



**MWRA Advisory Board Summary
of the
MWRA Board of Director's Meeting
Wednesday, May 13, 2009**

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on May 13, 2009 at the Charlestown Navy Yard. **Present:** Chair Ian Bowles, Joel Barrera and Michael Gove, Gubernatorial Appointees; Andrew Pappastergion and Joseph Foti, MWRA Advisory Board Representatives; Vincent Mannering, Kevin Cotter and James Hunt III, City of Boston Representatives; Joseph MacRitchie, City of Quincy Representative; Marie Turner, Town of Winthrop Representative. **Absent:** John Carroll, MWRA Advisory Board Representative.

REPORT OF THE CHAIR

REPORT OF THE EXECUTIVE DIRECTOR

MWRA Executive Director Fred Laskey

APPROVALS

BOND DEFEASANCE OF FUTURE DEBT SERVICE (A&F B 1)

The Board voted to authorize the Executive Director or his designee, on behalf of the Authority, to enter into and execute all necessary agreements and other instruments to escrow up to \$20 million of outstanding MWRA debt to maturity and, if the FY09 surplus is not sufficient to cover the full \$20 million defeasance, to utilize Bond Redemption funds in an amount not to exceed \$2.5 million.

At the April 15, 2009 Board meeting, staff presented defeasance scenarios that included the use of up to \$20 million of funds from the projected FY09 surplus to achieve rate relief for FY10 and FY11. The \$20 million defeasance includes the \$10 million assumption from the FY10 Proposed CEB and then up to an additional \$10 million, which would be used to provide rate relief primarily in FY11.

The defeasance of these bonds will decrease the FY10 and FY11 debt service requirement. The savings are approximately \$10.8 million in FY10 and \$9.6 million in FY11.

EXTENSION OF EMPLOYMENT CONTRACT, PRINCIPAL CIVIL ENGINEER, DEER ISLAND TREATMENT PLANT (P A1)

The Board voted to approve the extension of the employment contract for Mr. William A. Haynes, Principal Civil Engineer, Deer Island Treatment Plant, for a period of one year, from June 1, 2009 to June 1, 2010, at the current hourly rate of \$46.65, for an annual compensation not to exceed \$54,581.

Since June 6, 2005, Mr. Haynes, under a part-time employment contract, has been supplementing existing Deer Island staff to ensure comprehensive oversight on various construction projects. Present staffing

needs do not warrant the creation of a permanent, full-time position; however, the projected schedule of construction work on Deer Island does warrant the continued need for the part-time position for at least another year.

Funding for this contract is included in the FY09 CEB and will also be included in the Proposed FY10 CEB.

EXTENSION OF EMPLOYMENT CONTRACT, PAINTER, DEER ISLAND TREATMENT PLANT (P A2)

The Board voted to approve the extension of the employment contract for Mr. Lawone Bennett, Painter, Deer Island Treatment Plant, for a period of six months, from May 28, 2009 to November 28, 2009, at the current hourly rate of \$20.00, for a total compensation amount not to exceed \$20,800.00.

Since May 27, 2008, Mr. Bennett, under a full-time employment contract, has done an excellent job in supplementing existing Deer Island staff in addressing the plant's substantial painting needs. As part of Deer Island's maintenance program, all of the approximately 36,000 pieces of equipment on the island need to be re-painted or re-coated, particularly in certain areas of the plant that are exposed to harsh chemicals or salt-laden atmosphere. Properly sealing and coating the equipment will ensure maximum useful life, optimum performance and reliability, as well as reduced maintenance costs.

Funding for this contract is included in the FY09 and Proposed FY10 Current Expense Budgets.

CONTRACT AWARDS

SWITCHGEAR AUTOMATION – DEER ISLAND TREATMENT PLANT: FISCHBACH & MOORE ELECTRIC GROUP, LLC, CONTRACT 7061B (WW A1)

The Board voted to approve the award of Contract No. 7061B, Switchgear Automation – Deer Island Treatment Plant, to the lowest eligible and responsible bidder, Fischbach & Moore Electric Group, LLC, and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$1,355,000.00 for a term of 600 calendar days from the Notice to Proceed.

MWRA is implementing a three-phased approach in improving the performance and reliability of Deer Island's electrical distribution system. The first phase commenced with the award of Contract 7061, Switchgear Relay Upgrade, approved by the Board on December 17, 2008. Under Contract 7061, all of Deer Island's existing electro-mechanical (disc and plunger-type) relays, which were installed as part of the Boston Harbor Project, will be replaced with new solid state relays. The existing relays are maintenance intensive, require calibration and testing on an annual basis, and do not provide any information other than a "red flag" to indicate a possible failure. In other words, the relay will detect a fault and open a breaker to safely extinguish the fault before damage to a piece of electrical equipment can occur; however, no other information is provided and staff must quickly determine its location and cause before the equipment can be placed back into service.

Contract 7061B, the second phase of the program, will focus on overall improvements to the 43 switchgears included in the electrical distribution system and will include the installation of a new central monitoring and control system for the electrical switchgear consisting of a new fiber optic data highway, switches, servers and software that will interconnect the solid state relays. The new switchgear automation system will provide detailed information about the type and location of an electrical fault or power loss when it occurs and will enable staff to commence corrective measures sooner and thus minimize downtime of critical process equipment. This work will be performed concurrently with the switchgear relay upgrade work, which Fischbach and Moore is currently performing. Staff has been satisfied with the Contractor's work to date.

The third phase of the program, Contract 7061A, will be advertised this summer and will furnish and install a redundant fuel oil system for the power plant.

ELECTRICAL EQUIPMENT MAINTENANCE – DEER ISLAND TREATMENT PLANT: AMERICAN ELECTRICAL TESTING COMPANY, CONTRACT S474 (WW A2)

The Board voted to approve the award of Contract No. S474, Electrical Equipment Maintenance – Deer Island Treatment Plant, to the lowest eligible and responsible bidder, American Electrical Testing Company, and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$1,726,400.00 for a term of 1,095 calendar days from the Notice to Proceed.

Staff have developed a comprehensive maintenance and testing program built upon nationally recognized industry recommendations and standards. An important component of the maintenance program is a separately contracted electrical testing contract with a firm possessing the necessary expertise to test, diagnose, troubleshoot and recommend corrective measures for all of Deer Island’s electrical distribution equipment. MWRA has contracted its electrical testing service requirements since 1999.

The scope of work under this contract includes electrical testing of all 43 electrical substations and an allowance for the provision of replacement parts, if required, to be installed by MWRA staff. When parts are needed, they are generally of a critical nature and contractors in this industry have broader access to suppliers and can supply the needed parts more timely than if MWRA were to procure them separately. The contract scope also includes technical assistance on an as-needed basis.

American Electrical Testing Company has successfully performed a substantial amount of electrical testing for MWRA dating back to construction of the Boston Harbor Project and MWRA staff is confident that the firm possesses the skill, ability and integrity necessary to successfully perform the work under this contract for the bid price.

There are sufficient funds available in the FY09 through FY12 Current Expense Budgets for this contract.

DEER ISLAND TREATMENT PLANT, LANDSCAPE AND GARDENING SERVICES: UNICCO SERVICE COMPANY, D/B/A UGL UNICCO, CONTRACT S477 (WW A3)

The Board voted to approve the award of Contract No. S477, Deer Island Treatment Plant, Landscape and Gardening Services, to the lowest eligible and responsible bidder, UNICCO Service Company, d/b/a UGL UNICCO, and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$27,569 for a term of 504 calendar days from the Notice to Proceed.

Contract S477 will provide scheduled landscape maintenance, lawn mowing, seasonal flower plantings, annual tree trimming and weed control within all perimeter fence areas and unscheduled landscape services as required for areas located adjacent to the Administration and Lab Building, Main Entrance Guard Shack and Reception and Training Buildings at the Deer Island Treatment Plant. The current contract, previously awarded to UNICCO, provides the same landscape and gardening services for this area of the treatment plant and expires on June 12, 2009. UNICCO Service Company was also awarded Contract S445, Deer Island Public Access Grounds Keeping Services, a larger three-year contract in the amount of \$263,900, approved by the Board on November 14, 2007.

UNICCO’s bid price, which is more than 50% less than the Engineer’s Estimate of \$56,480, was prepared based on the fact that the firm has the current contract for these services and is well familiar with what the work entails in terms of labor and equipment, as well as the larger public access contract. Staff have determined that the bid price is reasonable and complete.

There are sufficient funds for this contract in Deer Island’s FY09 and Proposed FY10 Current Expense Budgets.

FIVE-YEAR PURCHASE ORDER CONTRACT FOR THE SUPPLY AND DELIVERY OF SODIUM HYPOCHLORITE TO THE DEER ISLAND TREATMENT PLANT: KUEHNE CHEMICAL COMPANY, INC., BID WRA-2927

The Board voted to approve the award of Purchase Order Contract WRA-2927 for the supply and delivery of sodium hypochlorite to the Deer Island Treatment Plant to Kuehne Chemical Company, Inc., and to authorize

the Executive Director, on behalf of the Authority, to execute and deliver said purchase order contract in an amount not to exceed \$10,921,500 for a period of five years from May 14, 2009 through May 14, 2014.

Sodium hypochlorite, a combination of chlorine and caustic soda, is primarily used at Deer Island for the disinfection of plant effluent; it is also used in the plant's water and the odor control systems. Kuehne Chemical Company, Inc. has supplied sodium hypochlorite to MWRA via barge deliveries since 1990. The previous five-year contract was approved by the Board and awarded on April 14, 2004, at which time the market indexes for chlorine and caustic soda were relatively stable and stayed that way through most of 2007. As the economy has struggled during the past year, so had the demand and production for chlorine and, therefore, the supply of caustic soda has gone down, increasing its demand and raising its cost.

Due to soaring market conditions, Kuehne had been aggressively seeking cost relief from MWRA since February 2008. At the same time, Kuehne was seeking a contract extension to justify capital expenses for extensive repairs needed for the barge. Staff determined that it was in MWRA's best interest to solicit bids for a new five-year contract prior to the May 2009 contract expiration.

Bid WRA-2927 was publicly advertised and staff directly solicited bids from seven vendors. Despite efforts to contact other chemical vendors and increase competition for this contract, only one bid was received from Kuehne Chemical Company, Inc. in the amount of \$18,750,000, which was initially rejected by MWRA staff. After an ongoing series of negotiations, Kuehne submitted its best offer of \$10,921,500.

At the time of the original bid, market conditions were at an all-time high and prices were expected to fall; therefore, Bid WRA-2927 was structured so that the unit price will fluctuate based on a market index after the first year of the contract. Now that market conditions have begun to fall, the final proposal from Kuehne represents a firm price for a one-year period that is more reasonable and still beneficial to both Kuehne and MWRA.

The Operations Division's FY09 CEB includes \$1,202,850 for sodium hypochlorite. The Proposed FY10-FY14 CEBs will be based on the pricing of this contract.

CONTRACT AMENDMENTS/ CHANGE ORDERS

WASTEWATER TRANSPORT SCADA IMPLEMENTATION, PHASE II: LYNNWELL ASSOCIATES, INC., CONTRACT 6534, CHANGE ORDER 7 (WW B2)

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 7 to increase the amount of Contract No. 6534 with Lynnwel Associates, Inc., Wastewater Transport SCADA Implementation, Phase II, in an amount not to exceed \$110,330.63 and to extend the time for completion by 45 calendar days to July 6, 2009. Further, the Board voted to authorize the Executive Director to approve additional change orders as may be needed to Contract No. 6534 in amounts not to exceed the aggregate of \$250,000 and 180 calendar days.

Supervisory Control and Data Acquisition (SCADA) systems provide a means of monitoring and controlling facilities and equipment from a centralized location and provide a continuous record of facility operations. This contract will fully implement SCADA technologies at Nut Island Headworks, Columbus Park Headworks, Ward Street Headworks and Chelsea Creek Headworks.

This Change Order consists of the following three items: 1) De-energize and Re-energize 120-Volt Power at Nut Island and Extend the Contract Time by 45 Calendar Days (\$100,000); Furnish and Install Four Relays at Chelsea Creek, Ward Street and Columbus Park (\$9,462.42); 3) Furnish and Install 120-Volt Beacon Lights at Chelsea Creek, Ward Street and Columbus Park (\$868.21).

The FY09 CIP includes \$4,818,000 for Contract 6534. The cumulative total value of all change orders to this contract is \$309,298.44, added to the original contract price of \$4,798,000.00, results in an adjusted subphase total of \$5,107,298.44, or \$289,298.44 over budget. This amount will be covered within the five-year CIP spending cap.

EAST BOSTON BRANCH SEWER RELIEF: BARLETTA HEAVY DIVISION, INC.: CONTRACT 6257, CHANGE ORDER 3 (WW B.3)

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 3 to increase the amount of Contract No. 6257 with Barletta Heavy Division, Inc., East Boston Branch Sewer Relief, in an amount not to exceed \$624,982, with no change in contract term. Further, The Board voted to authorize the Executive Director to approve additional change orders as may be needed to Contract No. 6257 in amounts not to exceed the aggregate of \$250,000 and 180 calendar days.

Contract 6257 involves construction of approximately 2.5 miles of 24-, 36-, 48- and 66-inch-diameter combined sewers in East Boston. Construction is being performed primarily by microtunneling on Chelsea, East Eagle, Condor, Border, Marginal, Orleans, Gove, Bremen and Porter Streets.

This Change Order consists of the following four items: 1) Install 450 Linear Feet 48-Inch-Diameter Concrete Pipe with a 36-Inch-Diameter PVC Liner and Grouted Annulus by Microtunneling Instead of Open-Cut Excavation (\$500,000); 2) Remove Obstructions (\$79,045); 3) Temporarily Relocate and Re-Install a Drain Pipe and Water Line; Support Testing of an Abandoned NStar Conduit and National Grid Gas Line; Remove and Dispose of Conduit and a Pipe (\$45,937); 4) Install 320 Linear Feet 48-Inch-Diameter Concrete Pipe with a 36-Inch-Diameter PVC Liner and Grouted Annulus by In-Line Microtunneling (\$0).

The cumulative total value of all change orders to this contract is \$1,574,766.60, or 2.63% of the original contract amount of \$59,900,000.00, resulting in an adjusted subphase total of \$61,474,766.60. The FY09 CIP includes \$61,905,000.00 for Contract 6257.

NORTH DORCHESTER BAY CSO STORAGE TUNNEL: SHANK/BALFOUR BEATTY/BARLETTA JV, CONTRACT 6244, CHANGE ORDER 14 (WW B4)

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 14 to decrease the amount of Contract No. 6244 with Shank/Balfour Beatty/Barletta JV, North Dorchester Bay CSO Storage Tunnel, by a lump sum credit amount of \$545,861.26, with no change in contract term. Further, the Board voted to authorize the Executive Director to approve additional change orders as may be needed to Contract No. 6244 in amounts not to exceed the aggregate of \$250,000 and 180 calendar days.

The North Dorchester Bay CSO Storage Tunnel contract is the largest construction contract associated with the North Dorchester Bay CSO Control Plan, which is intended to eliminate CSO discharges and greatly reduce stormwater discharges to the South Boston beaches.

This Change Order consists of the following two items:

- 1) Delete Unused Tunnel Boring Machine Delay Time (-\$320,000.00). All tunnel work is now complete and this bid item was not utilized, which will result in a credit to the contract.
- 2) Decrease Disputes Review Board Allowance (-\$225,861.26). The Disputes Review Board is no longer necessary because all tunnel construction has been completed.

The cumulative total value of all change orders to this contract is \$2,331,326.04, added to the original contract amount of \$145,733,208.00, resulting in an adjusted subphase total of \$148,064,534.04. The FY09 CIP includes \$148,888,000.00 for Contract 6244.

INFORMATION

DELEGATED AUTHORITY REPORT – APRIL 2009

Staff provided the Board with a list of delegated authority actions over \$25,000 for the period April 1 through APRIL 30, 2009. The report is broken down into two sections: construction/professional services and purchasing.

FY09 THIRD QUARTER ORANGE NOTEBOOK

Staff gave a presentation to the Board on the "Orange Notebook", which presents performance indicators for operational, financial, workforce and customer service parameters tracked by MWRA management each month for Deer Island and Clinton Wastewater Treatment Operations, Maintenance and NPDES Permit Compliance; Field Operations; Construction; Drinking Water Quality and Supply; Community Flows and Programs; and Management/Finance.

FY09 FINANCIAL UPDATE AND SUMMARY AS OF APRIL 2009

Staff provided the Board with a preliminary financial update and summary through April 2009, comparing actual spending to the FY09 amended budget.

Consistent with MWRA's 18-month budget strategy, staff has continued to implement cost savings measures and cut spending in order to grow the FY09 surplus to help address the significant financial challenges facing the Authority in FY10 and FY11. Based on year-to-date actual spending, staff projects the FY09 surplus at \$20 million. In addition to ongoing efforts to reduce expenses, this surplus is the result of favorable variable interest rates, savings associated with the recent 2009 Series A and B bond transaction, higher than projected non-rate revenues and lower energy prices. The projected surplus includes the postponement of the optional payment to the Pension Fund.

It is important to note that \$10 million of the \$20 million projected FY09 surplus is already designated to defease debt in FY10. This \$10 million defeasance is already reflected in the Proposed FY10 Budget and its Rate Revenue Requirement.

WILMINGTON UPDATE

On April 15, 2009, the MWRA Board approved the Town of Wilmington's admission to the MWRA Waterworks system, contingent upon Wilmington's Town Meeting approval and legislative and gubernatorial approval. Since then, both unanticipated and anticipated events have occurred.

On Thursday, April 30, Wilmington had a major water line break, which caused Wilmington's storage tanks to drop significantly. The Town's largest storage tank emptied and some businesses temporarily lost water supply; two smaller storage tanks also dropped to 20-35% full. The leak caused Wilmington to request a short-term emergency water supply withdrawal from MWRA (and Burlington), which was immediately granted by MWRA Operations, while the Town located and repaired the leak and until the Town's storage tanks could be replenished. Wilmington also contacted the Department of Environmental Protection to apprise them of the emergency. By mid-afternoon, the leak was successfully isolated; and by early Saturday morning, Wilmington's emergency withdrawals ceased. In total, Wilmington withdrew less than three million gallons of water. Given the nature of the emergency and the Board's approval of Wilmington's admission to MWRA, staff recommends that premium charges not be assessed. Wilmington will be billed based on the wholesale rate of \$2,514.49 per million gallons withdrawn during their short-term emergency.

On May 2, Wilmington Town Meeting overwhelmingly approved the Town's admission to MWRA. The legislative process is well underway and approvals of the Legislature and Governor are expected shortly.

LOW SERVICE STORAGE AT SPOT POND UPDATE

Staff made a presentation to the Board to provide an overview of why additional distribution storage is needed in the MWRA Low Service area, why it is best located in the vicinity of Spot Pond, and how MWRA narrowed down the potential sites. Staff also updated information developed by MWRA's consultant during the initial siting review about seven years ago with new information about the status of the sites and how other planning efforts influence this decision.

The Board was provided with a "Low Service Storage White Paper" that provided more detailed information on the following points: Purpose of Storage; Storage in the MWRA Metropolitan System; Locating Storage; MWRA's Low Service Area; Need for Low Service Storage; and Siting Storage for the Northern Low System.

*This summary does not include every item discussed by the Board, nor the full extent of the discussions.
Please contact Christine Hevelone-Byler at the Advisory Board office with questions, comments or requests for more information.*