimbursable contract effective April 26, 2006.	
At a Glance: Estimated Percent Complete 73%	
Estimated Completion Date September 2010	
Details: Projected Cost to Complete \$397,000,000 Earnings To Date \$289,437,996 *	
Earnings This Month \$5,187,102 *	
Contract Start 8/2/02	Relocation of pipe within the Etiwanda storage facility
Contract Completion 9/15/10	

Contract No. 1609 Specifications No. 1483 Contractor: Shimmick Construction/Obayashi Corp., JV	Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program and Washwater Reclamation Plant No. 3	
Scope: The work consists of construction of buildings and water treatment structures, washwater reclamation plant, chemical and liquid oxygen facilities, cooling water pump station, power substation, switchgear building, and associated work.		
At a Glance: Estimated Percent Complete 86% Percent Extra Work 2.4% Estimated Completion Date May 2009		
Details: Bid Amount \$184,650,000 Earnings To Date \$162,994,130 Net Extra Work To Date \$4,448,951 Earnings This Month \$2,838,720 Net Extra Work This Month \$473,127		
Contract Start 7/28/05		
Duration in Working Days 865		
Contract Completion 5/5/09		
		Ozone Generation Building

*Earnings for this project are as of May 25, 2008.

<p>Contract No. 1628 Specifications No. 1517 Contractor: J. R. Filanc Construction Co., Inc.</p>	<p>Henry J. Mills Water Treatment Plant Chemical System Upgrades</p>
<p>Scope: The work consists of construction of new chlorine containment facility including truck unloading and acid storage buildings, evaporator room, injection facility, and chlorine scrubber areas.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 92% Percent Extra Work 2.1% Estimated Completion Date September 2008</p>	
<p>Details:</p> <p>Bid Amount \$19,914,600 Earnings To Date \$18,627,640 Net Extra Work To Date \$422,339 Earnings This Month \$652,965 Net Extra Work This Month \$38,893 Contract Start 5/2/06 Duration in Working Days 360 Contract Completion 7/22/08 *</p>	
<p>Preparation for base and paving</p>	
<p>Contract No. 1631 1535 Contractor: Kiewit Pacific Co.</p>	<p>Diemer Water Treatment Plant Site Preparation for Oxidation Retrofit Program</p>
<p>Scope: The work consists of demolition of shop building, underground fuel tanks, and steel pipelines; installation of more than 3,000 feet of steel pipe, motor control center, remote transmitting unit, LPG tank and vaporizer, subdrain systems, and associated work.</p>	
<p>At a Glance:</p> <p>Percent Complete 100% Percent Extra Work 1.6% Completion Date June 2008</p>	
<p>Details:</p> <p>Bid Amount \$70,516,455 Earnings To Date \$71,084,075 Net Extra Work To Date \$1,122,330 Earnings This Month \$174,500 Net Extra Work This Month \$0 Contract Start 5/15/06 Duration in Working Days 445 Actual Contract Completion 6/3/08</p>	
<p>Completion of upper pad extension</p>	

*Time extension pending.

Contract No. 1633
 Specifications No. 1516A
 Contractor: Brutoco Engineering & Construction, Inc.

**Joseph Jensen Water Treatment Plant
 Jensen Chlorine Containment and Fluoride Project**

Scope:
 The work consists of construction of new chlorine containment facility, evaporator room, and chlorine scrubber area, new fluorosilicic acid unloading, storage and injection facility, and associated work.



At a Glance:
 Estimated Percent Complete 93%
 Percent Extra Work 3.9%
 Estimated Completion Date **October 2008**

Details:
 Bid Amount **\$19,988,000**
 Earnings To Date **\$19,407,583**
 Net Extra Work To Date **\$785,354**
 Earnings This Month **\$681,516**
 Net Extra Work This Month **\$4,616**
 Contract Start **8/29/06**
 Duration in Working Days **460**
 Contract Completion **10/3/08**

Placement of new track

Contract No. 1640
 Specifications No. 1542
 Contractor: Steve P. Rados, Inc.

**Air Release and Vacuum Valve Relocation for Treated Water Pipelines
 Construction Package No. 1**

Scope:
 The work consists of furnishing new replacement valves, pipes, and fittings for Metropolitan's inventory; removal of existing subsurface vacuum and air release valves; abatement of lead, PCBs and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Los Angeles, Alhambra, Commerce, Montebello, Monterey Park, Rosemead, and South Pasadena.



At a Glance:
 Percent Complete 100%
 Percent Extra Work 4.1%
 Completion Date **June 2008**

Details:
 Bid Amount **\$2,806,400**
 Earnings To Date **\$2,885,692**
 Net Extra Work To Date **\$115,292**
 Earnings This Month **\$37,665**
 Net Extra Work This Month **\$26,665**
 Contract Start **12/18/06**
 Duration in Working Days **260**
 Actual Contract Completion **6/12/08**

Completed tie-in

Contract No. 1649
Specifications No. 1559
Contractor: Brutoco Engineering & Construction, Inc.

**F. E. Weymouth Water Treatment Plant
Operations and Maintenance Building**

Scope:
The work consists of constructing a new centralized Operations and Maintenance Building of approximately 26,566 square feet including a Weld Shop, Machine Shop, Pipe Shop, Carpentry Shop, Test Area, Parts Storage Area, Instrumentation Shop, office areas, and restrooms/locker rooms.



At a Glance:
Estimated Percent Complete 69%
Percent Extra Work 0.61%
Estimated Completion Date September 2008

Drywall installation inside conference room

Details:
Bid Amount \$9,030,000
Earnings To Date \$6,270,220
Net Extra Work To Date \$54,769
Earnings This Month \$771,138
Net Extra Work This Month \$0
Contract Start 7/13/07
Duration in Working Days 220
Contract Completion 7/10/08 *

Contract No. 1650
Specifications No. 1549
Contractor: C.W. Roen Construction Co.

**Henry J. Mills Water Treatment Plant
Ozone Contactors 3 and 4**

Scope:
The work consists of constructing two new contactors, installing Metropolitan-furnished ozone equipment, and making tie-ins to existing process and utility lines within the existing contactor structure.



At a Glance:
Estimated Percent Complete 44%
Percent Extra Work 0.20%
Estimated Completion Date June 2009

Placement of ozone contactor walls

Details:
Bid Amount \$14,556,000
Earnings To Date \$6,462,698
Net Extra Work To Date \$28,437
Earnings This Month \$515,330
Net Extra Work This Month \$4,266
Contract Start 7/25/07
Duration in Working Days 460
Contract Completion 6/11/09

*Time extension pending.

Contract No.	1651	Perris Valley Pipeline North Reach
Specifications No.	1589	
Contractor:	W.A. Rasic Construction Co., Inc.	
Scope:		
The project consists of installing approximately 2.7 miles of large-diameter welded steel pipe. The work includes excavation; tunneling; pipe installation and welding; street improvements; construction of service connection EM-23; furnishing and installing valves and related piping; constructing manhole, blow-off, and other cast-in-place reinforced concrete vault structures; and electrical instrumentation and equipment.		
At a Glance:		
Estimated Percent Complete	72%	
Percent Extra Work	0.11%	
Estimated Completion Date	February 2009	
Details:		
Bid Amount	\$39,250,000	
Earnings To Date	\$28,096,998	
Net Extra Work To Date	\$41,373	
Earnings This Month	\$4,213,957	
Net Extra Work This Month	\$1,809	
Contract Start	8/7/07	Installation of 97-inch pipe at Gorgonio and Alessandro Blvd.
Duration in Working Days	250	
Contract Completion	9/23/08 *	

Contract No.	1653	CRA Reliability Program Phase 6
Specifications No.	1568	
Contractor:	Abhe & Svoboda, Inc.	
Scope:		
The project consists of rehabilitating deteriorated slide gates and upgrading electrical equipment at the San Jacinto Diversion Structure, and replacing valves and installing a security fence at the Desert Water/Coachella Valley discharge structure located at the Whitewater River.		
At a Glance:		
Estimated Percent Complete	23%	
Percent Extra Work	0.00%	
Estimated Completion Date	May 2009	
Details:		
Bid Amount	\$3,382,110	
Earnings To Date	\$779,735	
Net Extra Work To Date	\$0	
Earnings This Month	\$458,360	
Net Extra Work This Month	\$0	
Contract Start	10/8/07	Installation of electrical and telephone ductbank
Duration in Working Days	400	
Contract Completion	5/8/09	

*Contractor's progress is behind schedule. Water deliveries are anticipated to begin by November 2008.

Contract No. 1654 Specifications No. 1565 Contractor: Brutoco Engineering & Construction, Inc.	Rialto Pipeline Improvements Phase II
Scope: The project consists of construction of a new isolation bulkhead structure with removable spool piece, replacement of 30 feet of PCCP with 120-inch-diameter welded steel pipe, and installation of 96-inch-diameter sectionalizing valves in existing vault structures. The removable spool piece and 96-inch-diameter valves are furnished by Metropolitan.	
At a Glance: Estimated Percent Complete 94% Percent Extra Work 0.00% Estimated Completion Date September 2008	
Details: Bid Amount \$2,147,500 Earnings To Date \$2,018,500 Net Extra Work To Date \$0 Earnings This Month \$241,000 Net Extra Work This Month \$0 Contract Start 10/8/07 Duration in Working Days 230 Contract Completion 9/12/08	
	Placement of concrete for retaining wall

Contract No. 1656 Specifications No. 1581 Contractor: Lightning Fence Co., Inc.	Diamond Valley Lake Security and Wildlife Protection Fencing and Road
Scope: The project consists of demolition of approximately 2,500 feet of existing fencing; construction of approximately 15,000 feet of new fencing and maintenance road (15-foot wide) between the Diamond Valley Lake East Recreation Area and wildlife corridor.	
At a Glance: Percent Complete 100% Percent Extra Work -4.69% Completion Date June 2008	
Details: Bid Amount \$511,500 Earnings To Date \$487,500 Net Extra Work To Date (Credit) -\$24,000 Earnings This Month \$70,505 Net Extra Work This Month (Credit) -\$24,000 Estimated Contract Start 2/21/08 Duration in Working Days 100 Actual Contract Completion 6/16/08	
	Completed fence and maintenance road south of Angler Avenue

Contract No. 1657 Specifications No. 1579 Contractor: Cora Constructors, Inc.	Robert B. Diemer Water Treatment Plant Hatch Covers Replacement	
Scope: The project consists of replacement of 15 corroded hatch covers over the filter outlet conduit and Finished Water Reservoir inlet conduit, removal and disposal of PCB-containing sealant, temporary relocation of caustic piping, and repair of spalled concrete curbs.		
At a Glance: Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date August 2008		
Details: Bid Amount \$332,932 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 4/10/08 Duration in Working Days 90 Contract Completion 8/18/08		
		Existing hatch cover

Contract No. 1658 Specifications No. 1601 Contractor: Air-Ex Air Conditioning, Inc.	F.E. Weymouth Water Treatment Plant Administration Building HVAC Controls Upgrade	
Scope: The project consists of designing, furnishing and installing a building HVAC Control System that networks all of the standalone units to a central building controller that will monitor and control all the units.		
At a Glance: Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date October 2008		
Details: Bid Amount \$67,053 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Estimated Contract Start 6/23/08 Duration in Working Days 80 Estimated Contract Completion 10/16/08		
		Roof air-conditioning units to be connected to new central controller

Contract No.	1659	Air Release and Vacuum Valve Relocation for Treated Water Pipelines - Construction Package No. 4
Specifications No.	1584	
Contractor:	Spiniello Companies	
Scope: The project consists of removal of existing subsurface vacuum and air release valves; abatement of lead and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Beverly Hills, Burbank, Carson, Downey, Gardena, Glendale, Inglewood, La Mirada, Los Angeles, Norwalk, Santa Fe Springs, Torrance, West Hollywood, and portions of Los Angeles County.		
At a Glance:		
Estimated Percent Complete	0%	
Percent Extra Work	0.00%	
Estimated Completion Date	May 2009	
Details:		
Bid Amount	\$1,447,500	
Earnings To Date	\$0	
Net Extra Work To Date	\$0	
Earnings This Month	\$0	
Net Extra Work This Month	\$0	
Contract Start	6/13/08	Existing site condition in Burbank
Duration in Working Days	240	
Contract Completion	5/27/09	

Contract No.	1660	Air Release and Vacuum Valve Relocation for Treated Water Pipelines - Construction Package No. 5
Specifications No.	1597	
Contractor:	Zusser Company, Inc.	
Scope: The project consists of removal of existing subsurface vacuum and air release valves; abatement of lead and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Burbank, San Fernando, and the communities of Chatsworth, Granada Hills, Mission Hills, Pacoima, Sherman Oaks, Sun Valley, and Van Nuys within the City of Los Angeles.		
At a Glance:		
Estimated Percent Complete	0%	
Percent Extra Work	0.00%	
Estimated Completion Date	June 2009	
Details:		
Bid Amount	\$1,278,500	
Earnings To Date	\$0	
Net Extra Work To Date	\$0	
Earnings This Month	\$0	
Net Extra Work This Month	\$0	
Contract Start	6/20/08	Existing site condition in Los Angeles
Duration in Working Days	240	
Estimated Contract Completion	6/3/09	

Contract No. 1661 Specifications No. 1439A Contractor: Abhe & Svoboda, Inc.	Robert B. Diemer Water Treatment Plant West Washwater Tank Refurbishment
Scope: The project consists of abrasive blasting and recoating of the exterior and interior surfaces of a steel water storage tank; seismic retrofit; tank disinfection; repairing trusses, beams, roof, hatch cover, and vent structure.	
At a Glance: Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date January 2009	
Details: Bid Amount \$1,053,100 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 6/13/08 Duration in Working Days 150 Contract Completion 1/20/09	Tank stairs

Contract No. 1662 Specifications No. 1635 Contractor: Kiewit Pacific Co.	Sepulveda Feeder Repair at 3 Sites
Scope: The project consists of pipeline repairs at three separate sites on the Sepulveda Feeder located in the Brentwood area of Los Angeles, Culver City, and Ladera Heights.	
At a Glance: Estimated Percent Complete 60% Percent Extra Work 0.00% Estimated Completion Date July 2008	
Details: Bid Amount \$1,630,000 Earnings To Date \$976,362 Net Extra Work To Date \$0 Earnings This Month \$976,362 Net Extra Work This Month \$0 Contract Start 6/9/08 Duration in Working Days * Estimated Contract Completion 7/11/08	Carbon fiber repairs

*Contract to be completed by 7:00 p.m., July 11, 2008

<p>Contract No. 1663 Specifications No. 1608 Contractor: Oscar Renda Contracting, Inc.</p>	<p>Perris Valley Pipeline South Reach</p>
<p>Scope: The project consists of constructing approximately 4 miles of 97-inch diameter fabricated steel pipeline with Service Connections EM-24 and WR-35.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date December 2009</p>	
<p>Details:</p> <p>Bid Amount \$22,300,000 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Estimated Contract Start 7/28/08 Duration in Working Days 340 Contract Completion 12/2/09</p>	<p>Existing site conditions near March Field Air Museum</p>
<p>Contract No. 1664 Specifications No. 1574 Contractor: Orion Construction Corp.</p>	<p>F.E. Weymouth Water Treatment Plant Coagulant Tank Farm Modifications</p>
<p>Scope: The project consists of retrofitting the existing alum/ferric storage and feed facilities, installation of a new roof canopy over the existing coagulant tank farm, construction of modifications to the alum/ferric tank farm, installation of a new polymer tank farm, demolition and removal of the existing storage building, carbon tank facility, and mechanical maintenance shop (Building No. 6), and an underground storage tank.</p>	
<p>At a Glance:</p> <p>Estimated Percent Complete 0% Percent Extra Work 0.00% Estimated Completion Date November 2010</p>	
<p>Details:</p> <p>Bid Amount \$10,437,000 Earnings To Date \$0 Net Extra Work To Date \$0 Earnings This Month \$0 Net Extra Work This Month \$0 Contract Start 6/30/08 Duration in Working Days 595 Estimated Contract Completion 11/3/10</p>	<p>Existing site condition</p>

<table> <tr> <td>Contract No.</td> <td>1665</td> </tr> <tr> <td>Specifications No.</td> <td>1598</td> </tr> <tr> <td>Contractor:</td> <td>Cora Constructors, Inc.</td> </tr> </table>	Contract No.	1665	Specifications No.	1598	Contractor:	Cora Constructors, Inc.	<p>Air Release and Vacuum Valve Relocation for Treated Water Pipelines - Construction Package No. 6</p>										
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Specifications No.	1598																
Contractor:	Cora Constructors, Inc.																
<p>Scope: The project consists of removal of existing subsurface vacuum and air release valves; abatement of lead and asbestos-containing material inside subsurface vaults; and modification and extension of piping system for installation of new vacuum and air release valves at above-ground locations within the cities of Brea, Buena Park, Fullerton, Placentia, Stanton, and Yorba Linda.</p>																	
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