

**MWRA ADVISORY BOARD**  
Summary of the  
MWRA BOARD OF DIRECTORS' MEETING

January 12, 2000

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on January 12, 2000 at the Authority Headquarters in Charlestown. **Present:** Chairman Robert Durand, Gubernatorial Representative; John Carroll, Norman Jacques and Andrew Pappastergion, Advisory Board Representatives; Vincent Mannering and Robert Spinney, City of Boston Representatives; Joseph MacRitchie, City of Quincy Representative; Marie Turner, Town of Winthrop Representative. **Absent:** Andrea d'Amato, City of Boston Representatives; Lucile Hicks and Donald Mitchell, Gubernatorial Representatives.

**AGENDA**

**Report of the Chair**

No Report.

**Report of the Executive Director**

Douglas B. MacDonald, Executive Director of the MWRA, stated that the bond cap was expected to be through the House of Representatives on January 13.

Mr. MacDonald noted that the court hearing on the Walnut Hill Water Treatment Plant is receiving a great deal of attention. The Judge is hearing thoughtful arguments from the MWRA.

Mr. Spinney asked the status of the Chestnut Hill disposition. Mr. MacDonald noted that the initiative had not yet been filed, but felt that the MWRA had the appropriate support to file the legislation.

**APPROVALS**

**New England Water Works Association Project 2000**

The Board voted to approve a contribution of \$15,000 to support the New England Water Works Association's new training center.

The New England Water Works Association (NEWWA) is a not-for-profit, independent, member-driven organization dedicated to serving the regions water works professionals and the public interest. MWRA is a significant beneficiary of programs conducted by NEWWA; programs have ranged from on-site classes for operator certification to a co-sponsored Continuing Education Workshop on corrosion control. MWRA personnel also attend regular training sessions held at the NEWWA Training Center in Milford, Massachusetts.

NEWWA has outgrown its original center in Milford and has undertaken a capital campaign to construct a new larger \$1.4 million facility in Holliston to meet its current and future needs. Approximately 85% of the \$969,200 raised to date have been contributed by the private sector, principally through engineering firms.

## CONTRACT AWARDS

### **Construction Support Labor, Phase VI: Sciaba Contracting Co., Inc., Contract 6682**

The Board voted to approve the award of Contract No. 6682, Construction Support Labor, Phase VI, to the lowest responsive bidder, E. J. Sciaba Contracting Co., Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$2,542,964.81 for a period of 700 calendar days from the notice to proceed. Because the Contract is being awarded ten months earlier than anticipated, it will require a contingency transfer for the full amount.

Given the size, scope and complexity of the Boston Harbor Project (BHP), emergency repairs and modifications to various facilities and utilities have been and will continue to be necessary. For this purpose, it is necessary to have an on-call construction labor force available to perform these emergency services at various BHP locations.

Under this construction support contract, the Contractor will perform emergency site construction related modifications, repair and construction at all BHP facilities. The Contractor will be utilized to perform urgent maintenance and repairs that support on-going construction and start-up activities, including service areas, and logistic facilities that are under the supervision of the Program Management Division.

### **Hauling and Disposal of Minor Residuals: R. Zoppo Corp.**

The Board voted to approve the award of a contract for Hauling and Disposal of Minor Residuals to the lowest responsive bidder, R. Zoppo Corp., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$2,813,232 for a period of 731 days from the notice to proceed. (The existing Contract is to end January 31, 2000.)

In addition to providing hauling and disposal services, the Contractor will provide monthly laboratory analysis of both grit and screenings, and scum screenings in accordance with federal and state landfill regulations to ensure suitability of material for disposal as a solid waste.

The work included in this contract is to furnish proper containers and haul material for disposal at a landfill. Facilities to be serviced include Caruso Pumping Station, Chelsea Creek Headworks, Chelsea Creek Screenhouse, Columbus Park Headworks, Commercial Point CSO Facility, DeLauri Pump Station, Deer Island Grit Facility, Deer Island Scum Screening Facility, Fox Point CSO Facility, Nut Island Headworks, Somerville Marginal CSO Facility, Ward Street Headworks and Winthrop Terminal Headworks.

### **Phase 3 Valve Replacement: J. D'Amico, Inc., Contract 6278**

The Board voted to approve the award of Contract No. 6278, Phase 3 Valve Replacement, to the lowest responsive bidder, J. D'Amico, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$1,284,145 for a period of 536 calendar days.

The work of this contract includes the replacement of nine mainline valves, the installation of two new main line valves, the retrofit (elimination of cross connections) of nine blow off valves, and the installation of one new blow off valve. The work is located in Hyde Park, West Roxbury, Brookline and Boston. Additional work includes one meter vault and equipment installation, along with other miscellaneous work.

The replacement of the mainline valves will allow reliable isolation of critical pipeline sections. The retrofitting of the blow off valves will help meet the Department of Environmental Protection's requirements regarding cross connections between water and other utilities.

### **CONTRACT AMENDMENTS/CHANGE ORDERS**

#### **Hauling and Disposal of Minor Residuals: Browning-Ferris Industries, Inc., Contract No. S270, Change Order 3**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 3 to increase the contract price on Contract No. S270, with Browning-Ferris Industries, Inc., Hauling and Disposal of Minor Residuals, in the amount of \$205,247 and to extend the time for completion by three months to January 31, 2000. The original contract amount was \$1,781,988, with cumulative change orders of \$413,354, for an adjusted contract amount of \$2,195,342.

On August 13, 1997, Browning-Ferris Industries, Inc. (BFI) was awarded Contract No. S270 to collect, haul and dispose of minor residuals from Deer Island Wastewater Treatment Plant (DITP), Nut Island Treatment Plant, and various headworks and CSO facilities. This contract originally expired on July 31, 1999 and was extended through October 31, 1999.

The Massachusetts Department of Environmental Protection (DEP) recently (June 1999) proposed a number of amendments to the 1997 Massachusetts Solid Waste Master Plan. The plan originally imposed a moratorium on the permitting of additional landfill capacity beyond 2000. This moratorium was imposed to promote recycling and to allow DEP sufficient time to review landfill capacity needs in light of recycling.

#### **Local Pretreatment Limits Development Study: Montgomery Watson Americas, Inc., Contract S304, Amendment No. 1**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 1 to increase the contract price on Contract No. S304 with Montgomery Watson Americas, Inc., Local Pretreatment Limits Development Study, in the amount of \$192,842, increasing the contract amount from \$264,516 to \$457,358.

The purpose of the Amendment is to develop industrial and municipal discharge controls for the MWRA Framingham Extension Sewer (FES) Service Area to help reduce or eliminate corrosion and nuisance odors in the FES, FERS and downstream in the West Roxbury Tunnel. This work will assist the communities with some of the preliminary planning to address the proposed new municipal sulfide standards.

#### **MetroWest Water Supply Tunnel – Owner Controlled Insurance Program: J. H. Albert International Advisors, Contract No. 6117C, Amendment 1**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 1 to extend the time for completion of Contract No. 6117C with J. H. Albert International Insurance Advisors, Insurance Consultant Services, by eighteen months to August 31, 2001.

In February 1997, J. H. Albert Insurance Advisors was selected to provide insurance consulting services to the MWRA under a task order contract. This contract, with an established budget of \$75,000 and a term of three years, will expire in February 2000. Approximately \$32,000 of the original award amount has been spent to date. In the original time period, J. H. Albert has provided a technical review of the MetroWest insurance policies and assisted with the procurement of the Walnut Hill Owner Controlled Insurance Program (OCIP) and then completed a review of that program's policies to ensure MWRA's insurance interests were properly addressed.

In the coming months, J. H. Albert will be requested to assist in conducting a mid-project OCIP evaluation of the MetroWest project, and will continue to provide as-needed technical input on the Walnut Hill OCIP. Other tasks may be identified as circumstances warrant on these programs, or on other related Waterworks projects. The funds remaining in the Contract appear to be sufficient for anticipated projects.

## INFORMATION REPORTS

### **Business Plan Update**

*[The First of the Business Plan was presented to the Board of Directors in December 1995, followed by the submission in December 1997 of a complete report including full strategy descriptions with performance measures and milestones. In January 1999, the Board convened a special meeting on the Business Plan to review each strategy and directed staff to add a new strategy to address MWRA's legislative agenda and to merge the Waterworks and Sewerage strategies related to SCADA. The Board also asked staff to incorporate budget/fiscal impact statements for each strategy.]*

MWRA's Business Plan is an evolving document that is a key tool for managing the agency. It highlights the most important challenges and opportunities for the next five years and beyond (FY2000-FY2005). The strategies embody specific priority initiatives MWRA is undertaking to achieve the goals and objectives.

Since the last Business Plan presentation to the Board of Directors in January 1999, an over-arching target on the percentage increase in the rate revenue requirement has been changed from "single-digit" to a more specific less-than-7% target. Since January, of the 44 strategies presented, three new strategies have been added, two strategies have been completed, one strategy has been dropped, and two strategies have been combined, for a total of 43 strategies.

The three new strategies include: A new approach to legislative and regulatory matters; the implementation of a centralized MWRA-wide security program; and the development and implementation of an extreme wet weather emergency response plan.

### **Transport Overtime**

Early variance reporting indicated that there would be significant overspending against the Sewerage Division budget for overtime in the Transport Department, which continues to utilize overtime for person to person coverage, wet weather coverage, planned routine facility and low flow maintenance, as well as emergency response. The approved overtime for the Transport Department for FY00 is approximately \$1,136,000. Based on the estimated year-end projection as of November 1999, overtime use in the Transport Department will be \$1,312,000, or \$176,000 over the original budget (of which \$48,000 is an accrual issue carried from the beginning of the fiscal year. Additionally, \$23,000 is for Y2K coverage and \$60,000 is for cross-functional training, both of which were unbudgeted.). All categories are generally being managed within budgeted amounts except facility and pipeline maintenance (due primarily to critical inspection and metering repair tasks that are done during night time low flow conditions). The Transport Department overtime budget estimate for FY01 will be based on and supported by this year's spending. Transport staff will be cross-trained to allow more staff members to operate any facility (pump station, CSO, headworks).

Mr. Mannering asked, "How much savings do you expect to realize by cross training?" Charles Lombardi of the MWRA staff replied, "Cross training will save \$100,000 annually."

Mr. Spinney stated, "The Board received a letter regarding safety at the Headworks from an employee. Have these issues been addressed?" Mr. Lombardi replied that the accident involved maintenance activities. Agreements were formulated with safety as a top priority. Additionally, Mr. Lombardi reported that he met with the employee to assure him that there would be only dry weather staffing.

Mr. MacRitchie asked, "Of the \$1.3 million of overtime per year, how many employees are involved?" Staff replied that the overtime covers 80 employees, ranging between \$2,000 to \$60,000 per year. The \$60,000 overtime per year was earned by an employee who never refused overtime when his name was reached on the list.

### **Current Revenues for Capital Financing**

*[The Fiscal Year 2000 Current Expense Budget (CEB) includes \$1 million to fund ongoing capital expenditures such as capital equipment replacement, pipeline rehabilitation, and valve replacement. When the CEB was approved in June, the Board of Directors requested an update later in the fiscal year.]*

MWRA's capitalization policy provides that capital expenditures are intended to create assets or extend the useful life of assets. The capitalization policy further provides that capital expenditures are included in the Capital Improvement Program (CIP) if the expected cost of the asset or capital project is \$100,000 or more and if the expected useful life is more than one year.

During the FY00 budget process, and in particular as part of discussions concerning the need for replacement of capital equipment at Deer Island, staff recommended beginning to fund some recurring capital expenditures with current revenue. This approach will allow ratepayers to avoid significant interest costs that would be incurred if MWRA continues to borrow to fund what are essentially annual expenditures. As a result, the FY00 CEB includes \$1 million to fund ongoing capital projects.

Except for projects funded by grants, the cost of capital projects always end up in the CEB, usually as debt service. Funding ongoing capital expenditures with current revenue will reduce interest costs and mitigate the long-term burden on MWRA ratepayers. For example, funding \$40 million per year of ongoing capital expenditures with current revenue for ten years would cost \$400 million. The total cost of borrowing \$400 million for 40 years at 6.5% interest would be \$1.1 billion, a difference of \$700 million.

### **Update on Framingham Odor and Corrosion Control**

In 1997, MWRA undertook the Corrosion and Odor Control Study to identify causes of the corrosion and odor in the Framingham Extension Sewer (FES), Framingham Extension Relief Sewer (FERS) and downstream MWRA interceptors and to recommend corrective measures. The study, completed by Anderson-Nichols & Company, was completed in December 1998. The report recommended actions to be taken by the MWRA, Ashland, Framingham and Natick and was supplemented by an investigation in 1998 by Odor and Corrosion Technology Consultants, Inc. specifically focused on the FERS.

Actions recommended in the studies included: Improvements in chemical addition at the Arthur Street Pump Station; addition of wastewater quality limits by the MWRA to municipal permits for Ashland, Framingham and Natick; modifications of wastewater quality limits to industrial permits by the MWRA; exhaust air treatment at several locations along the FES; modifications to the FERS force main to allow complete draining of the main when not in use; eliminate sources of odor along the FERS gravity sewer; and provide exhaust air treatment for the FERS gravity sewer.

Permanent modifications to the MWRA's Arthur Street Pump Station, including the existing chemical feed system to allow for the addition of potassium permanganate, will require two to four years to design, permit and build. A temporary facility can be installed by staff before December 2000 to provide immediate relief

from the impacts of the corrosion and odor. Staff will be needed to load the potassium permanganate into the chemical feed equipment and to maintain the new system. Until the temporary system becomes operational, a single potassium permanganate feed unit will be purchased and installed in the existing chemical feed area of the Arthur Street Pump Station, expected to be operational by June 2000.

Industries discharging to the system have been identified as likely sources of sulfate and BOD that contribute to the corrosion and odor problems. A monitoring program was conducted in June and July 1999 for an industry in Ashland that contributes significant quantities of sulfate to the MWRA's sewerage system. Tighe and Bond, MWRA's technical assistance consultant regarding industrial pretreatment, was engaged in August 1999 to perform a comparison of possible pretreatment methods and determine the pretreatment costs for this industry's wastewater. A detailed study of the sources and proposed control options for municipal and industrial sources will be undertaken by MWRA's local limits consultant (Montgomery-Watson) beginning this month.

Mr. MacRitchie asked, "If we know that there are several large isolated contributors, would we be better off going to those systems and removing what they are adding?" Staff replied that a number of pump stations in Framingham are sources of the problem as well and that staff could not identify two or three producers who cause the problem.

Mr. Carroll asked, "By adding the potassium permanganate, are we doing the job that Ashland and Framingham should be doing?" Staff replied that a number of contributors cause the problem.

Chairman Durand asked, "Is there a timetable on finding out where the sources are?" Staff replied that Montgomery-Watson would establish parameters and develop a plan to maintain the established goals.

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*This summary does not include every item discussed by the Board, nor the full extent of the discussions. Please contact Mary Ann McClellan at the Advisory Board Office with questions, comments and requests for additional information.*