MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

# Report
Corporate Resources

## • Engineering Services Key Activities for the Month of July 2009

## Summary

- Recent Events
  Orange County Feeder Relocation

- Supply and Delivery Reliability:
  Inland Feeder Program
  Perris Valley Pipeline
  Skinner Water Treatment Plant Expansion No. 4

- Infrastructure Reliability:
  Assess the Condition of Metropolitan's Prestressed Concrete Cylinder Pipe
  Capital Program for Projects Costing Less Than $250,000
  CRA Pumping Plant Reliability Program
  Diemer Water Treatment Plant Improvements Program

- Water Quality:
  Oxidation Retrofit Program

- Regulatory:
  Chlorine Containment and Handling Facilities

## Attachments

Monthly Progress Report of Construction and Procurement Contracts for June 2009

## Detailed Report

This report details key engineering activities for the month of July 2009.

### Recent Events:

**Orange County Feeder Relocation:** Metropolitan received a request from a private developer to relocate a short portion of the Orange County Feeder near Ball Road in Anaheim. At this location, Metropolitan's pipeline is in permanent easement. The proposed multiple-story structure would encroach upon Metropolitan's easement. The developer and Metropolitan have agreed that relocation of the pipeline is mutually beneficial. The developer has submitted an initial deposit, and Metropolitan has started preparation of a reimbursement agreement to perform the work. Metropolitan has also performed the initial survey work required to commence with design.

Date of Report: August 18, 2009

## Supply and Delivery Reliability:

**Inland Feeder Program:** This 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 (SPW) supplies from the Devil Canyon Second Afterbay to Diamond Valley Lake. Eight of nine construction contracts have been completed. Based on recent progress on the Arrowhead Tunnels, which is the final element, the Inland Feeder will be available in November 2009 for delivery of SPW at the full design flow rate. The Arrowhead Tunnels are projected to be completed nine months ahead of the contract schedule, and within the Board-authorized budget. Recent activities include the following:

- Arrowhead East Tunnel (AET) – In June, the contractor completed cellular grouting (grout injected between the pipe and the outer bolted-gasketed mining segments) from the City Creek Portal. The contractor also completed the final stage of grouting (contact grouting) to fill any voids left in the cellular grout. This now completes all grouting activities in the East Tunnel and the contractor will begin final clean-up of the tunnel in July. The contractor began installation of pipe outside of the tunnel at Strawberry Creek, that connects the tunnel to the previously constructed pipeline running between AET and Arrowhead West Tunnel. The contractor prepared for mobilization of the cement mortar lining operation to coat those portions of the tunnel that have welded steel pipe, prior to final completion of construction.
- Arrowhead West Tunnel (AWT) – In June, the contractor continued construction of the access structure at the Waterman Portal (Figure 1). The contractor completed the backfill (cellular) grouting on AWT. The contractor neared completion of the contact grouting of AWT to fill voids that typically remain after the backfill grouting.

Figure 1: Waterman Portal access structure

## Supply and Delivery Reliability (cont.):

**Perris Valley Pipeline:** This 96-inch diameter pipeline will be approximately 6.5 miles long, extending east and south from the Mills plant to provide service to Eastern Municipal Water District and Western Municipal Water District of Riverside County. Recent activities include the following:

- North Reach – The contractor has completed all work and is now demobilizing from the site. The contractor finished more than 200 days beyond the contract completion date; accordingly, liquidated damages in the amount of $3 million have been assessed for the delay. Staff is attempting to resolve several claims submitted by the contractor.
- South Reach – The contractor is continuing with pipe installation. South Reach pipe installation is approximately 56 percent complete (8,975 feet out of 20,313 feet) and is scheduled to be completed in October 2009 (Figure 2). Overall, construction is anticipated to be completed in January 2010. The contractor has encountered difficulty with disposal of pumped groundwater. Staff is coordinating with affected agencies to resolve the issue.

Figure 2: Perris Valley Pipeline South Reach – Backfill operations

## 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 (Figure 3). Module No. 7 commenced operation in July 2007, while Washwater Reclamation Plant No. 3 and a coal removal structure were completed in December 2006. Construction of the Chemical Systems Modifications was completed in October 2007. All chemical systems under this program have been placed into service. The reclaimed washwater return pumping station, which is under the Skinner ORP construction contract, was placed into service in March 2009. Remaining work includes the completion of project close-out activities, such as preparation of record drawings and contract warranty items.

The program is to be completed by end of December 2009 and is on schedule and within budget.

Figure 3: Skinner Module No. 7

## Infrastructure Reliability:

**Assess the Condition of Metropolitan's Prestressed Concrete Cylinder Pipe:** Metropolitan has over 163 miles of PCCP within the distribution system. This program is being implemented in three phases to assess the condition of PCCP lines utilizing alternate inspection techniques.

Phase III electromagnetic inspections have been performed on the following pipelines: Box Springs Feeder, San Diego Pipeline No. 5, and Rialto Pipeline (Figure 4). The condition assessment identified some new distressed pipe segments. Staff is reviewing the inspection reports and evaluating data to determine if repairs are warranted. Phase III inspections are 60 percent complete and are scheduled to be completed by June 2011.

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

Figure 4: Crack on the Rialto pipeline

## Infrastructure Reliability (cont.):

**Capital Program for Projects Costing Less Than $250,000:** The minor capital projects support timely and essential repairs and upgrades throughout the distribution system, including equipment such as pumps and valves, structural components, plumbing or electrical equipment, HVAC systems, etc. Each fiscal year, the Board is requested to authorize the General Manager to execute capital projects costing less than $250,000. Recent activities include the following:

- Black Metal Mountain Electrical Transformer – This project will upgrade the electrical transformer at Black Metal Mountain to meet increased electrical demands (Figure 5). Construction is 30 percent complete and is scheduled to be completed by October 2009.
- Mills Plant Air Rehabilitation – This project will upgrade Mills plant pneumatic air compressors to replace equipment that has exceeded its life cycle and to meet current demands. Construction is 70 percent complete and is scheduled to be completed by October 2009.
- Skinner Module 3 Flocculator Drive Conversion – This project will replace out-dated single speed drives with variable speed drives to improve water quality by improving the flocculation. The drives are operating and testing is currently underway. The project is 90 percent complete and is scheduled to be completed by August 2009.
- Weymouth Chlorine Containment Security Upgrade – This project will install security systems at the chlorine containment facility. This facility will be continually monitored from the Eagle Rock Control Center for improved life safety. Construction is 90 percent completed and is scheduled be completed by August 2009.
- Weymouth Flagpole Landscaping – This project will replace 6,200 square feet of turf with California friendly landscaping at the Weymouth plant entrance. Construction is 95 percent complete and is scheduled to be completed by August 2009.

The overall program is on schedule and is within budget.

Figure 5: Sample electrical transformer to be installed at Black Metal Mountain

## 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 9 active projects, while 4 have been completed. Recent activities include the following:

- Desert Water Tank Access and Safety Improvements – This project is required to improve access and safety to the water tanks located in the hills above the pumping plants. Final design is complete and the project is scheduled to be advertised for competitive bids in August 2009. A Board action is anticipated in December 2009 to award the construction contract.
- Intake Pumping Plant Instrumentation Replacement and Automation – A pilot project will automate Pump No. 1 and several support systems. Construction was completed in May 2009. Testing was completed in late July 2009.
- Suction/Discharge Line Expansion Joints – This project will rehabilitate leaking joints on the delivery and suction lines at all five CRA pumping plants (Figure 6). Preliminary design is complete. Staff is moving forward with the final design in two phases. Phase 1 will address the leaking joints on the delivery lines, and final design 1 is scheduled to be completed by March 2010. Phase 2 will address the leaking joints on the suction lines of all the CRA pumping plants, with final design scheduled to be completed by December 2010.

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

Figure 6: Delivery line at Iron Mountain Plant

## 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. There are 22 active projects, while 7 have been completed. Recent activities include the following:

- Diemer North Access Road – Final design is complete and the project was advertised for bids in July 2009; staff will return to the Board in October 2009 for award of the construction contract (Figure 7).
- Finished Water Reservoir and East Washwater Tank Seismic Upgrades – Final design is 50 percent complete and is scheduled to be completed by November 2009.
- Filter Outlet Conduit Seismic Upgrades – This study is 75 percent complete and is scheduled to be completed by early 2010.
- New Fire and Potable Water Pump Station – Final design is 60 percent complete and scheduled to be completed by January 2010.
- Public Address System Upgrades – Final design is 60 percent complete and is scheduled to be completed by September 2009.
- Filter Valves Replacement – Preliminary design is 70 percent complete and is scheduled to be completed by October 2009.
- Electrical Improvements – Preliminary design is 60 percent complete and is scheduled to be completed by September 2009.

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

Figure 7: Proposed North Access Road looking west

## 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 capacity to 326 mgd is complete and start-up testing is underway. Fabrication of additional ozone equipment is approximately 80 percent complete and is scheduled to be completed by August 2009. Installation and testing of additional ozone equipment is scheduled to be completed by July 2011.
- Jensen Plant – The plant's ozone system became fully operational in July 2005.
- Skinner Plant – Construction is 99 percent complete and is scheduled to be completed in the third quarter of 2009. The ozone equipment vendor, Ozonia North America, continues the ozone equipment functional and system testing. Both the contractor and Ozonia continue to provide equipment and system training.
- Diemer Plant – Construction of ozone facilities is approximately 24 percent complete and is scheduled to be completed by mid-2012 (Figure 8). Fabrication of ozone equipment is approximately 95 percent complete and is scheduled to be completed by September 2009.
- Weymouth Plant – This program consists of multiple, staged construction contracts. The Weymouth ozone facilities are currently scheduled to be completed by late 2014.

Figure 8: Construction of Diemer Ozone Generation Building

## Regulatory:

**Chlorine Containment and Handling Facilities:** This program includes 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:

- Water Treatment Plants – Chlorine containment facilities are operational at each of Metropolitan's five treatment plants.
- Chemical Unloading Facility (CUF) – Preliminary design for a chlorine containment facility is scheduled to be completed by February 2010. Final design for the dechlorination system is 75 percent complete and is scheduled to be completed by August 2009.
- Filter Outlet Chlorine Capacity Increase Projects – Final design is underway for the Mills, Jensen and Skinner facilities. Construction of the Mills facility is scheduled to be completed by late 2009, while the Jensen facility is scheduled to be completed by mid-2010. Construction of the Skinner facility is scheduled to be completed by late 2009. Figure 9 shows the existing chlorine equipment at Skinner that will be modified as part of this project. Future Board actions are planned to initiate designs for the Diemer and Weymouth projects.

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

Figure 9: Existing Skinner chlorine equipment to be modified as part of the Filter Outlet Chlorine Capacity Increase project

# MONTHLY PROGRESS REPORT
# OF CONSTRUCTION AND PROCUREMENT CONTRACTS
# JUNE 2009

(Progress Through June 25, 2009)

| Summary of Progress | | |
|---|---|---|
| | Construction | Related Procurement |
| Number of Contracts | 17 | 4 |
| Total Bid Amount of Contracts in Progress | $ 885,893,875 | $ 45,501,420 |
| Number of Contracts Awarded This Month | 0 | 0 |
| Total Bid Amount of Contracts Awarded This Month | $ - | $ - |
| Contract Gross Earnings This Month* | $ 17,451,716 | $ 1,132,333 |

**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

No contracts were awarded this month.

## Contracts Completed This Month

No contracts were completed this month.

## 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 | $ 5,870,109 | $ 359,487,226 | N/A | 8/2/02 | 11/15/10 | 3/10 | 91% |
| | | **Inland Feeder Totals** | | **$ 397,000,000** | **$ 5,870,109** | **$ 359,487,226** | **$ -** | | | | |
| | | **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 | $ 533,608 | $ 203,399,439 | $ 12,773,819 | 7/28/05 | 9/8/09 | 9/09 | 99% |
| 1650 | 1549 | Henry J. Mills Water Treatment Plant Ozone Contactors Nos. 3 and 4 | C.W. Roen Construction Co. | $ 14,556,000 | $ 534,367 | $ 14,667,559 | $ 252,309 | 7/25/07 | 7/2/09 | 7/09 | 99% |
| 1651 | 1589 | Perris Valley Pipeline North Reach | W.A. Rasic Construction Co., Inc. | $ 39,250,000 | $ 826,460 | $ 38,991,479 | $ 224,237 | 8/7/07 | 10/23/08 | 7/09 | 99% |
| 1653 | 1568 | CRA Reliability Program Phase 6 | Abhe & Svoboda, Inc. | $ 3,382,110 | $ - | $ 1,862,327 | $ 18,114 | 10/8/07 | 5/8/09 | 11/09 [2] | 55% |
| 1659 | 1584 | Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 4 | Spiniello Companies | $ 1,447,500 | $ 175,770 | $ 849,389 | $ - | 6/13/08 | 7/6/09 | 7/09 | 59% |
| 1660 | 1597 | Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 5 | Zusser Company, Inc. | $ 1,278,500 | $ 51,000 | $ 799,441 | $ 23,041 | 6/20/08 | 7/30/09 | 8/09 | 61% |
| 1663 | 1608 | Perris Valley Pipeline, South Reach | Oscar Renda Contracting, Inc. | $ 22,300,000 | $ 718,643 | $ 6,990,330 | $ - | 9/4/08 | 1/12/10 | 1/10 | 31% |
| 1664 | 1574 | F.E. Weymouth Water Treatment Plant Coagulant Tank Farm Modifications | Orion Construction Corp. | $ 10,437,000 | $ 694,540 | $ 5,019,380 | $ - | 6/30/08 | 12/3/10 | 12/10 | 48% |
| 1665 | 1598 | Air Release and Vacuum Valve Relocation for Treated Water Pipelines Construction Package No. 6 | Cora Constructors, Inc. | $ 1,609,100 | $ 113,500 | $ 1,494,590 | $ - | 7/2/08 | 7/16/09 | 7/09 | 93% |
| 1667 | 1500 | Robert B. Diemer Water Treatment Plant Oxidation Retrofit Program | Shimmick Construction/Obayashi Corp. JV | $ 188,080,588 | $ 6,240,623 | $ 44,972,746 | $ 74,133 | 8/15/08 | 6/1/12 | 6/12 | 24% |

[1] Earnings for this project are as of May 25, 2009.
[2] Time extension pending.

SUMMARY CONTINUED ON NEXT PAGE

**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 | | | | | | | |
| 1668 | 1619 | Skinner Water Treatment Plant Solar Power Generation Facility | SunPower Corporation, Systems | $ 9,984,000 | $ 10,000 | $ 9,919,000 | $ - | 8/6/08 | 5/28/09 | 9/09 [2] | 99% |
| 1669 | 1575A | Union Station Tenant Improvements | W.E. O'Neil Construction Co. of California | $ 162,457 | $ - | $ 153,457 | $ - | 8/22/08 | 1/9/09 | 7/09 | 94% [3] |
| 1672 | 1616 | Lake Skinner East Bypass Screening Structure Rehabilitation | Gantry Constructors, Inc. | $ 4,591,500 | $ 1,103,331 | $ 3,420,290 | $ - | 9/17/08 | 10/20/09 | 10/09 | 74% |
| 1673 | 1557 | Joseph Jensen Water Treatment Plant Solids Thickeners 5 and 6 | Brutoco Engineering & Construction, Inc. | $ 5,499,000 | $ 529,265 | $ 2,164,885 | $ - | 10/28/08 | 3/22/10 | 3/10 | 39% |
| 1677 | 1613 | Joseph Jensen Water Treatment Plant Administration Building Seismic Upgrades | Brutoco Engineering & Construction, Inc. | $ 1,535,000 | $ 50,500 | $ 255,500 | $ - | 5/7/09 | 3/9/10 | 3/10 | 17% |
| 1678 | 1620 | Weymouth Asphalt Rehabilitation | D.P. Mangan, Inc. dba Pave West | $ 131,120 | $ - | $ - | $ - | 7/1/09 | 9/24/09 | 9/09 | 0% |
| | | | | $ 488,893,875 | $ 11,581,607 | $ 334,959,812 | $ 13,365,653 | | | | |
| | | | | | | | | | | | |
| | | **Total Value of Construction Contracts in Progress** | | **$ 885,893,875** | **$ 17,451,716** | **$ 694,447,038** | **$ 13,365,653** | | | | |

[2] Time extension pending.
[3] Contract substantially complete. Punch list work remains.

**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 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No contracts were completed this month. | | | | | | | | |

**Summary of Procurement Contracts**

| Cont. No. | Spec. No. | Feature | Contractor | Bid Amount | Earnings This Month | Earnings to Date | Starting Date | Delivery Date | |
|---|---|---|---|---|---|---|---|---|---|
| 1582 | 1480 | Oxygen/Ozone System Equipment for the Robert A. Skinner Water Treatment Plant Oxidation Retrofit Program | Ozonia North America | $ 8,409,000 | $ - | $ 6,299,641 | 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 | Ozonia North America | $ 15,733,300 | $ - | $ 10,285,141 | 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 | $ 1,132,333 | $ 17,270,563 | 3/5/07 | 7/30/09 | |
| 1655 | 1604 | Henry J. Mills Water Treatment Plant Ozone System Reliability Upgrade Equipment | Ozonia North America | $ 3,403,950 | $ - | $ 383,530 | 1/17/08 | 12/18/09 | Payments on this contract are made quarterly |
| | | | | | | | | | |
| | | | **Total Value of Procurement Contracts in Progress** | **$ 45,501,420** | **$ 1,132,333** | **$ 34,238,875** | | | |

| | |
|---|---|
| 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.

Installation of pipe at Waterman Canyon Portal

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **91%** |
| Estimated Completion Date | **March 2010** |

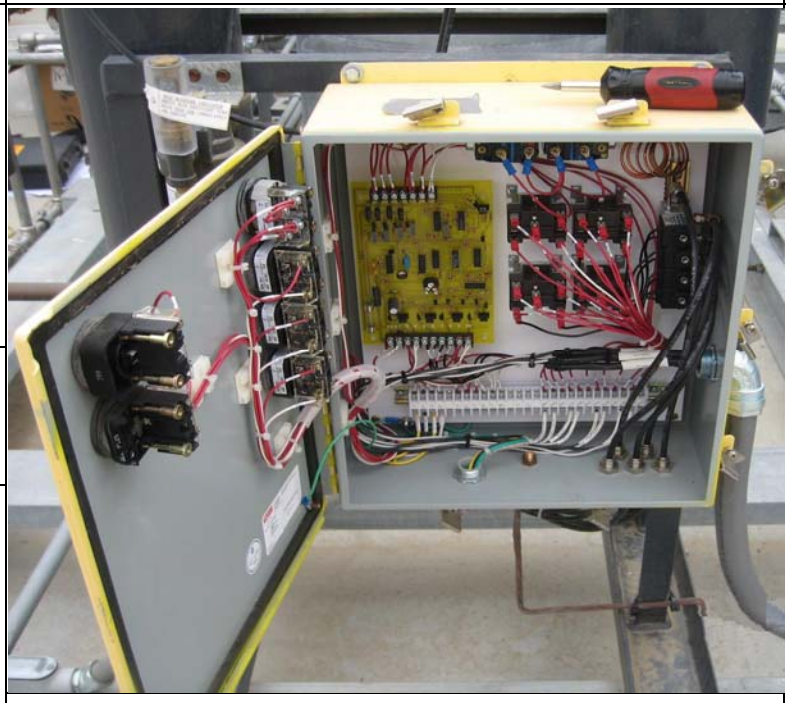
**Details:**

| | |
|---|---|
| Projected Cost to Complete | **$397,000,000** |
| Earnings To Date | $359,487,226 * |
| Earnings This Month | $5,870,109 * |
| Contract Start | **8/2/02** |
| Contract Completion | **11/15/10** |

| | |
|---|---|
| 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.



Nitrogen skid dryer control panel

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **99%** |
| Percent Extra Work | **6.9%** |
| Estimated Completion Date | **September 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$184,650,000** |
| Earnings To Date | **$203,399,439** |
| Net Extra Work To Date | **$12,773,819** |
| Earnings This Month | **$533,608** |
| Net Extra Work This Month | **$984,734** |
| Contract Start | **7/28/05** |
| Duration in Working Days | **865** |
| Contract Completion | **9/8/09** |

*Earnings for this project are as of May 25, 2009.

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

**Henry J. Mills Water Treatment Plant**
**Ozone Contactors Nos. 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.

Wiring valve on Contactor No. 3 deck

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **99%** |
| Percent Extra Work | **1.7%** |
| Estimated Completion Date | **July 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$14,556,000** |
| Earnings To Date | **$14,667,559** |
| Net Extra Work To Date | **$252,309** |
| Earnings This Month | **$534,367** |
| Net Extra Work This Month | **$16,254** |
| Contract Start | **7/25/07** |
| Duration in Working Days | **460** |
| Contract Completion | **7/2/09** |

| | |
|---|---|
| Contract No. | 1651 |
| Specifications No. | 1589 |
| Contractor: | W.A. Rasic Construction Co., Inc. |

**Perris Valley Pipeline North Reach**

**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.

Compaction of asphalt concrete along Alessandro Boulevard

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **99%** |
| Percent Extra Work | **0.57%** |
| Estimated Completion Date | **July 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$39,250,000** |
| Earnings To Date | **$38,991,479** |
| Net Extra Work To Date | **$224,237** |
| Earnings This Month | **$826,460** |
| Net Extra Work This Month | **$24,735** |
| Contract Start | **8/7/07** |
| Duration in Working Days | **250** |
| Contract Completion | **10/23/08** |

| | |
|---|---|
| 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.

Potholing to locate existing electrical ductbanks at the San Jacinto Portal

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **55%** |
| Percent Extra Work | **0.54%** |
| Estimated Completion Date | **November 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$3,382,110** |
| Earnings To Date | **$1,862,327** |
| Net Extra Work To Date | **$18,114** |
| Earnings This Month | **$0** |
| Net Extra Work This Month | **$0** |
| Contract Start | **10/8/07** |
| Duration in Working Days | **400** |
| Contract Completion | **5/8/09** * |

| | |
|---|---|
| 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.

Welding of 20-inch steel casing located in Los Angeles

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **59%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **July 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$1,447,500** |
| Earnings To Date | **$849,389** |
| Net Extra Work To Date | **$0** |
| Earnings This Month | **$175,770** |
| Net Extra Work This Month | **$0** |
| Contract Start | **6/13/08** |
| Duration in Working Days | **240** |
| Contract Completion | **7/6/09** |

*Time extension pending. Shutdown for February/March 2009 rescheduled to October/November 2009.

| | |
|---|---|
| Contract No. | 1660 |
| 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 | **61%** |
| Percent Extra Work | **1.8%** |
| Estimated Completion Date | **August 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$1,278,500** |
| Earnings To Date | **$799,441** |
| Net Extra Work To Date | **$23,041** |
| Earnings This Month | **$51,000** |
| Net Extra Work This Month | **$0** |
| Contract Start | **6/20/08** |
| Duration in Working Days | **240** |
| Contract Completion | **7/30/09** |

Cored manhole for 8-inch pipe located in Granada Hills

| | |
|---|---|
| Contract No. | 1663 |
| Specifications No. | 1608 |
| Contractor: Oscar Renda Contracting, Inc. | |

**Perris Valley Pipeline South Reach**

**Scope:**

The project consists of constructing approximately 4 miles of 97-inch diameter fabricated steel pipeline with Service Connections EM-24 and WR-35.

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **31%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **January 2010** |

**Details:**

| | |
|---|---|
| Bid Amount | **$22,300,000** |
| Earnings To Date | **$6,990,330** |
| Net Extra Work To Date | **$0** |
| Earnings This Month | **$718,643** |
| Net Extra Work This Month | **$0** |
| Contract Start | **9/4/08** |
| Duration in Working Days | **340** |
| Contract Completion | **1/12/10** |

Excavation of meter vault

| | |
|---|---|
| Contract No. | 1664 |
| Specifications No. | 1574 |
| Contractor: | Orion Construction Corp. |

**F.E. Weymouth Water Treatment Plant**
**Coagulant Tank Farm Modifications**

**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.

New chemical trench

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **48%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **December 2010** |

**Details:**

| | |
|---|---|
| Bid Amount | **$10,437,000** |
| Earnings To Date | $5,019,380 |
| Net Extra Work To Date | $0 |
| Earnings This Month | $694,540 |
| Net Extra Work This Month | $0 |
| Contract Start | **6/30/08** |
| Duration in Working Days | **595** |
| Contract Completion | **12/3/10** |

| | |
|---|---|
| Contract No. | 1665 |
| Specifications No. | 1598 |
| Contractor: | Cora Constructors, Inc. |

**Air Release and Vacuum Valve Relocation for**
**Treated Water Pipelines - Construction Package No. 6**

**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.

Installation of two 8-inch pipes located in Brea

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **93%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **July 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$1,609,100** |
| Earnings To Date | $1,494,590 |
| Net Extra Work To Date | $0 |
| Earnings This Month | $113,500 |
| Net Extra Work This Month | $0 |
| Contract Start | **7/2/08** |
| Duration in Working Days | **240** |
| Contract Completion | **7/16/09** |

| | |
|---|---|
| Contract No. | 1667 |
| Specifications No. | 1500 |
| Contractor: | Shimmick Construction/Obayashi Corp. JV |

**Robert B. Diemer Water Treatment Plant**
**Oxidation Retrofit Program**

**Scope:**
The project consists of constructing an ozone generation building, ozone contactors, contactor inlet and outlet conduits, an underground contactor rejection tunnel, liquid oxygen (LOX) storage and feed system, chemical feed facilities, unit substation, switchgear building, emergency generator building, and large diameter yard conduits and piping.

Ozone Building basement

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **24%** |
| Percent Extra Work | **0.04%** |
| Estimated Completion Date | **June 2012** |

**Details:**

| | |
|---|---|
| Bid Amount | **$188,080,588** |
| Earnings To Date | **$44,972,746** |
| Net Extra Work To Date | **$74,133** |
| Earnings This Month | **$6,240,623** |
| Net Extra Work This Month | **$8,412** |
| Contract Start | **8/15/08** |
| Duration in Working Days | **950** |
| Contract Completion | **6/1/12** |

| | |
|---|---|
| Contract No. | 1668 |
| Specifications No. | 1619 |
| Contractor: | SunPower Corporation, Systems |

**Skinner Water Treatment Plant Solar Power Generation Facility**

**Scope:**
The project consists of providing all equipment and constructing a 1 MW photovoltaic solar power generation facility including ground-mount solar panels on single or dual axis tracking platforms, equipment pads, canopies, inverters, lighting, weather station, monitoring system, chain link fence and gates.

Meter showing amount of electricity generated

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **99%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **September 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$9,984,000** |
| Earnings To Date | **$9,919,000** |
| Net Extra Work To Date | **$0** |
| Earnings This Month | **$10,000** |
| Net Extra Work This Month | **$0** |
| Contract Start | **8/6/08** |
| Duration in Working Days | **200** |
| Contract Completion | **5/28/09** * |

*Time extension pending.

| | |
|---|---|
| Contract No. 1669 | **Union Station Tenant Improvements** |
| Specifications No. 1575A | |
| Contractor: W.E. O'Neil Construction Co. of California | |

**Scope:**
The project consists of the addition of storage/work space for the 4th and 5th floors including demolition, modification of lightning and HVAC system, interior walls, custom millwork cabinetry, flooring, painting, ceiling, electrical, and communications. This is a reimbursable project for the tenant, the State of California Division of State Architect (DSA).

Completed plan check area

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **94%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **July 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$162,457** |
| Earnings To Date | **$153,457** |
| Net Extra Work To Date | **$0** |
| Earnings This Month | **$0** |
| Net Extra Work This Month | **$0** |
| Contract Start | **8/22/08** |
| Duration in Working Days | **80** |
| Contract Completion | **1/9/09** * |

| | |
|---|---|
| Contract No. 1672 | **Lake Skinner East Bypass Screening Structure Rehabilitation** |
| Specifications No. 1616 | |
| Contractor: Gantry Constructors, Inc. | |

**Scope:**
The project consists of removing and disposing of the existing two inoperative screens; designing, furnishing, and installing three new dual flow rotating screens, four trash racks, and one slide gate; refurbishing existing algae removal facilities; and removing and replacing the existing emergency generator and fuel tanks.

Traveling water screens prepared for start-up

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **74%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **October 2009** |

**Details:**

| | |
|---|---|
| Bid Amount | **$4,591,500** |
| Earnings To Date | **$3,420,290** |
| Net Extra Work To Date | **$0** |
| Earnings This Month | **$1,103,331** |
| Net Extra Work This Month | **$0** |
| Estimated Contract Start | **9/17/08** |
| Duration in Working Days | **260** |
| Contract Completion | **10/20/09** |

*Contract substantially complete. Punch list work remains.

| | |
|---|---|
| Contract No. | 1673 |
| Specifications No. | 1557 |
| Contractor: | Brutoco Engineering & Construction, Inc. |

**Joseph Jensen Water Treatment Plant**
**Solids Thickeners 5 and 6**

**Scope:**
The project consists of constructing two gravity solids thickeners and a sludge vault; replacing three centrifugal pumps, two rotary lobe pumps, and two sludge scraper rake gearboxes; adding one rotary lobe pump; installing four annular feed rings on four existing gravity solids thickeners; reconfiguring piping systems; and performing sitework. The work also includes removal of PCB-containing joint sealants and PCB-contaminated concrete, construction and expansion joint cleaning and preparation, sealant placement in construction and expansion joints, and replacement of wood boards in Sedimentation Basin No. 3.

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **39%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **March 2010** |

**Details:**

| | |
|---|---|
| Bid Amount | **$5,499,000** |
| Earnings To Date | **$2,164,885** |
| Net Extra Work To Date | **$0** |
| Earnings This Month | **$529,265** |
| Net Extra Work This Month | **$0** |
| Contract Start | **10/28/08** |
| Duration in Working Days | **340** |
| Contract Completion | **3/22/10** |

Preparation for yard piping tie-in

| | |
|---|---|
| Contract No. | 1677 |
| Specifications No. | 1613 |
| Contractor: | Brutoco Engineering & Construction, Inc. |

**Joseph Jensen Water Treatment Plant**
**Administration Building Seismic Upgrades**

**Scope:**
The project consists of seismic upgrade of the Joseph Jensen Water Treatment Plant Administration Building including fabrication and installation of structural steel and concrete beams, cross bracing, connections, electrical work, asbestos abatement, and other related work.

**At a Glance:**

| | |
|---|---|
| Estimated Percent Complete | **17%** |
| Percent Extra Work | **0.00%** |
| Estimated Completion Date | **March 2010** |

**Details:**

| | |
|---|---|
| Bid Amount | **$1,535,000** |
| Earnings To Date | **$255,500** |
| Net Extra Work To Date | **$0** |
| Earnings This Month | **$50,500** |
| Net Extra Work This Month | **$0** |
| Contract Start | **5/7/09** |
| Duration in Working Days | **210** |
| Contract Completion | **3/9/10** |

Existing precast panels and clerestory roof to be replaced

| | |
|---|---|
| **Contract No.** | **1678** |
| **Specifications No.** | **1620** |
| **Contractor:** | **D.P. Mangan, Inc. dba Pave West** |

**Weymouth Asphalt Rehabilitation**

**Scope:**

**The project consists of removing and disposing existing paving, base course, and unsuitable material, and replacing with a new pavement section. Work also includes grading, scarifying, and re-compaction of the sub-grade material.**

**Existing site conditions**

| **At a Glance:** | |
|---|---|
| **Estimated Percent Complete** | **0%** |
| **Percent Extra Work** | **0.00%** |
| **Estimated Completion Date** | **September 2009** |

| **Details:** | |
|---|---|
| **Bid Amount** | **$131,120** |
| **Earnings To Date** | **$0** |
| **Net Extra Work To Date** | **$0** |
| **Earnings This Month** | **$0** |
| **Net Extra Work This Month** | **$0** |
| **Contract Start** | **7/1/09** |
| **Duration in Working Days** | **60** |
| **Contract Completion** | **9/24/09** |