



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

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ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

Chair: H. Vitale
Vice-Chair: J. Foti
Committee Members:
A. Blackmon
J. Carroll
K. Cotter
A. Pappastergion
B. Peña
J. Walsh

to be held on

Wednesday, January 17, 2018

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: 10:00 a.m.

AGENDA

A. Information

1. Delegated Authority Report – December 2017
2. FY2018 Financial Update and Summary as of December 2017
3. FY2018 Mid-Year Capital Project Spending Report

B. Approvals

1. Memorandum of Agreement with the Massachusetts Historical Commission and the Southborough Historical Commission for the Demolition of the Oren Nichols Historical Properties

C. Contract Amendments/Change Orders

1. Maximo Update Project: SHI International Corporation and Total Resources Management, Inc., Contract 7287, Amendment 2

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Administration, Finance and Audit Committee

December 20, 2017

A meeting of the Administration, Finance and Audit Committee was held on December 20, 2017 at the Authority headquarters in Charlestown. Chairman Vitale presided. Present from the Board were Ms. Wolowicz and Messrs. Blackmon, Carroll, Cotter, Flanagan, Pappastergion, Peña and Walsh; Mr. Foti joined the meeting in progress. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Michele Gillen, Mike Hornbrook, Carolyn Francisco Murphy, Tom Durkin, Kathy Soni, Paul Whelan, Emily Dallman, Andrew Hildick-Smith and Bonnie Hale. The meeting was called to order at 11:05 a.m.

Information

Delegated Authority Report – November 2017

There was general discussion and question and answer on some of the items contained in the report.

Update on Procurement Procedure for Contract 7581, John J. Carroll Water Treatment Plant – SCADA System Improvements

Staff presented their updated alternative procurement procedure for this contract, which had been modified after inquiries and comments received at the November 15, 2017 meeting, and includes added safeguards for security-sensitive information.

FY2018 Financial Update and Summary as of November 2017

Staff described the highlights of the report, and there was general discussion.

Approvals

*Transmittal of FY2019 Proposed Capital Improvement Program and FY2019-2023 Spending Cap to the MWRA Advisory Board

Staff gave a presentation on the proposed FY2019 CIP and 5-year spending cap. The Committee recommended approval of transmittal of the proposed CIP and spending cap to the MWRA Advisory Board for its 60-day review and comment period (ref. agenda item B.1).

* Approved as recommended at December 20, 2017 Board of Directors meeting.

(Mr. Foti joined the meeting.)

*Approval of Seventy-Sixth Supplemental Resolution

The Committee recommended approval of the seventy-six supplemental resolution (ref. agenda item B.2).

Contract Awards

*Financial and Swap Advisory Services: PFM Financial Advisors, LLC, Contract F247

The Committee recommended approval of the contract award (ref. agenda item C.1).

*Dental Insurance: Delta Dental of Massachusetts, Contract A613

Staff presented an updated review of dental insurance options, which concluded that the most feasible approach to MWRA's Dental Program continues to be the Fully Insured approach. There was general discussion. The Committee recommended approval of the contract award (ref. agenda item C.2).

Contract Amendments/Change Orders

*Security Guard Services for Various MWRA Facilities: Universal Protection Service, LLC, d/b/a Allied Universal Security Services, Contract EXE-033, Amendment 2

There was general discussion and question and answer. The Committee recommended approval of Amendment 2 (ref. agenda item D.1).

The meeting adjourned at 12:05 p.m.

* Approved as recommended at December 20, 2017 Board of Directors meeting.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 17, 2018
SUBJECT: Delegated Authority Report – December 2017



COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE

Linda D'Addario, Admin. Systems Coordinator
Preparer/Title


Michele S. Gillen

Director, Administration

Barbara Aylward, Administrator A & F
Preparer/Title


Carolyn Francisco Murphy

Director of Procurement

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period December 1 – 31, 2017.

This report is broken down into three sections:

- Awards of Construction, non-professional and professional services contracts and change orders and amendments in excess of \$25,000, including credit change orders and amendments in excess of \$25,000;
- Awards of purchase orders in excess of \$25,000; and
- Amendments to the Position Control Register, if applicable.

BACKGROUND:

The Board of Directors' Management Policies and Procedures, as amended by the Board's vote on October 14, 2009, delegate authority to the Executive Director to approve the following:

Construction Contract Awards:

Up to \$1 million if the award is to the lowest bidder; or up to \$500,000 if the award is to other than the lowest bidder.

Change Orders:

Up to 25% of the original contract amount or \$250,000, whichever is less, where the change increases the contract amount, and for a term not exceeding an aggregate of six months; and for any amount and for any term, where the change decreases the contract amount. The delegations for cost increases and time can be restored by Board vote.

Professional Service Contract Awards:

Up to \$100,000 and one year with a firm; or up to \$50,000 and one year with an individual.

Non-Professional Service Contract Awards:

Up to \$250,000 if a competitive procurement process has been conducted, or up to \$100,000 if a procurement process other than a competitive process has been conducted.

Purchase or Lease of Equipment, Materials or Supplies:

Up to \$1 million if the award is to the lowest bidder; or up to \$500,000 if the award is to other than the lowest bidder.

Amendments:

Up to 25% of the original contract amount or \$250,000, whichever is less, and for a term not exceeding an aggregate of six months.

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

BUDGET/FISCAL IMPACT:

Recommendations for delegated authority approval include information on the budget/fiscal impact related to the action. For items funded through the capital budget, dollars are measured against the approved capital budget. If the dollars are in excess of the amount authorized in the budget, the amount will be covered within the five-year CIP spending cap. For items funded through the Current Expense Budget, variances are reported monthly and year-end projections are prepared at least twice per year. Staff review all variances and projections so that appropriate measures may be taken to ensure that overall spending is within the MWRA budget


CONSTRUCTION/PROFESSIONAL SERVICES DELEGATED AUTHORITY ITEMS DECEMBER 1 - 31, 2017

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMEND/CO	COMPANY	FINANCIAL IMPACT
C-1.	12/01/17	COMBUSTION TURBINE GENERATOR MAINTENANCE, DEER ISLAND TREATMENT PLANT FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: NON-EMERGENCY AND EMERGENCY REPAIR SERVICE HOURS; REPLACEMENT PARTS; AUTHORIZED FACTORY SERVICE REPRESENTATIVES; FIRE DEPARTMENT SERVICES.	S524	2	O'CONNOR CONSTRUCTORS, INC.	(\$42,109.83)
C-2.	12/01/17	AIR COMPRESSOR SYSTEM SERVICE AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR AIR COMPRESSOR SYSTEM SERVICE FOR A TERM OF 730 CALENDAR DAYS.	OP-361	AWARD	COOLING & HEATING SPECIALISTS, INC.	\$129,671.00
C-3.	12/01/17	13.8KV ELECTRICAL SYSTEMS MAINTENANCE AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR 13.8KV ELECTRICAL SYSTEMS MAINTENANCE FOR A TERM OF 730 CALENDAR DAYS.	OP-363	AWARD	INFRA-RED BUILDING AND POWER SERVICE, INC.	\$241,805.00
C-4.	12/06/17	DEER ISLAND WIND TURBINE REMOVAL AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR THE DEER ISLAND WIND TURBINE REMOVAL FOR A TERM OF 120 CALENDAR DAYS.	S566	AWARD	FRANCESCO DEMOLITION, INC.	\$285,975.00

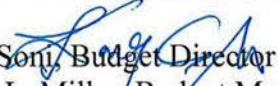
PURCHASING DELEGATED AUTHORITY ITEMS DECEMBER 1 - 31, 2017

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMENDMENT	COMPANY	FINANCIAL IMPACT
P-1.	12/01/17	PURCHASE OF MAINTENANCE SERVICE AGREEMENT AWARD OF A TWO-YEAR SOLE SOURCE PURCHASE ORDER FOR PAGE/PARTY SYSTEM PREVENTATIVE MAINTENANCE SERVICE.			GAI-TRONICS CORPORATION	\$54,000.00
P-2.	12/01/17	SUPPLY AND DELIVERY OF ULTRA-LOW-SULFUR, #2 DIESEL FUEL AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR SUPPLY AND DELIVERY OF 343,000 GALLONS OF ULTRA-LOW-SULFUR, #2 DIESEL FUEL FOR THE DEER ISLAND TREATMENT PLANT.	WRA-4456		GLOBAL MONTELLO GROUP	\$694,197.70
P-3	12/06/17	PURCHASE OF MINE SAFETY APPLIANCE GAS MONITORS AND DETECTORS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR FIFTEEN MINE SAFETY APPLIANCE GAS MONITORS AND DETECTORS FOR THE DEER ISLAND TREATMENT PLANT.	WRA-4433Q		SAFETY SOURCE OF NEW ENGLAND, INC.	\$35,726.00
P-4	12/06/17	PURCHASE OF MAINTENANCE AND SUPPORT OF PBX EQUIPMENT AWARD OF A ONE-YEAR PURCHASE ORDER UNDER STATE BLANKET CONTRACT #1TT50 TO THE LOWEST RESPONSIVE BIDDER FOR MAINTENANCE AND SUPPORT OF PBX EQUIPMENT.	WRA-4455Q		METROPOLITAN TELEPHONE CO., INC.	\$36,145.40
P-5	12/12/17	PURCHASE OF ORGANIC SAMPLE EXTRACT CONCENTRATOR UNIT AWARD OF A SOLE SOURCE PURCHASE ORDER FOR ONE ORGANIC SAMPLE CONCENTRATOR UNIT.			BUCHI CORPORATION	\$62,774.40
P-6	12/13/17	PURCHASE OF EXALT MICROWAVE RADIOS AND RELATED HARDWARE AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THREE EXALT MIRCOWAVE RADIOS AND RELATED HARDWARE TO SUPPORT THE SCADA & SECURITY NETWORKS.	WRA-4443Q		INFINITI WIRELESS, INC.	\$27,657.00
P-7	12/15/17	PURCHASE OF REMOTELY OPERATED VEHICLE AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE REMOTELY OPERATED VEHICLE.	WRA-4430Q		DEEP TREKKER, INC.	\$25,554.00
P-8	12/15/17	PURCHASE OF CRASH ATTENUATOR WITH INTEGRATED ARROW BOARD AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE CRASH ATTENUATOR WITH INTEGRATED ARROW BOARD.			VISI-FLASH RENTALS EASTERN, INC.	\$28,638.33
P-9	12/19/17	PURCHASE OF ELECTRIC FORK LIFT TRUCK AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE ELECTRIC FORK LIFT TRUCK FOR THE DEER ISLAND TREATMENT PLANT.	WRA-4447Q		BRODIE, INC.	\$25,198.00
P-10	12/22/17	PURCHASE OF PIPE AND FITTINGS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR PIPE AND FITTINGS FOR THE MOBILE PUMP UNITS FOR THE CHELSEA FACILITY.	WRA-4445Q		FW WEBB COMPANY	\$38,025.68
P-11	12/22/17	PURCHASE OF EMERGENCY GENERATOR DOCKING STATION AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE EMERGENCY GENERATOR DOCKING STATION FOR THE BRAINTREE/ WEYMOUTH INTERMEDIATE PUMP STATION.	WRA-4435		GRAYBAR ELECTRIC COMPANY, INC.	\$40,990.52
P-12	12/22/17	PURCHASE OF TRASH REMOVAL SERVICES AWARD OF A TWO-YEAR PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR TRASH REMOVAL SERVICES AT THE DEER ISLAND TREATMENT PLANT.	WRA-4438		CASELLA WASTE MGMT OF MA, INC.	\$145,305.00
P-13	12/22/17	PURCHASE OF ELECTRIC BURDEN CARRIERS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR FIFTEEN ELECTRIC BURDEN CARRIERS FOR THE DEER ISLAND TREATMENT PLANT.	WRA-4451		NORTHLAND INDUSTRIAL TRUCK COMPANY, INC.	\$147,541.95

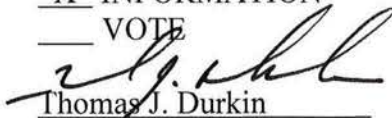
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 17, 2018
SUBJECT: FY18 Financial Update and Summary through December

COMMITTEE: Administration, Finance & Audit


Kathy Soni, Budget Director
Louise L. Miller, Budget Manager
Preparer/Title

INFORMATION
 VOTE


Thomas J. Durkin
Director, Finance

RECOMMENDATION:

For information only. This staff summary provides the financial results and variance highlights for Fiscal Year 2018 through December, comparing actual spending to the budget.

DISCUSSION:

Total year-to date variance for the FY18 CEB is \$13.8 million due to lower direct expenses of \$3.9 million, lower debt service of \$4.0 million, lower indirect expenses of \$490,000, and higher revenues of \$5.3 million.

Total year-to-date variance for the FY18 CIP is \$7.9 million or 9.7%, over budget.

FY18 Current Expense Budget

The CEB expense variances for Fiscal Year 2018 through December by major budget category were:

- Net Lower Direct Expenses of \$3.9 million, or 3.6% under budget. Spending was lower for Wages & Salaries, Maintenance, Worker's Compensation, Fringe Benefits, Chemicals, Professional Services, and Training and Meetings. This is offset by higher spending on Overtime, Other Services, Utilities, and Other Materials.
- Lower Debt Service of \$4.0 million, or 1.8%, due to favorable short-term interest rates.
- Lower Indirect Expenses of \$485,000, or 2.6%, due to lower Watershed reimbursements, Insurance costs and expenses for the existing HEEC cable.

FY18 Budget and FY18 Actual Year-to-Date Variance by Expenditure Category
(in millions)

	FY18 Budget YTD	FY18 Actual YTD	\$ Variance	% Variance
Direct Expenses	\$109.4	\$105.5	-\$3.9	-3.6%
Indirect Expenses	\$18.6	\$18.1	-\$0.5	-2.6%
Debt Service	\$222.8	\$218.7	-\$4.0	-1.8%
Total	\$350.7	\$342.3	-\$8.4	-2.4%

Totals may not add due to rounding

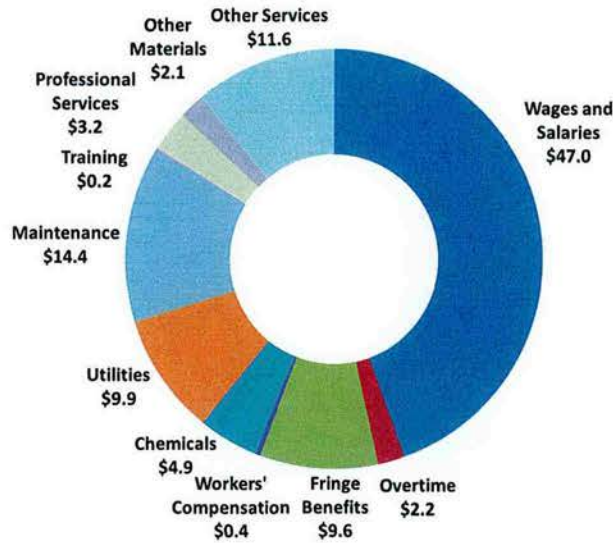
Year-to-date Revenues of \$377.8 million were \$5.3 million over budget reflecting a \$4.2 million receipt from the settlement between various State Attorneys General and Barclays PLC for attempting to manipulate the LIBOR market. LIBOR is a standard financial index used to set the cost of various variable-rate loans. Revenues were also over budget by \$630,000 for favorable returns on investment income, \$228,000 for the final payment of a class action lawsuit settlement for derivative agreements, \$128,000 for revenue attributable to renewable energy credits and energy rebates, and \$163,000 for disposal of surplus material.

Please refer to Attachment 1 for a more detailed comparison by line item of the budget variances for the year to date.

Direct Expenses

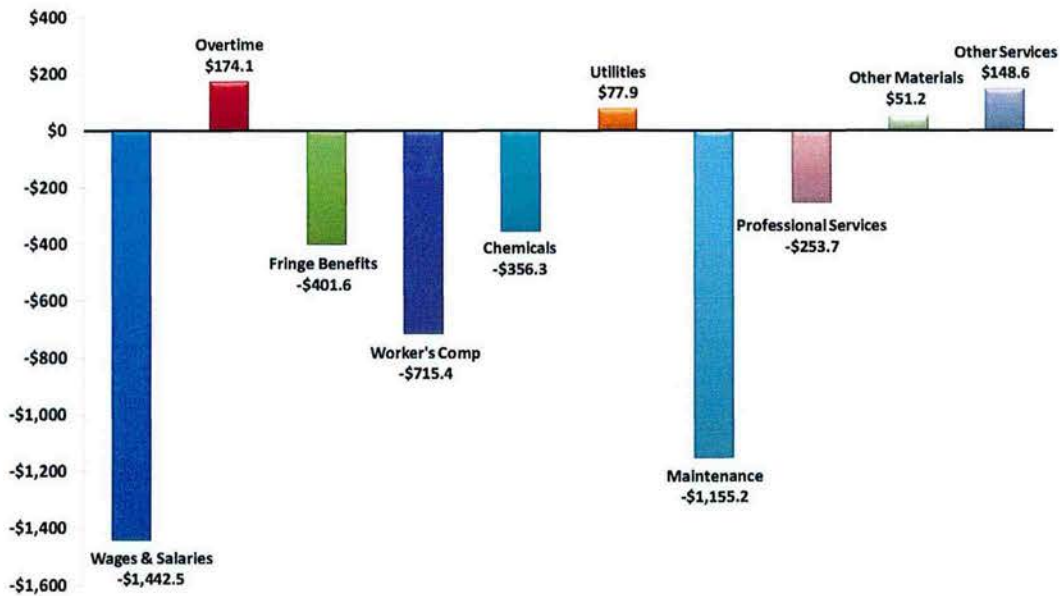
Year-to-date direct expenses totaled \$105.5 million, \$3.9 million, or 3.6%, less than budgeted.

**FY18 Year-to-Date Direct Expenses
(in millions)**



Lower than budgeted spending for Wages & Salaries, Maintenance, Worker's Compensation, Fringe Benefits, Chemicals, Professional Services, and Training and Meetings was partially offset by higher spending for Overtime, Other Services, Utilities, and Other Materials.

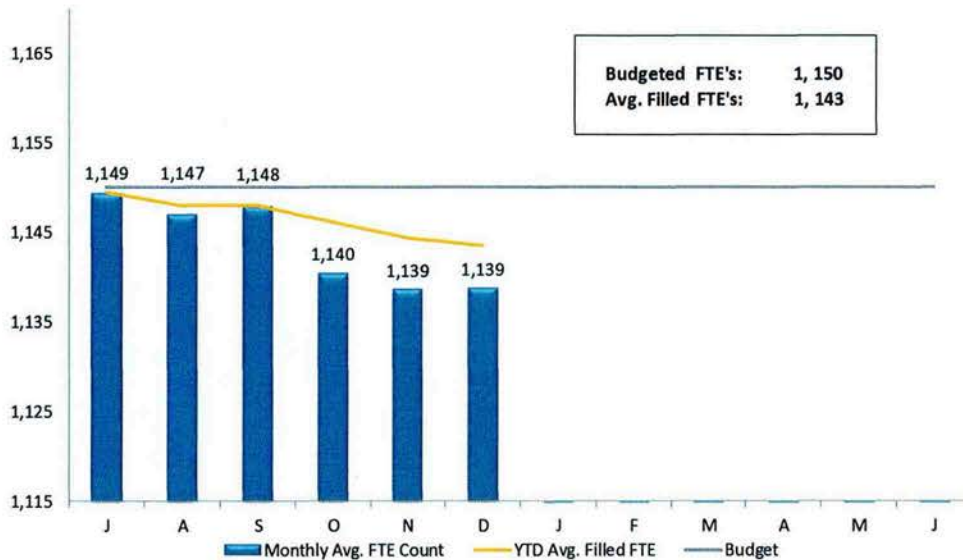
**FY18 Year-to-Date Direct Expense Variance
(in thousands)**



Wages and Salaries

Wages and Salaries are under budget by \$1.4 million. Year to date, there have been 7 fewer average FTEs (1,143 versus 1,150 budget), lower average new hire salaries versus retirees and the timing of backfilling vacant positions, which has contributed to Regular Pay being under budget.

FY18 MWRA Full Time Equivalent (FTE) Position Trend



Maintenance

Maintenance was under budget by \$1.2 million, or 7.4%; \$764,000 at Deer Island \$159,000 of the underspending is in Field Operations. There were numerous components to the underspending for Maintenance year-to date, including timing of the HVAC upgrades to the Braintree/Weymouth Pump Station and Chelsea facility, timing of door replacement at Deer Island Treatment Plant, and timing of PICS upgrade at Deer Island; offset by overspending for timing of the Headworks HVAC duct cleaning contract, which is being done ahead of schedule.

Worker's Compensation

Through December, Worker's Compensation expenses were lower than budget by \$715,000, or 61.6%. Indemnity payments and reserves were lower than budget by \$471,000 year-to-date primarily as the result of the settlement of six claims, and the resolution of a number of other claims through return to work. Medical payments and reserves were lower than budget by \$199,000 for lower medical expenses and a reduction in medical reserves. Expense payments and reserves were lower than budget by \$46,000 primarily for a reduction in reserves. It should be noted that the Worker's Compensation budget is spread evenly every month during the course of the year and can result in wide monthly variations which cannot be predicted.

Fringe Benefits

Fringe Benefit spending was lower than budgeted by \$402,000, or 4.0%, primarily for lower Health Insurance costs of \$310,000 due to fewer employees and retirees than budgeted participating in health insurance plans, and the shift from family to individual plans which are less expensive.

Chemicals

Year-to-date, Chemicals were lower than budget by \$356,000 or 6.8%. The variance for Chemicals was the result of lower flows both at Deer Island and the Carroll Plant, 13% and 5% respectively, the quality of the influent at Deer Island and the water quality at the Carroll Plant. Underspending of \$232,000 for Soda Ash, \$151,000 for Activated Carbon, \$68,000 for Sodium Hypochlorite, \$65,000 for Carbon Dioxide, and \$57,000 for Sodium Bisulfite contributed to the variance. This is offset by overspending of \$299,000 for Hydrogen Peroxide. Chemical variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor. For instance, the underspending for Activated Carbon is due to the timing of the change out of carbon beds at Deer Island, which is planned for later in the year than budgeted.

Professional Services

While Professional Services are under budget by \$254,000, or 7.3%, they are over budget for the month of December by \$81,000. The overall underspending year-to-date and overspending in December is due to timing of services. Professional Services are underspent in MIS due to timing of network application and design services, and in the Treasury Department due to timing of the need for services. While the Law Division budget for outside legal fees for litigation and expert fees is underspent year-to-date, these services were overspent in December due to ongoing litigation.

Training & Meetings

Training & Meetings expenses are less than budgeted by \$42,000 or 20.3% due to timing.

Overtime

Overtime expenses year-to-date are higher than budgeted by \$174,000 or 8.5%, which is a decrease since November. The overspending year-to-date was mainly in Water Operations for maintenance and emergency leak repairs and Wastewater Operations for wet weather events. Field Operations performed off-hours maintenance work to alleviate project backlogs due to staff vacancies in Western Water Operations, replaced manhole covers and frames prior to a major repaving project, and the replacement of a HVAC unit at the Chelsea facility.

Other Services

Other Services spending was higher than budgeted by \$149,000, or 1.3%. There were numerous components to the overspending in Other Services, including Sludge Pelletization of \$218,000 due to higher year-to-date quantities related to struvite control during the cleaning of one digester.

Utilities

Utilities were overspent by \$78,000 or 0.8%, essentially on budget. Diesel Fuel was over budget by \$568,000 due to an additional delivery at Deer Island prior to the start of the winter season, which was budgeted for in May 2018; offset by lower electricity bills of \$426,000 due to favorable pricing for Field Operations facilities and the Deer Island Wastewater Treatment Plant; and \$121,000 lower diesel expense in Field Operations also due to favorable pricing.

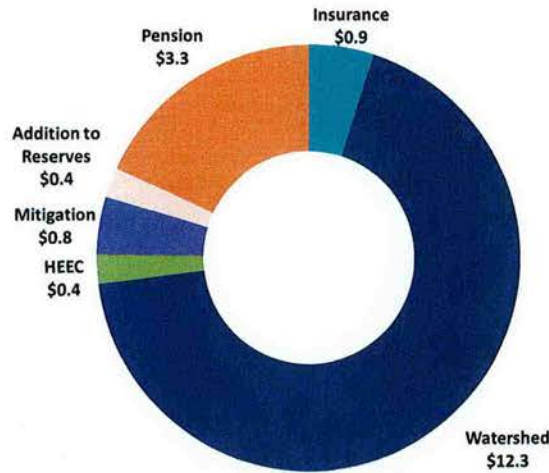
Other Materials

Other Materials were higher than budgeted by \$51,000 or 2.5%. A variety of items are over budget including Computer Hardware in MIS and Lab and Testing Materials at Deer Island due to timing of purchases. There were various items under budget, including Vehicle Expenses due to lower than budgeted fuel prices.

Indirect Expenses

Year-to-date Indirect Expenses totaled \$18.1 million, \$485,000 or 2.6% lower than budgeted, due to lower Watershed costs of \$286,000 resulting from an over-accrual in FY17 of Watershed operating expenses; lower than budgeted insurance costs of \$108,000 due to lower than budgeted claims of \$88,000 and lower than budgeted premiums of \$19,000; and lower HEEC charges than budgeted of \$80,000 for the existing cross-harbor cable.

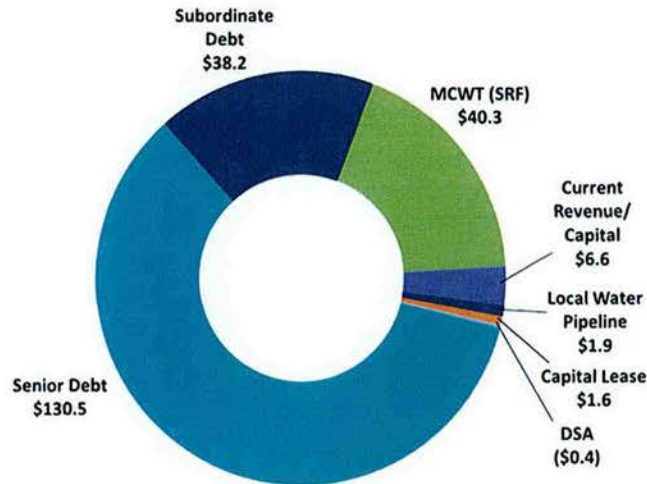
**FY18 Year-to-date Indirect Expenses-YTD
(in millions)**



Capital Financing

Capital Financing expenses include the principal and interest payment for fixed debt, the variable subordinate debt, the Massachusetts Clean Water Trust (SRF) obligation, the commercial paper program for the local water pipeline projects, current revenue for capital, and the Chelsea facility lease payment.

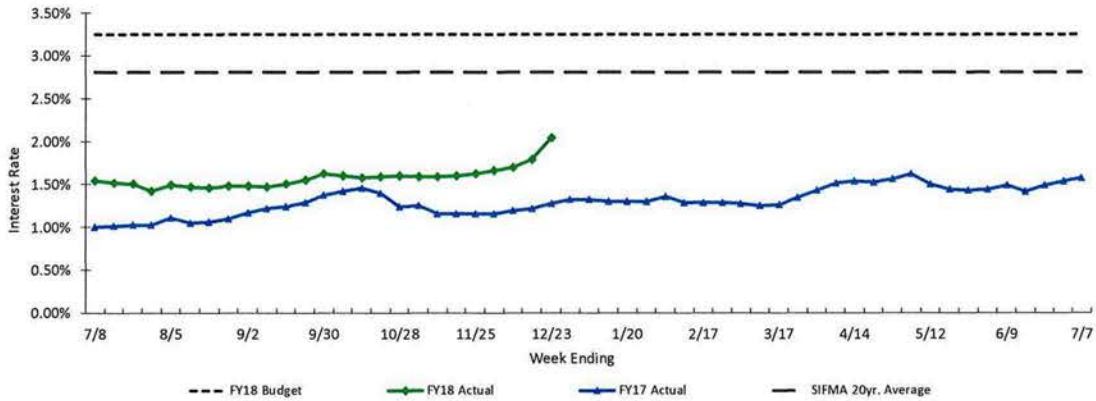
**Year-to-date FY18 Capital Finance
(in millions)**



Year-to-date Capital Financing expenses for FY18 totaled \$218.7 million, which was \$4.0 million less than budgeted. The entire variance is related to short-term variable rates.

The graph below reflects the FY18 actual variable rate trend by week year-to-date against the FY18 Budget.

**Weekly Average Interest Rate on MWRA Variable Rate Debt
(Includes liquidity support and remarketing fees)**



Revenue & Income

Year-to-date Revenues of \$377.8 million were \$5.3 million over budget reflecting a \$4.2 million receipt from the settlement between various State Attorneys General and Barclays PLC for attempting to manipulate the LIBOR market. LIBOR is a standard financial index used to set the cost of various variable-rate loans. Revenues were also over budget by \$630,000 for favorable returns on investment income, \$228,000 for the final payment of a class action lawsuit settlement for derivative agreements, \$128,000 for revenue attributable to renewable energy credits and energy rebates, and \$163,000 for disposal of surplus material.

FY18 Capital Improvement Program

Capital expenditures in Fiscal Year 2018 through December total \$89.1 million, \$7.9 million, or 9.7%, over budget.

After accounting for programs which are not directly under MWRA’s control, most notably the Inflow and Infiltration (I/I) grant/loan program, the Local Water Pipeline loan program, and the community managed CSO projects, capital spending totaled \$69.5 million, \$2.7 million or 4.1% over budget.

Please see the Fiscal Year 2018 Mid-Year Capital Improvement Program Spending Report, which is being presented to the Board as a separate agenda item, for spending by program and explanations of variances for individual projects as well as Attachment A to Fiscal Year 2018 Mid-Year Capital Improvement Program Spending Report for a detailed analysis of contract variances.

Construction Fund Balance

The construction fund balance was \$55.7 million as of the end of December. Commercial Paper/Revolving Loan availability was \$147.0 million to fund construction projects.

ATTACHMENTS:

Attachment 1 – Variance Summary December 2018

Attachment 2 – Current Expense Variance Explanations

ATTACHMENT 1
FY18 Actuals vs. FY18 Budget

	December 2017 Year-to-Date					
	Period 6 YTD Budget	Period 6 YTD Actual	Period 6 YTD Variance	%	FY18 Approved	% Expended
EXPENSES						
WAGES AND SALARIES	\$ 48,402,813	\$ 46,960,283	\$ (1,442,530)	-3.0%	\$ 104,286,370	45.0%
OVERTIME	2,036,351	2,210,406	174,055	8.5%	4,110,637	53.8%
FRINGE BENEFITS	10,041,770	9,640,189	(401,581)	-4.0%	20,997,975	45.9%
WORKERS' COMPENSATION	1,161,490	446,098	(715,392)	-61.6%	2,322,980	19.2%
CHEMICALS	5,218,088	4,861,748	(356,340)	-6.8%	9,836,933	49.4%
ENERGY AND UTILITIES	9,804,677	9,882,606	77,929	0.8%	21,735,222	45.5%
MAINTENANCE	15,536,912	14,381,700	(1,155,212)	-7.4%	32,200,785	44.7%
TRAINING AND MEETINGS	209,260	166,839	(42,421)	-20.3%	406,269	41.1%
PROFESSIONAL SERVICES	3,485,577	3,231,855	(253,722)	-7.3%	7,221,622	44.8%
OTHER MATERIALS	2,046,004	2,097,237	51,233	2.5%	6,692,660	31.3%
OTHER SERVICES	11,434,847	11,583,421	148,574	1.3%	22,764,526	50.9%
TOTAL DIRECT EXPENSES	\$ 109,377,789	\$ 105,462,382	\$ (3,915,406)	-3.6%	\$ 232,575,979	45.3%
INSURANCE	\$ 1,006,726	\$ 898,855	\$ (107,871)	-10.7%	\$ 2,013,452	44.6%
WATERSHED/PILOT	12,582,003	12,296,185	(285,818)	-2.3%	25,164,006	48.9%
BEC0 PAYMENT	478,723	398,308	(80,415)	-16.8%	957,445	41.6%
MITIGATION	798,475	787,445	(11,030)	-1.4%	1,596,950	49.3%
ADDITIONS TO RESERVES	410,558	410,558	-	0.0%	821,116	50.0%
RETIREMENT FUND	3,277,369	3,277,369	-	0.0%	3,277,369	100.0%
POST EMPLOYEE BENEFITS	-	-	-	---	5,035,422	0.0%
TOTAL INDIRECT EXPENSES	\$ 18,553,854	\$ 18,068,720	\$ (485,134)	-2.6%	\$ 38,865,760	46.5%
STATE REVOLVING FUND	\$ 40,318,935	\$ 40,318,935	\$ -	0.0%	\$ 84,931,906	47.5%
SENIOR DEBT	130,530,134	130,530,134	-	0.0%	264,560,267	49.3%
CORD FUND	-	-	-	---	-	---
DEBT SERVICE ASSISTANCE	(391,580)	(391,580)	-	0.0%	(391,580)	100.0%
CURRENT REVENUE/CAPITAL	6,600,000	6,600,000	-	0.0%	13,200,000	50.0%
SUBORDINATE MWRA DEBT	42,197,487	42,197,487	-	0.0%	85,443,447	49.4%
LOCAL WATER PIPELINE CP	1,897,472	1,897,472	-	0.0%	3,794,944	50.0%
CAPITAL LEASE	1,608,530	1,608,530	-	0.0%	3,217,060	50.0%
DEBT PREPAYMENT	-	-	-	---	10,900,000	0.0%
VARIABLE DEBT	-	(4,037,603)	(4,037,603)	---	-	0.0%
HEEC CABLE CAPACITY RESERV	-	-	-	---	6,532,146	---
DEFEASANCE ACCOUNT	-	-	-	---	-	---
TOTAL DEBT SERVICE	\$ 222,760,978	\$ 218,723,375	\$ (4,037,603)	-1.8%	\$ 472,188,190	46.3%
TOTAL EXPENSES	\$ 350,692,621	\$ 342,254,477	\$ (8,438,143)	-2.4%	\$ 743,629,929	46.0%
REVENUE & INCOME						
RATE REVENUE	\$ 358,527,000	\$ 358,527,000	\$ -	0.0%	\$ 717,054,000	50.0%
OTHER USER CHARGES	4,381,124	4,352,996	(28,128)	-0.6%	9,011,070	48.3%
OTHER REVENUE	4,842,029	9,576,987	4,734,958	97.8%	7,359,078	130.1%
RATE STABILIZATION	-	-	-	---	-	---
INVESTMENT INCOME	4,730,371	5,360,507	630,136	13.3%	10,205,781	52.5%
TOTAL REVENUE & INCOME	\$ 372,480,524	\$ 377,817,490	\$ 5,336,966	1.4%	\$ 743,629,929	50.8%

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY18 Budget YTD December	FY18 Actuals YTD December	FY18 YTD Actual vs. FY18 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	48,402,813	46,960,283	(1,442,530)	-3.0%	Wages and Salaries are under budget by \$1.4 million. Year to date, there have been 7 fewer average FTEs (1,143 versus 1,150 budget), lower average new hire salaries versus retirees and the timing of backfilling vacant positions, which has contributed to Regular Pay being under budget.
Overtime	2,036,351	2,210,406	174,055	8.5%	Higher spending mainly in Water Operations of \$135,000 and Metro Maintenance of \$101,000, both for off-hours maintenance, and Wastewater Operations of \$26,000 for wet weather events. Some examples of off-hour maintenance work include off-hours work to alleviate a project backlog in western ops due to staff vacancies, replacement of manholes in a community prior to a major repaving job, and crane rigging to hoist replacement HVAC units into place at the Chelsea maintenance facility.
Fringe Benefits	10,041,770	9,640,189	(401,581)	-4.0%	Lower than budget mainly in Health Insurance of \$310,000, due to fewer than budgeted participants in health insurance plans, and the shift from family to individual plans which are less expensive; lower Medicare payments of \$40,000; and lower Unemployment Insurance of \$31,000.
Worker's Compensation	1,161,490	446,098	(715,392)	-61.6%	Underspending due to lower compensation payments of \$480,000, medical payments of \$199,000 and management costs of \$46,000. Compensation payments were lower due to a reductions of reserves primarily due to settlements of six claim and lower reserves for claims resolved through returns to work. Medical payments were lower due to adjustments to reserves for claims resolved through return to work. Management Costs were adjusted as well to reflect resolution of outstanding cases. It is important to note that spending on this line item can change significantly depending on future claims and severity of cases.

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY18 Budget YTD December	FY18 Actuals YTD December	FY18 YTD Actual vs. FY18 Budget		Explanations
			\$	%	
Chemicals	5,218,088	4,861,748	(356,340)	-6.8%	Underspending for Soda Ash of \$232,000 primarily at JCWTP; Activated Carbon of \$151,000 at DITP; Sodium Hypochlorite of \$68,000 primarily at DITP, offset by over spending at JCWTP; Carbon Dioxide of \$65,000 at JCWTP; and Sodium Bisulfite of \$57,000 primarily at DITP. This is offset by over spending on Hydrogen Peroxide of \$299,000 at DITP and on Ferric Chloride of \$41,000 also at DITP. The majority of underspending for Chemicals is the result of lower flows both at DITP and JCWTP, 13% and 5% respectively through December and the quality of the influent both at DITP and JCWTP. It is important to note that Chemicals variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor. For instance, the underspending for Activated Carbon is due to the timing of the change out of carbon beds at DITP later in the year than budgeted.
Utilities	9,804,677	9,882,606	77,929	0.8%	Overspending in Diesel Fuel of \$568,000. \$689,000 overspending in Diesel Fuel at DITP due to unbudgeted delivery in December, offset by \$121,000 underspending in FOD due to favorable pricing. Diesel Fuel spending further is offset by underspending in Electricity of \$426,000 primarily in FOD due to favorable pricing (approx. 2¢ under budget per kwh) and DITP also due to favorable pricing; and Water of \$44,000 primarily at JCWTP and DITP.
Maintenance	15,536,912	14,381,700	(1,155,212)	-7.4%	Materials were underspent by \$670,000 and Services were underspent by \$488,000. Underspending in HVAC Materials of \$656,000 in FOD for the timing of the B/W IPS and Chelsea HVAC upgrades and DITP for timing of purchases; Specialized Equipment Services of \$360,000 in DITP for timing of PIC upgrade, FOD, OEP & DLS; Building & Grounds Services of \$344,000 for timing of door replacement contract at DITP, and for invasive control contract at various drinking reservoirs; Computer Licenses/Upgrades of \$289,000 in MIS for timing of software maintenance agreements; Computer Materials of \$106,000 for an inventory issuance credit in MIS; Building & Grounds Materials of \$66,000 for Metro Maintenance, Water Western Ops, and at the Chelsea Facility. Overspending in Plant & Machinery Services of \$240,000 mostly at DITP for Boiler/STG maintenance; HVAC Services of \$218,000 for timing of the Headworks duct cleaning contract and Western Ops HVAC services; Computer Services of \$63,000 in MIS and SCADA Maintenance; and Electrical Services of \$52,000 primarily at JCWTP.


ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY18 Budget YTD December	FY18 Actuals YTD December	FY18 YTD Actual vs. FY18 Budget		Explanations
			\$	%	
Training & Meetings	209,260	166,839	(42,421)	-20.3%	Underspending in Operations, MIS and Procurement due to timing.
Professional Services	3,485,577	3,231,855	(253,722)	-7.3%	Other Professional Services was under spent \$190,000 primarily in Law due to timing of expert services needed for ongoing litigation, Op Admin due to timing of Mystic River Modeling Project, MIS for timing of network, application and design services, and Treasury for timing of financial services; Legal Services was underspent \$73,000 in Human Resources and the Law Division for outside legal fees for litigation; and Resident Inspection of \$27,000 related to lower spending on Diver Assisted Suction Harvesting (DASH) Quality Assurance/Quality Control diver associated with the invasive species control of the water reservoirs. This is offset by higher spending for Lab & Testing of \$40,000 in Dept. Lab Services for unplanned algae testing for Chestnut Hill Reservoir and ENQUAL for unbudgeted red tide study.
Other Materials	2,046,004	2,097,237	51,233	2.5%	Higher budgeted spending for Computer Hardware of \$171,000 in MIS due to timing of purchases; Postage of \$65,000 due to timing of filling postage meters in Admin, and Lab & Testing Supplies of \$63,000 primarily in Dept. of Lab Services. This is offset by lower spending for Health and Safety of \$66,000 primarily at DITP and Op Support; Equipment/Furniture of \$64,000 primarily in Dept. of Lab Services; and Vehicle Expenses of \$52,000 due to lower prices for fuel than budgeted.
Other Services	11,434,847	11,583,421	148,574	1.3%	Higher than budgeted spending for Sludge Pelletization of \$218,000 due to higher year to date quantities related to Struvite control; Space Lease/Rentals of \$110,000 primarily due to Internal Audit's completing their annual audit of CY16 operating expenses and FY17 property taxes which determined we owe the landlord \$41,000 and increased the common area maintenance and property taxes portions of the monthly bill for FY18; and Telephone of \$53,000 in MIS. This is offset by lower spending in Other Services of \$148,000 for a number of services, including timing of remediation projects managed by Real Property/Environmental Management and timing of Technical Assistance for Lead issues; and Police Details of \$33,000 primarily in Meter Maintenance, Wastewater Pipeline Maintenance, Water Valve Maintenance, and Pipeline Maintenance.
Total Direct Expenses	109,377,789	105,462,382	(3,915,407)	-3.6%	

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY18 Budget YTD December	FY18 Actuals YTD December	FY18 YTD Actual vs. FY18 Budget		Explanations
			\$	%	
Indirect Expenses					
Insurance	1,006,726	898,855	(107,871)	-10.7%	Lower Claims than budgeted of \$88,000 and lower premiums of \$19,000.
Watershed/PILOT	12,582,003	12,296,185	(285,818)	-2.3%	Lower Watershed Reimbursement of \$286,000 due to over accrual at the end of FY17 as compared to the actual amount paid in the first quarter of FY18.
HEEC Payment	478,723	398,308	(80,415)	-16.8%	Lower than budgeted charges for O&M charges for existing HEEC cable.
Mitigation	798,475	787,445	(11,030)	-1.4%	Actual inflation rate was 2.08% vs. 2.5% used for the budget.
Addition to Reserves	410,558	410,558	-	0.0%	
Pension Expense	3,277,369	3,277,369	-	0.0%	
Post Employee Benefits	-	-	-		
Total Indirect Expenses	18,553,854	18,068,720	(485,134)	-2.6%	
Debt Service					
Debt Service	223,152,558	219,114,955	(4,037,603)	-1.8%	\$4.0 million for lower variable rate than budgeted.
Debt Service Assistance	(391,580)	(391,580)	-	0.0%	
Total Debt Service Expenses	222,760,978	218,723,375	(4,037,603)	-1.8%	
Total Expenses					
Total Expenses	350,692,621	342,254,477	(8,438,144)	-2.4%	
Revenue & Income					
Rate Revenue	358,527,000	358,527,000	-	0.0%	
Other User Charges	4,381,124	4,352,996	(28,128)	-0.6%	
Other Revenue	4,842,029	9,576,987	4,734,958	97.8%	\$4.4 M for two settlements, \$4.2 M receipt for settlement between various State Attorneys General and Barclays PLC for attempting to manipulate the LIBOR market and \$228,000 for the final payment of a class action lawsuit settlement for derivative agreements; \$128,000 for revenue attributable to renewable energy credits and energy rebates; and \$163,000 for disposal of surplus material.
Rate Stabilization	-	-	-		
Investment Income	4,730,371	5,360,507	630,136	13.3%	Investment Income is over budget as result of higher short term rates.
Total Revenue	372,480,524	377,817,490	5,336,966	1.4%	
Net Revenue in Excess of Expenses	21,787,903	35,563,013	13,775,110		


STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 17, 2018
SUBJECT: Fiscal Year 2018 Mid-Year Capital Improvement Program Spending Report

COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE


 Kathy Soni, Budget Director
Louise Miller, Budget Manager
 Preparer/Title

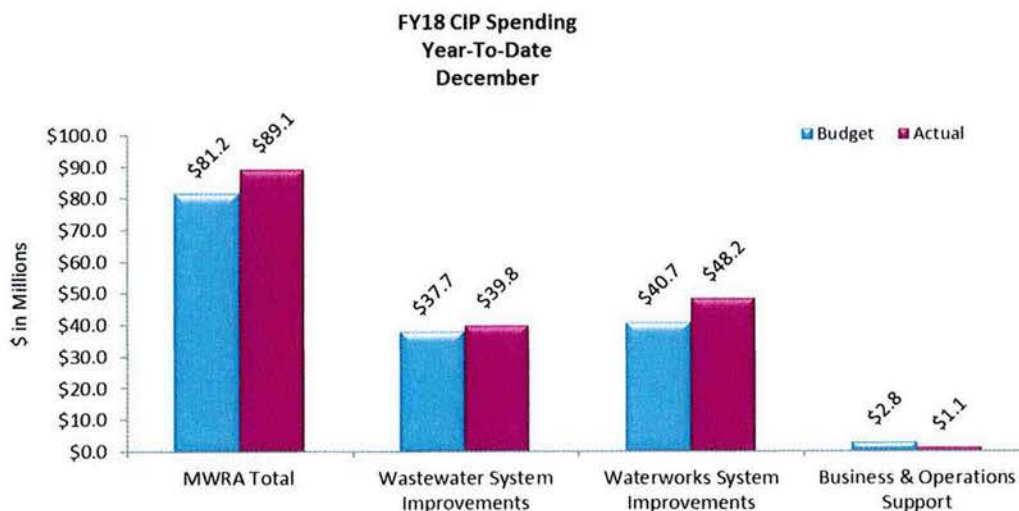

Thomas J. Durkin
 Director, Finance

RECOMMENDATION:

For information only. The Fiscal Year 2018 Mid-Year Capital Improvement Program Spending Report highlights major capital program accomplishments and provides explanations for spending variances and schedule changes versus the budget.

DISCUSSION:

FY18 actual spending for the first half of the year is \$89.1 million compared to a budgeted amount of \$81.2 million which is \$7.9 million or 9.7% greater than budget. The projected spending for FY18, based on the FY19 Proposed CIP, is estimated at \$179.5 million versus the budget of \$174.5 million which is \$5.0 million or 2.9% higher than budget as compared to the historical 19% variance below budget spending pattern. After accounting for programs which are not directly under MWRA's control, the projected spending for FY18 is estimated at \$138.9 million versus the budget of \$142.3 million which is \$3.4 million or 2.5% less than budget as compared with a historical 22% variance below budget spending pattern.



Projects that were completed or reached substantial completion in the first half of FY18 included:

Wastewater System Improvements

- Deer Island Treatment Digester Sludge Pump Replacement Phase 2
 - Total Project Cost: \$2.7 million
 - Completion Date: July 2017
 - Total Project Duration: 1.5 years
- Deer Island North Main Pump Station and Winthrop Terminal Facility Butterfly Valve Replacements
 - Total Project Cost: \$17.6 million
 - Completion Date: September 2017
 - Total Project Duration: 3.3 years
- Prison Point Piping Rehabilitation
 - Total Project Cost: \$0.5 million
 - Completion Date: September 2017
 - Total Project Duration: 1 year
- Deer Island Personnel Dock Rehabilitation
 - Total Project Cost: \$1.5 million
 - Completion Date: October 2017
 - Total Project Duration: 8 months

Waterworks System Improvements

- Cathodic Protection Testing Evaluation Program
 - Total Project Cost: \$0.2 million
 - Completion Date: August 2017
 - Total Project Duration: 2 years
- Chicopee Valley Aqueduct Screens Replacement Construction
 - Total Project Cost: \$1.2 million
 - Completion Date: August 2017
 - Total Project Duration: 7 months
- Fish Hatchery Pipeline Construction
 - Total Project Cost: \$3.6 million
 - Completion Date: September 2017
 - Total Project Duration: 1.5 years
- Evaluation of Farm Pond Buildings-Waban Arches
 - Total Project Cost: \$0.3 million
 - Completion Date: December 2017
 - Total Project Duration: 1.5 years

MWRA also has a number of projects currently in design or under construction. Life-to-date expenditures for some of the larger active contracts are:

Wastewater System Improvements

- Chelsea Creek Headworks Upgrades Construction – 28% complete
 - Total budget: \$76.1 million, \$21.3 million spent

- Alewife Brook Pump Station Rehabilitation – 36% complete
 - Total budget: \$12.6 million, \$4.5 million spent
- Clinton Phosphorus Reduction Construction – 88% complete
 - Total budget: \$7.5 million, \$6.6 million spent
- Prison Point Rehabilitation Engineering Services – 25% complete
 - Total budget \$2.8 million, \$0.7 million spent
- Deer Island HVAC Equipment Replacement Engineering Services – 65% complete
 - Total budget \$2.0 million, \$1.3 million spent
- Deer Island Winthrop Terminal Facility Variable Frequency Drives Construction – 12% complete
 - Total budget: \$12.0 million, \$1.4 million spent
- Deer Island Fire Alarm System Replacement Design – 30% complete
 - Total budget \$2.1 million, \$0.7 million spent
- Deer Island Clarifier Rehabilitation Phase 2 Design – 43% complete
 - Total budget \$2.3 million, \$1.0 million spent

Waterworks System Improvements

- Wachusett Aqueduct Pump Station Construction – 80% complete
 - Total budget: \$47.2 million, \$37.8 million spent
- Northern Intermediate High Section 89 & 29 Redundancy Phase 1B Construction – 98% complete
 - Total budget: \$12.0 million, \$11.8 million spent
- Northern Intermediate High Section 89 & 29 Redundancy Phase 1C Construction – 85% complete
 - Total budget: \$17.8 million, \$15.2 million spent
- Northern Intermediate High Section 89 & 29 Redundancy Phase 2 Construction – 6% complete
 - Total budget: \$24.5 million, \$1.4 million spent
- Southern Extra High Section 111 Phase 1 Construction – 85% complete
 - Total budget: \$12.5 million, \$10.6 million spent
- Southern Extra High Redundancy Pipeline Phase 1 Engineering Services – 53% complete
 - Total budget: \$7.7 million, \$4.1 million spent
- Northern Intermediate High Section 89/29 Redundancy Engineering Services – 76% complete
 - Total budget: \$6.3 million, \$4.8 million spent
- Peabody Pipeline Engineering Services – 14% complete
 - Total budget: \$3.5 million, \$0.5 million spent
- Marlborough Maintenance Facility Construction – 49% complete
 - Total budget: \$3.4 million, \$1.7 million spent

Community Financial Assistance

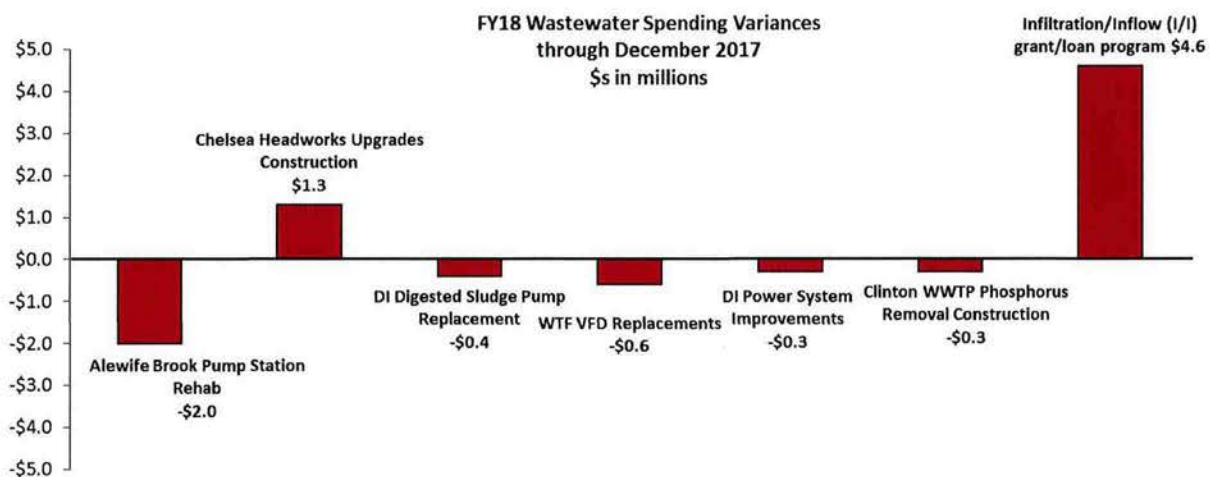
In the first half of FY18, MWRA continued support for the community financial assistance programs by providing funding distributions of \$35.1 million for wastewater infiltration and inflow (I/I) removal (\$18.4 million) and water pipeline improvements (\$16.7 million, including a \$1.5 million for lead service replacement).

Major Variances to FY18 Budget

FY18 Capital Improvement Program Spending Through December 2017 (\$000s)					
Program	Budgeted Spending	Actual Spending	Variance to Budget		% of Total YTD Actual Spending
			\$	%	
Total Wastewater System	\$37,734	\$39,842	\$2,108	6%	45%
Interception & Pumping	\$20,310	\$19,751	(\$559)	-3%	22%
Treatment	\$7,166	\$5,327	(\$1,839)	-26%	6%
Residuals	\$128	\$135	\$7	0%	0%
Combined Sewer Overflow	\$1,458	\$1,309	(\$149)	-10%	1%
Other Wastewater Programs	\$8,672	\$13,320	\$4,648	54%	15%
Total Waterworks System	\$40,677	\$48,172	\$7,495	18%	54%
Drinking Water Quality Improvements	\$1,712	\$1,970	\$258	15%	2%
Transmission	\$14,305	\$16,792	\$2,487	17%	19%
Distribution and Pumping	\$20,171	\$24,408	\$4,236	21%	27%
Other Waterworks Programs	\$4,489	\$5,002	\$513	11%	6%
Business & Operations Support	\$2,783	\$1,050	(\$1,733)	-62%	1%
Total MWRA (without Contingency)	\$81,194	\$89,064	\$7,869	10%	100%

Wastewater System Improvements

Wastewater year-to-date spending was \$39.8 million, \$2.1 million or 5.6% greater than budget. The graph below reflects contract variances greater than \$250,000:



The reasons for the variances are:

Interception & Pumping: Net underspending of \$0.6 million

- \$2.0 million underspending for Alewife Brook Pumping Station Construction due to bypass pumping delays;
- \$1.3 million overspending for Chelsea Creek Headworks Upgrades Construction due to contractor progress.

Wastewater Treatment: Net underspending of \$1.8 million

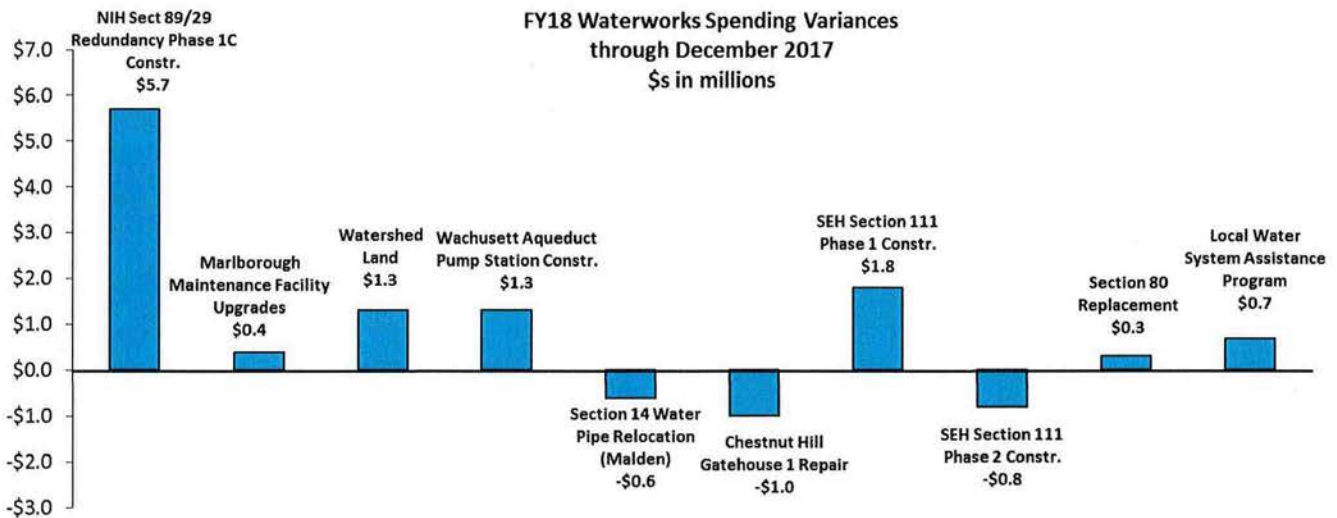
- Clinton underspending of \$0.3 million for Phosphorus Reduction Construction due to less than anticipated progress including preliminary testing delays.
- Deer Island underspending of \$0.6 million for lead time for equipment for the Winthrop Terminal Facility VFD Replacement Construction and \$0.4 million for Clarifier Rehabilitation Phase 2 Design, and \$0.3 million for Fuel System Upgrades for work scheduled for FY18 performed in FY17.

Other Wastewater: Net overspending of \$4.6 million

- \$4.6 million overspending for Community Infiltration/Inflow (I/I) due to greater than anticipated requests for grants and loans.

Waterworks System Improvements

Waterworks actual spending was \$48.2 million, \$5.5 million or 18.4% greater than budget. The graph below reflects contract variances greater than \$250,000:



Drinking Water Quality Improvements: Net overspending of \$0.3 million

- \$0.4 million overspending for contractor progress for the Marlborough Maintenance Facility.

Waterworks Transmission: Net overspending of \$2.5 million

- \$1.3 million overspending for Watershed Land due to timing of land purchases and \$1.3 million for Wachusett Aqueduct Pump Station Construction due to contractor progress.

Water Distribution and Pumping: Net overspending of \$4.2 million

- \$5.7 million overspending for Section 89/29 Redundancy Phase 1C Construction, \$1.8 million for SEH Redundancy Pipeline Section 111 Phase 1 Construction, and \$0.3 million Section 80 Replacement Construction due to contractor progress.
- Underspending of \$1.0 million for Chestnut Hill Gatehouse #1 Repairs and \$0.8 million for SEH Redundancy Pipeline Section 111 Phase 2 due to later than budgeted notices-to-proceed, and \$0.6 million Section 14 Water Pipe Relocation (Malden) due to delay in commencing pipe installation.

Other Waterworks: Net overspending of \$0.5 million

- \$0.7 million overspending for Local Water System Assistance Program due to greater than anticipated community requests for loans.

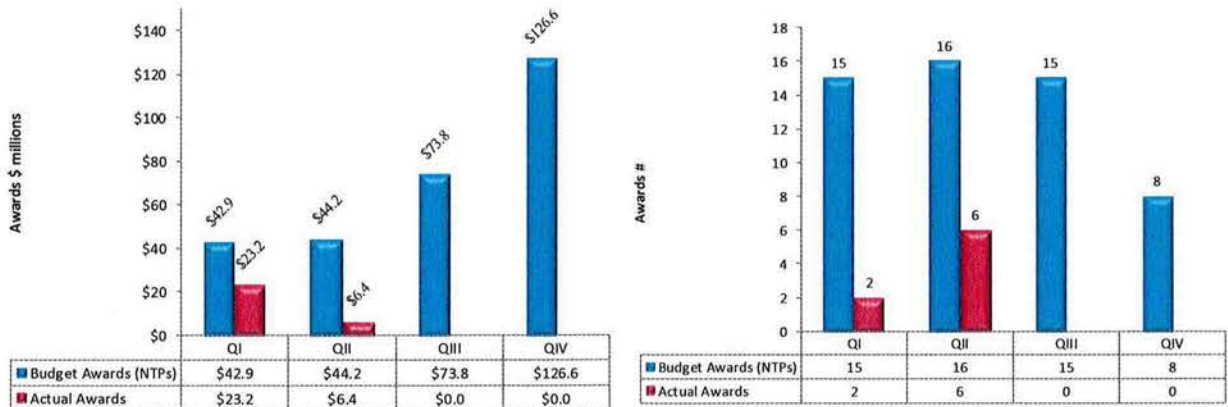
Business and Operations Support

Business and Operations Support spending is \$1.1 million, \$1.7 million or 62.2% less than budget. The underspending is due to delay in implementing security and equipment initiatives as well as timing of vehicle purchases.

Please refer to Attachment A for detailed FY18 CIP variance explanations.

Status of Contract Awards Planned for FY18

MWRA’s FY18 CIP projects 54 contract to be awarded valued at \$287.5 million. Through mid-year, MWRA has awarded 8 contracts with a value of \$29.6 million or 34% of the \$87.0 million planned.



As part of the FY19 CIP development and monthly CIP coordination meetings, staff have reviewed planned contract awards for FY18 and updated have updated assumptions based on new information. By the end of FY18, staff expect to award 17 additional contracts valued at \$91.4 million for a total of 25 contracts valued at \$121.0 million.

The primary reasons for not expecting to award all contracts in FY18 are:

- Five projects have been delayed due to changes in scope that have required additional work;
- Twenty-three projects whose schedules have been modified; and
- Two design projects have been deleted and are being either combined with another project or will be handled through as-needed technical assistance.

The table below summarizes the total number of capital contract awards planned for FY18 and highlights the number planned for award during the second half of FY18.

Please refer to Attachment B for contract award status for all FY18 budgeted contracts.

FY18 Contract Awards		
	# of Awards	\$ Awards
Total Planned Awards per FY18 CIP	54	\$287.5
Actual Awards in First Half FY18	7	\$29.5
Actual Unplanned Awards First Half FY18	1	\$0.1
Planned Awards in Second Half FY18	17	\$91.4
Shifted Beyond FY18 - Scope or Priority Change	28	\$160.7
Deleted/Transferred from CIP/Project on Hold	2	\$2.9
Total Projects Planned to be Awarded in FY18	25	\$121.0

The following contracts were awarded in the first half of FY18:

- Southern Extra High Redundancy Pipeline Section 111 Construction 2 - \$17.2 million
- Northern Low Service Section 57 Water & Sections 21/20/19 Sewer Engineering Services - \$6.0 million
- Combined Sewer Overflow Performance Assessment - \$2.9 million
- Section 14 Water Pipeline Relocation (Malden) - \$1.4 million
- Chestnut Hill Gatehouse #1 Repair Construction - \$0.8 million
- Residuals Sludge Tank & Silo Coating - \$0.6 million
- Deer Island Treatment Plant VFD Replacement Construction - \$0.5 million
- Residuals Immediate Mechanical Improvements - \$0.1 million

Major Awards Planned for the 2nd Half of FY18

Looking ahead to the second half of FY18, the MWRA anticipates awarding several major construction contracts. The largest of these projects are listed below:

Major Planned Construction Contract Awards for Second Half of FY18		
Project	Contract	FY18 Budget in Millions
DI Treatment Plant Asset Protection	HVAC Equipment Replacement Construction	38.8
DI Treatment Plant Asset Protection	Gravity Thickener Rehabilitation	16.9
SEH Redundancy and Storage	Redundancy Pipeline Section 111 Construction 3	10.0
Waterworks Facility Asset Protection	*Steel Tanks Painting at Bellevue II, Turkey Hill, Deer Island	7.0
DI Treatment Plant Asset Protection	Chemical Bulk Storage Tanks Relining	5.0
Residuals Asset Protection	Mechanical Improvements	2.0
Total		\$ 79.7

* Broken out into separate contract from the other steel tanks improvements contract in the FY19 Proposed CIP.

MWRA also anticipates awarding several significant professional services contracts. The largest contracts are listed below:

Major Planned Professional Services Awards for Second Half of FY18		
Project	Contract	FY18 Budget in millions
Wastewater Central Monitoring	Design and Programming Services	3.5
NIH Redundancy and Storage	Section 89 & 29 Replacement Design and Engineering Services During Construction	3.2
DI Treatment Plant Asset Protection	HVAC Equipment Replacement Resident Engineering Inspection	2.0
DI Treatment Plant Asset Protection	Combined Heat and Power Alternatives Study	0.8
Total		\$ 9.5

In the second half of the FY18, MWRA also anticipates substantial completion on major contracts including Northern Intermediate High Section 89 & 29 Redundancy Phase 1B Construction, Clinton Phosphorus Reduction, Alewife Brook Pump Station Rehabilitation, Section 14 Pipeline Relocation (Malden), and Section 80 Replacement Construction.

ATTACHMENTS:

- A. FY18 CIP Variance Explanations through December 2017
- B. FY18 CIP Contract Award Update

ATTACHMENT A
FY18 CIP Variance Explanations through December 2017
(000's)

	FY18 Budget YTD December	FY18 Actuals YTD December	YTD Actuals vs. Budget		Explanations
			\$	%	
Wastewater					
Interception & Pumping (I&P)	\$20,310	\$19,751	(\$559)	-2.8%	<u>Underspending</u> Alewife Brook Pump Station Rehab - Construction: \$2.0M (testing of dry and wet weather bypass pumps delayed) Prison Point Rehab - Design/CA/RI: \$180k (delayed pending out of scope design amendment) Other smaller projects totaling \$77k. <u>Offset Overspending</u> Chelsea Creek Headworks Upgrades - Construction: \$1.3M (contractor progress) Sections 4, 5, 6, 186 - Study: \$212k, (consultant progress) Nut Island Odor Control & HVAC Improvements - Design/CA/REI: \$186k (consultant progress on preliminary design)
Treatment	\$7,166	\$5,327	(\$1,839)	-25.7%	<u>Underspending</u> WTF VFD Replacement - Construction: \$552k (due to lead times on equipment) Digested Sludge Pump Replacement - Phase 2: \$396k and Power System Improvements - Construction: \$288k (for work scheduled for FY18 performed in FY17) Clinton Wastewater Treatment Plant Phosphorus Reduction - Construction: \$296k (up to a six-month time extension due to delays including preliminary testing) Clarifier Rehab Phase 2 - Design: \$185k (delayed pending staff review and comment on 60% design) <u>Offset Overspending</u> Personnel Dock Rehab: \$156k
Residuals	\$128	\$135	\$7	5.4%	
CSO	\$1,458	\$1,309	(\$149)	-10.2%	<u>Underspending</u> Cambridge Sewer Separation: \$198k (pending final cost reconciliation)
Other Wastewater	\$8,672	\$13,320	\$4,648	53.6%	<u>Overspending</u> I/I Local Financial Assistance: \$4.6M (greater than budgeted requests for grants and loans)
Total Wastewater	\$37,734	\$39,842	\$2,108	5.6%	

ATTACHMENT A
FY18 CIP Variance Explanations through December 2017
(000's)

	FY18 Budget YTD December	FY18 Actuals YTD December	YTD Actuals vs. Budget		Explanations
			\$	%	
Waterworks					
Drinking Water Quality Improvements	\$1,712	\$1,970	\$258	15.1%	<u>Overspending</u> CP7 Existing Facilities: \$357k (contractor progress on the Marlborough Maintenance Facility)
Transmission	\$14,305	\$16,792	\$2,487	17.4%	<u>Overspending</u> Wachusett Aqueduct Pump Station - Design/ESDC and Construction: \$1.4M (due to project progress) Watershed Land Acquisition: \$1.3M (timing of land purchases) WASM 3 - MEPA/Design/CA/RI: \$347k (field work scheduled for FY17 performed in FY18) <u>Offset Underspending</u> CVA Motorized Screens Replacement - Construction: \$208k (work scheduled for FY18 performed in FY17) Evaluation of Farm Pond Buildings - Waban Arches: \$141k (project is substantially complete and will be less than budgeted) Comm. Ave. Pump Station Improvements - Design/CA/RI: \$105k (Preliminary Design ran 11 weeks behind schedule. Recovery schedule established to catch up during Final Design phase) Other smaller projects totaling \$106k
Distribution & Pumping	\$20,171	\$24,408	\$4,236	21.0%	<u>Overspending</u> NIH Section 89/29 Redundancy Phase 1C: \$5.7M, SEH Redundancy Pipeline Section 111 Phase 1 - Construction: \$1.8M, and Section 80 Replacement - Construction: \$249k (all due to project progress) <u>Offset Underspending</u> Chestnut Hill Gatehouse No. 1 Repair - Construction: \$1.0M, and SEH Redundancy Pipeline Section 111 Construction 2: \$800k (due to delayed notices-to-proceed) Section 14 Water Pipe Relocation (Malden): \$634k (delay in commencing pipe installation) NIH Redundancy & Storage Easements: \$500k (timing of payment for the meter vault based on MOA with Town of Stoneham) CP3, Sections 23, 24, 47 Rehab - Final Design/CA/RI: \$166k (delay due to coordination of field work to determine pipe condition and establish test pits) NIH Section 89/29 Redundancy Phase 1B Construction: \$100k (work scheduled for FY18 performed in FY17) Other smaller projects totaling \$313k

ATTACHMENT A
FY18 CIP Variance Explanations through December 2017
(000's)

	FY18 Budget YTD December	FY18 Actuals YTD December	YTD Actuals vs. Budget		Explanations
			\$	%	
Other Waterworks	\$4,489	\$5,002	\$513	11.4%	<u>Overspending</u> Local Water System Assistance Program: \$709k (greater than budgeted community requests for loans) <u>Offset Underspending</u> Quabbin Power, Communication & Security - Construction: \$122k (partially due to reimbursement from DCR Office of Watershed Management for work at boat cove)
Total Waterworks	\$40,677	\$48,172	\$7,495	18.4%	
Business & Operations Support					
Total Business & Operations Support	\$2,783	\$1,050	(\$1,733)	-62.3%	<u>Underspending</u> Security Equipment: \$897k (delay in implementing security initiatives) Vehicle Purchases: \$332k (timing of vehicle purchases) MIS Projects: \$218k (timing of IT Strategic Plan implementation) Fish Hatchery Pipeline Hydro: \$129k (timing of final work. Project is substantially complete) Other smaller projects totaling \$157k
Total MWRA	\$81,194	\$89,064	\$7,869	9.7%	

ATTACHMENT B
FY18 PLANNED CAPITAL CONTRACT AWARDS (\$ in Millions)

Project	Contract No.	Subphase	Notice to Proceed	Revised Notice to Proceed	Total Contract Amount	Award Amount	Vendor	Schedule Change Reason Code*
Residuals Asset Protection	7153	Mechanical Improvements	Jul-17	May-18	\$ 2.0			3
DI Treatment Plant Asset Protection	7131	Misc. VFD Replacement Construction	Jul-17	Oct-17	5.3	0.5	U.S. Electrical Services, inc.	1
NHS - Revere & Malden Pipeline Improvements	6957	Sect 14 Water Pipeline Relocate (Malden)	Jul-17	Jul-17	1.3	1.4	Albanese Brothers, Inc.	1
Northern Low Service Rehabilitation Section 8	7540	Sec 57 Water & 21/20/19 Sewer Design/Engineering Services During Construction/Resident Engineer Inspection	Jul-17	Jul-17	5.8	6.0	Weston & Sampson Engineers, Inc.	1
SEH Redundancy & Storage	7504	Redundancy Pipeline Section 111 - Construction 2	Jul-17	Oct-17	15.2	17.2	P. Gioioso and Sons, Inc.	1
Residuals Asset Protection	7151	Sludge Tank & Silo Coating	Aug-17	Sep-17	0.8	0.6	Soep Painting Corp.	1
Applications Improvements Program	7438	Enterprise Content Mgmt	Sep-17	Jul-18	4.0			6
Information Security Program ISP	7440	Electronic Security Plan Implementation	Sep-17	Jan-20	0.5			6
Facility Asset Protection	7237	Headworks Effluent Shaft - Study	Sep-17	Jun-18	0.5			3
Facility Asset Protection	7551	Wiggins Term Pump Station Design	Sep-17	Jul-18	0.5			6
Facility Asset Protection	7553	Fuel Oil Tank Replacement Design	Sep-17	Deleted/Scope moved to another contract	1.5			2
Residuals Asset Protection	7152	Electrical Improvements	Sep-17	Jul-18	2.2			6
Clinton Wastewater Treatment Plant	7450	Clinton Roofing Rehabilitation	Sep-17	May-18	1.2			3
Chestnut Hill Connecting Mains	7382	Chestnut Hill Gatehouse # 1 Repair Construction	Sep-17	Nov-17	1.0	0.8	T Ford Comp.	1
Waterworks Facility Asset Protection	7022	Cosgrove/Gillis Pump Station/Cottage Farm CSO Flat Roof Replacement	Sep-17	Jun-18	0.9			3

ATTACHMENT B
FY18 PLANNED CAPITAL CONTRACT AWARDS (\$ in Millions)

Project	Contract No.	Subphase	Notice to Proceed	Revised Notice to Proceed	Total Contract Amount	Award Amount	Vendor	Schedule Change Reason Code*
CSO Support	7572	CSO Performance Assessment	Oct-17	Nov-17	3.0	2.9	AECOM Technical Services, Inc.	1
Braintree-Weymouth Relief Facilities	7326	Mill Cove Siphon Sluice Gates - Design	Oct-17	Apr-24	0.8			6
Corrosion & Odor Control	7365	NI Mechanical & Electrical Upgrades Design/Construction Administration/Resident Engineering Inspection	Oct-17	Sep-18	1.6			6
Facility Asset Protection	7361	DeLauri Pump Station Screens Gates Valves & Security	Oct-17	Feb-18	1.1			3
DI Treatment Plant Asset Protection	6880	Cathodic Protection - Design/Engineering Services During Construction	Oct-17	Deleted/Scope moved to another contract	1.4			2
DI Treatment Plant Asset Protection	6963	Combined Heat and Power Alternatives Study	Oct-17	Jun-18	0.8			3
DI Treatment Plant Asset Protection	7449	Chemical Bulk Storage Tanks Relining	Oct-17	May-18	5.0			3
NIH Redundancy & Storage	7116	Section 89 & 29 Rehabilitation - Design	Oct-17	May-18	3.2			3
SEH Redundancy & Storage	7505	Redundancy Pipeline Section 111 - Construction 3	Oct-17	Apr-18	10.0			3
Watershed Division Capital Improvements	7569	Quabbin Administration Building Conceptual Design Report	Oct-17	Oct-19	0.2			6
DI Treatment Plant Asset Protection	7167	Gas Protection System Replacement	Nov-17	Jul-18	2.0			6
NHS - Revere & Malden Pipeline Improvements	7485	Sect 53 and 99 Connections-Design Construction Administration/Resident Inspection	Nov-17	Oct-18	5.2			6
Central Monitoring System	7581	CWTP SCADA Upgrades Design Programming Resident Engineering	Nov-17	Aug-18	2.2			6
Facility Asset Protection	7162	Pump Stations & CSOs Condition Assessment	Dec-17	Oct-18	3.3			6
Residuals Asset Protection	7173	Pellet Piping - Relocate	Dec-17	Jul-18	3.0			6

ATTACHMENT B
FY18 PLANNED CAPITAL CONTRACT AWARDS (\$ in Millions)

Project	Contract No.	Subphase	Notice to Proceed	Revised Notice to Proceed	Total Contract Amount	Award Amount	Vendor	Schedule Change Reason Code*
Clinton Wastewater Treatment Plant	7372	Valves & Screw Pumps Replacement	Dec-17	Oct-18	1.5			5
July 2017 - December 2017		31 Contracts Planned			\$ 87.0	\$ 29.5		
Braintree-Weymouth Relief	7435	B/W Improvements - Design/Construction Services/Resident Inspection	Jan-18	Nov-18	0.8			6
Wastewater Central Monitoring	7578	Design & Programming Services	Jan-18	Apr-18	3.5			3
Facility Asset Protection	7515	Interceptor Renewal 5 Milton - Design Construction Administration/Resident Inspection	Jan-18	Dec-18	2.0			6
DI Treatment Plant Asset Protection	7094	HVAC Equipment Replacement Resident Engineering Inspection	Jan-18	May-18	2.0			3
DI Treatment Plant Asset Protection	7110	HVAC Equipment Replacement - Construction	Jan-18	Jun-18	38.8			3
DI Treatment Plant Asset Protection	7126	South System Pump Station VFD Replacement Design/Engineering Services During Construction	Jan-18	Aug-18	4.8			6
South Spine Distribution Mains	7155	Section 22 North - Facility Plan/Environmental Impact Report	Jan-18	Jan-19	1.0			6
Carroll Water Treatment Plant	7543	Technical Assistance 9	Jan-18	Jun-18	0.6			3
Carroll Water Treatment Plant	7544	Technical Assistance 10	Jan-18	Jun-18	0.6			3
Waterworks Facility Asset Protection	6832	Steel Tank/Impr Des CA/RI	Jan-18	Feb-19	3.0			5
Winsor Station Pipeline Improvements	7460	Winsor Power Station Final Design/Construction Administration/Resident Inspection	Jan-18	Jan-22	4.4			6
Watershed Division Capital Improvements	7577	Maintenance Garage/Wash Bay/Storage Building Construction	Jan-18	Jan-18	2.3			3
DI Treatment Plant Asset Protection	6705	Expansion Joint Repair - Construction 3	Mar-18	Sep-18	2.0			6

ATTACHMENT B
FY18 PLANNED CAPITAL CONTRACT AWARDS (\$ in Millions)

Project	Contract No.	Subphase	Notice to Proceed	Revised Notice to Proceed	Total Contract Amount	Award Amount	Vendor	Schedule Change Reason Code*
NHS - Revere & Malden Pipeline Improvements	7536	Sec 56 Pipe Demolition Construction	Mar-18	Jan-19	0.6			6
Metro Tunnel Redundancy	7159	Conceptual Design Engineering Impact Report	Mar-18	Oct-18	7.5			5
DI Treatment Plant Asset Protection	6723	Eastern Seawall Design/Engineering Services During Construction/Resident Engineering Inspection	Apr-18	Apr-19	0.7			6
DI Treatment Plant Asset Protection	7428	Gravity Thickener Rehabilitation	Apr-18	Jun-18	16.9			3
NHS - Revere & Malden Pipeline Improvements	7454	Section 56 Replacement/Saugus Design Construction Administration/Resident Inspection	Apr-18	Jan-19	2.0			6
New Connect Mains-Shaft 7 to WASM 3	6955	Replacement Section 25, 75, 59 & 60 Design Construction Administration/Resident Inspection	Apr-18	Oct-18	3.0			5
Wastewater Central Monitoring	7580	Equipment/Hardware	Apr-18	Apr-18	2.1			3
Metropolitan Redundancy Interim Improvements	7560	Tops of Shafts Design/Construction Administration/Resident Inspection	Apr-18	Oct-18	1.6			6
DI Treatment Plant Asset Protection	7395	Clarifier Rehabilitation Phase 2 - Construction	Jun-18	Nov-18	100.0			6
Sudbury/Weston Aqueduct Repairs	7491	Weston Aqueduct Sluice Gates - Design	Jun-18	Sep-18	0.4			5
January 2018 - June 2018		23 Contracts Planned			\$ 200.4	\$ -		
Total FY18		54 Contract Awards Planned			\$ 287.5			

Unplanned Awards

Residuals Asset Protection	7153A	Mechanical Improvements		Sep-17		\$ 0.1	IPC Lydon, LLC	1
Total Unplanned Awards						\$ 0.1		

Total Awards July 2017-December 2017 8 contracts awarded

\$ 29.6

ATTACHMENT B
FY18 PLANNED CAPITAL CONTRACT AWARDS (\$ in Millions)

*** Reason Codes:**


1. NTP issued in first half of FY18.
2. Project/Phase eliminated or being performed in-house; or phase completed but on hold.
3. NTP expected January 2018 - June 2018.
4. Schedule change due to permitting.
5. Scope changes.
6. Changes in priorities.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 17, 2018
SUBJECT: Memorandum of Agreement with the Massachusetts Historical Commission and the Southborough Historical Commission for Demolition of the Oren Nichols Historical Properties

COMMITTEE: Administration, Finance & Audit

INFORMATION
X VOTE


Marianne Connolly, Sr. Program Manager
Preparer/Title

Sean Navin 
Director, Intergovernmental Affairs

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute a Memorandum of Agreement with the Massachusetts Historical Commission and the Southborough Historical Commission, substantially in the form attached, to demolish the Oren Nichols House, barn and office storage building at MWRA's Western Operations Headquarters in Southborough.

BACKGROUND:

The 147-year old Oren Nichols House (aka the DeClinton Nichols House and/or the Dam Attendant's House) was built in 1870 and later moved in 1899 to the current location near the Sudbury Dam as part of the real estate taking process for the Sudbury Reservoir and Dam construction and used by the former Metropolitan District Commission. MWRA has never used the buildings for operational purposes, nor does MWRA foresee any use for the structures. The House and adjacent structures are listed on the State and National Historic Registers as contributing elements of the Sudbury Dam Historic District.

In May 2006, staff submitted a Project Notification Form (PNF) to the Massachusetts Historical Commission (MHC) requesting permission to demolish and remove the structures because they did not serve a water supply purpose and were in such disrepair that restoration was cost prohibitive. In response to the 2006 PNF, pursuant to 950 CMR 71.05 (a), MHC determined that the proposed project will have an "adverse effect" on the Sudbury Dam Historic District through the destruction of these buildings and directed MWRA to work with stakeholders from Southborough to seek ways to eliminate, minimize



Oren Nichols House

or mitigate the adverse effect of the project. At that time, MWRA learned of interest from local interested parties to acquire and convert the building/s into an American History Museum and began to work with the Southborough Museum Group and the local legislative delegation to advance a museum/archival facility proposal.

DISCUSSION:

On June 24, 2009, staff provided an overview to the Board of Directors of a formal Proposal from the Stony Brook Museum Group to utilize the buildings and land for the museum/archival facility.

The consensus of the Board was to advise the Museum Group that it could have the subject buildings for a nominal fee if they were able to move the buildings elsewhere off of the site, or otherwise they would be demolished as planned. At the April 14, 2010 Board meeting, Representatives Danielle Gregoire and Carolyn Dykema asked that MWRA explore the possibility of providing an area near the edge of the property to relocate the structures for the museum much further away from the sensitive location next to the Dam due to the difficulty in finding an alternative Southborough site. The Board agreed to have MWRA staff survey the area, and, if feasible, offer this land to the Museum Group and begin the process to prepare a Memorandum of Understanding that would outline parameters to allow the building/s to be moved and to advance the Museum Proposal.

Since that time, staff have learned from the Town of Southborough Historical Commission and the Southborough Historical Society that the Proponents for the Museum are no longer interested in pursuing the project. In addition, pursuant to 527 CMR 10.13.5.1 – 10.13.5.5: Fire Prevention, General Provisions of the State Fire Code, all the buildings were posted as “unsafe” by the Southborough Fire Department.



Barn behind the Oren Nichols House



Office Storage Building

Staff once again sought approval from MHC to demolish these structures and a formal request was submitted in November 2017. In December 2017, MHC accepted the “adverse effect” finding and proposed the development of a Memorandum of Agreement to resolve the adverse effects. The agreement requires that MWRA provide an interpretive sign adjacent to the structures near a future walking trail proposed by the Town of Southborough. If, prior to demolition, the Southborough Historical Commission wishes to repurpose any items found within the properties for Southborough historical purposes, MWRA will work with the demolition contractor to remove such items, if feasible, for the Southborough Historical Commission.

The Southborough Fire Department had expressed some interest in utilizing the structures for training evolutions prior to demolition. Staff expect to hear back in early January. Regardless, MWRA will need to proceed with the demolition and removal of the buildings.

BUDGET/FISCAL IMPACT:

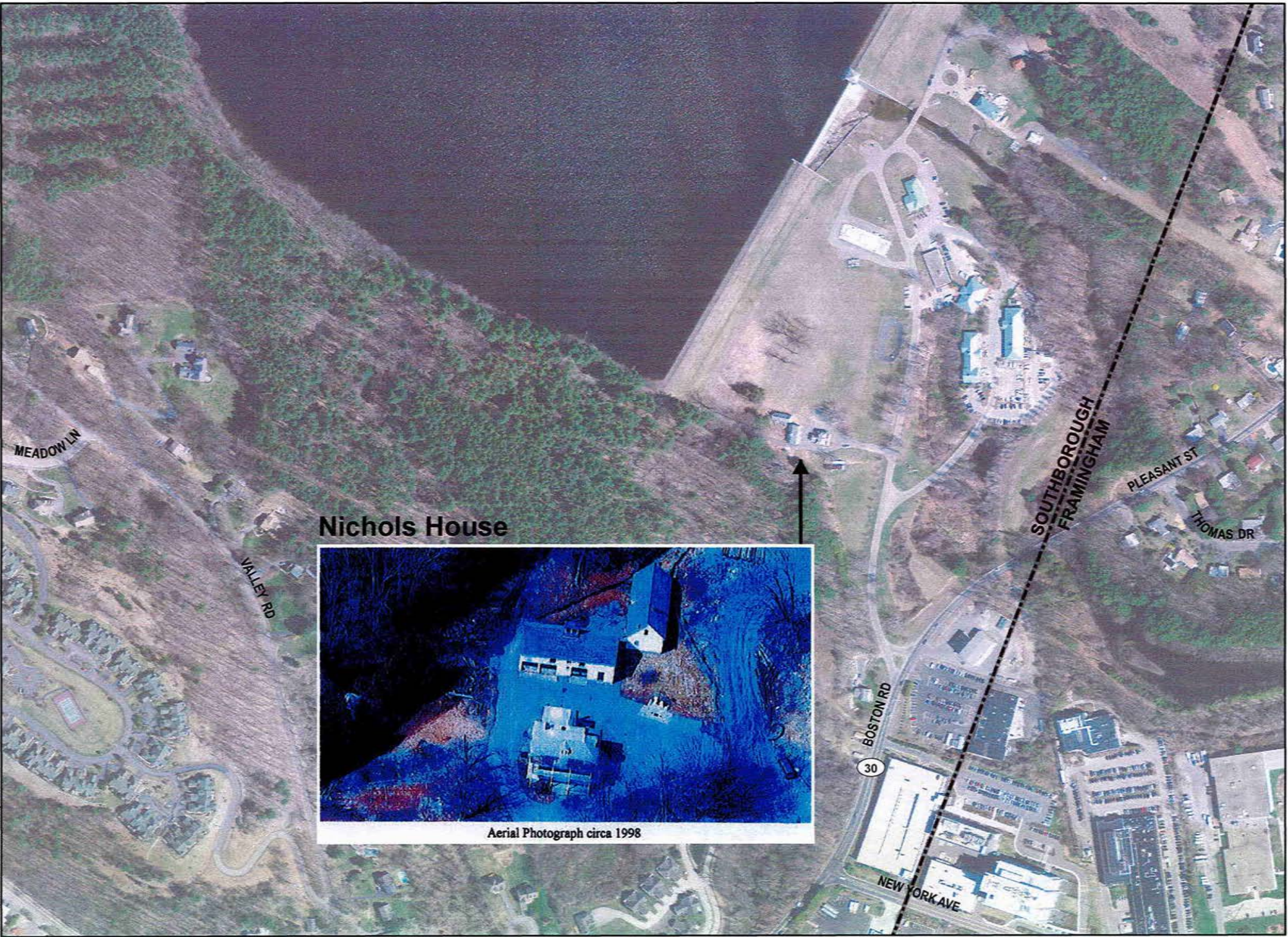
Any professional services required will be handled under a task order through one of MWRA's as-needed technical assistance contracts and the demolition work will be bid pursuant to the bid laws.

ATTACHMENTS:

Project Location Map

MHC approval letter dated December 12, 2017

Memorandum of Agreement between MHC and the Southborough Historical Commission



Nichols House



Aerial Photograph circa 1998

0 200 400 800 Feet



The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

December 12, 2017

Marianne Connolly
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

RE: Demolition of the Oren Nichols House, Barn and Office/Storage Building, Southborough, MA; MHC# RC.39835

Dear Ms. Connolly:

Staff of the Massachusetts Historical Commission (MHC) have reviewed the information that was submitted, received at this office on November 1, 2017, November 20, 2017, and December 11, 2017, for the project referenced above.

The proposed project involves the demolition of the Oren Nichols house, barn, and office/storage building. These buildings are located at MWRA's existing Southborough Headquarters on Route 30. The buildings had previously been in the control of the Metropolitan District Commission (now the Department of Conservation and Recreation) when the MWRA acquired them in 2004.

The Oren Nichols house (SBR.257), barn (SBR.667), and office/storage building (SBR.668) are listed in the State and National Registers of Historic Places as contributing elements of the Sudbury Dam Historic District (SBR.F).


Demolition of the Oren Nichols house, barn, and office storage building constitutes an "adverse effect" (950 CMR 71.05(a) and 950 CMR 71.07 (2)(b)(3)) through the destruction or alteration of all or part of a State Register listed property. Pursuant to 950 CMR 71.07(3), the MHC initiated consultation and requested that the MWRA explore alternatives that would eliminate, minimize, or mitigate the adverse effect of the proposed demolition in a letter dated June 9, 2006.

The MHC understands that the MWRA worked closely with the Stony Brook Museum Development Committee and the Town of Southborough to explore the moving and reuse of the buildings into a museum. The proponents of the museum are no longer pursuing the project. The MHC also understands that the buildings are in a very deteriorated state.

The MHC accepts the adverse effect and proposes the development of a Memorandum of Agreement (MOA) in order to resolve the adverse effects.

These comments are offered to assist in compliance with M.G.L. Chapter 9, sections 26-27C (950 CMR 71.00). Please do not hesitate to contact Elizabeth Sherva of my staff if you have any questions.

Sincerely,


for Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

Enclosure

xc: Joseph Hubley, Chairman, Southborough Historical Commission

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

**MEMORANDUM OF AGREEMENT
BETWEEN
MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE MASSACHUSETTS HISTORICAL COMMISSION**

WHEREAS, the Massachusetts Water Resources Authority (MWRA) proposes to demolish the Oren Nichols house, barn, and office/storage building; and

WHEREAS, the Oren Nichols house (SBR.257), barn (SBR.667), and office/storage building (SBR.668) are listed in the State Register of Historic Places as contributing elements of the Sudbury Dam Historic District (SBR.F); and

WHEREAS, the Massachusetts Historical Commission (MHC) has determined that the proposed demolition of the Oren Nichols house, barn, and office/storage building will have an "adverse effect" on the Sudbury Dam Historic District pursuant to 950 CMR 71.05(a); and

WHEREAS, the MWRA has consulted with the MHC pursuant to the provisions of 950 CMR 71.00, regulations implementing Massachusetts General Laws, Chapter 9 Sections 26-27C, as amended by Chapter 254 of the Acts of 1988; and

WHEREAS, no feasible or prudent alternative to demolition of the Oren Nichols house, barn, and office/storage building exists that would otherwise avoid or minimize the adverse effect of the project; and

NOW THEREFORE, the MHC and MWRA, and the Southborough Historical Commission (SHC) hereby concurs, that the project shall be undertaken and implemented in accordance with the following stipulations to mitigate the effects of the demolitions on the Sudbury Dam Historic District in compliance with M.G.L. Chapter 9, Section 27C.

STIPULATIONS

MWRA shall ensure that the following measures are carried out in coordination with MHC and SHC, as set forth below:

1. INTERPRETIVE SIGNAGE

MWRA will ensure that one interpretive panel is designed, fabricated, and installed on site adjacent to the proposed trail. MWRA will provide a draft panel with language and photographs to the Southborough Historical Commission for review and comment.

2. ARCHITECTURAL SALVAGE AND REPURPOSE

If prior to demolition, the Southborough Historical Commission wishes to repurpose any items found within the properties for Southborough historical purposes, if feasible, MWRA will work with the demolition contractor to remove such items for the Southborough Historical Commission.

3. MODIFICATIONS

Any party to this MOA may request that it be amended or modified whereupon the parties will consult in accordance with 950 CMR 71.00 to consider such amendment or modification

CONSULTING PARTIES:

MASSACHUSETTS WATER RESOURCES AUTHORITY

By: _____ Date: _____

Name:

Title:

MASSACHUSETTS HISTORICAL COMMISSION

By: _____ Date: _____

Name: Brona Simon

Title: Executive Director

CONCURRING PARTIES:

SOUTHBORBOUGH HISTORICAL COMMISSION

By: _____ Date: _____

Name:

Title:

STAFF SUMMARY

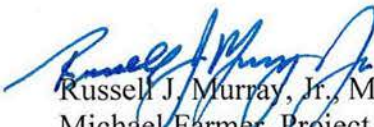
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 17, 2018
SUBJECT: Maximo Upgrade Project
SHI International Corp. and
Total Resources Management, Inc.
Contract 7287, Amendment 2



COMMITTEE: Administration, Finance & Audit

 INFORMATION

 X VOTE



Russell J. Murray, Jr., MIS Director
Michael Farmer, Project Manager
Preparer/Title



Michele S. Gillen
Director of Administration

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to Contract 7287 with SHI International Corp. and Total Resources Management, Inc. to extend the current contract term by 328 days from February 4, 2018 to December 28, 2018 with no increase in contract price.

DISCUSSION:

Contract 7287 was approved by the Board of Directors on May 13, 2015, in an amount not to exceed \$2,625,904, for a term of 26 months, to provide an upgrade to MWRA's existing computerized maintenance management system, Maximo. The project includes upgrading Maximo to the latest software version; installing additional add-on modules such as Spatial Asset Management and Maximo Anywhere; incorporating a variety of disparate MWRA asset databases; and replacing the existing MIS helpdesk with Maximo Control Desk. Spatial Asset Management allows MWRA users to view complex GIS information and provides them with a geospatial context for work and assets. MWRA's Planners and Schedulers are now able to create routes based on the work order locations so that staff time can be used more efficiently. Maximo Anywhere provides authorized field staff remote access from mobile devices to directly access and update Maximo work order information, eliminating the need for paper work orders. Control Desk integrates all IT assets onto one platform. It also provides an optimized and automated end-to-end IT service management solution, based on industry-best practices.

The update of the existing system and the installation and implementation of Spatial and Anywhere was substantially complete as of May 2017 and is currently being utilized by Operations staff. After the installation of Spatial and Anywhere, staff learned that Total Resources Management failed to install Control Desk in the proper sequence. Control Desk should have been installed prior to the installation of the Spatial and Anywhere add-on modules. Demand was made on Total Resources Management to perform all work necessary to install Control Desk properly, at no

additional cost to the Authority. Total Resources Management acknowledged responsibility to properly install Control Desk and incorporate it into the Maximo system.

Additional time was required to properly sequence and install Control Desk, migrate data and redeploy the add-on modules to production. In September 2017, the Executive Director approved Amendment 1, under delegated authority, to extend Contract 7287 180 days, to February 3, 2018, with no increase in contract price. Amendment 1 also authorized the reallocation of \$109,222.56 of the unexpended funds associated with certain work found to have little value that was deleted from the contract. The funds were reallocated to the allowance for Special Support Services which provides for enhancements and additional features not included in the original scope of work such as loading assets from the Clinton Water Treatment Plant, e-forms and customizing mobile forms for recording field inspection results.

This Amendment

The work to correct the installation sequencing and redeploy the upgraded system has taken longer than anticipated and is scheduled to be complete as of January 22, 2018. Staff anticipate that, minimally, an additional 140 days will be required to properly configure, test and deploy Control Desk. In addition, the contract calls a 90 days warranty period and staff anticipate Special Support Services allowance tasks to add an additional 98 days.

For the reasons set forth above, staff request that Contract 7287 be amended to extend the term 328 days, from February 4, 2018 to December 28, 2018 with no increase in contract price.

CONTRACT SUMMARY:

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Original Contract	\$2,625,904	792 Days	06/08/2015
Amendment 1*	\$0	180 Days	09/08/2017
Proposed Amendment 2	<u>\$0</u>	<u>328 Days</u>	Pending
Adjusted Contract	\$2,625,904	1,300 Days	

*Approved under delegated authority

BUDGET/FISCAL IMPACT:

Sufficient funds are included in the FY18 and FY19 Capital Improvement Program under Application Improvement Project 7287. This is a time extension with no change in the overall contract cost.

MBE/WBE PARTICIPATION:

Although there were no M/WBE participation goals for this Contract, SHI International Corp. is a certified Minority-Owned Business.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

Chair: P. Flanagan
Vice-Chair: J. Walsh
Committee Members:
A. Blackmon
J. Carroll
J. Foti
A. Pappastergion
B. Peña
H. Vitale

to be held on

Wednesday, January 17, 2018

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following AF&A Comm.

AGENDA

A. Contract Awards

1. DeLauri Pumping Station Bar Screen Replacement and Security Upgrades:
Daniel O'Connell's Sons, Inc., Contract 7361

B. Contract Amendments/Change Orders

1. Prison Point CSO Facility Improvements Design, CA/RE Services: Arcadis
U.S., Inc., Contract 7359, Amendment 1
2. Alewife Brook Pump Station Rehabilitation: Stantec Consulting Services, Inc.,
Contract 7034, Amendment 4
3. Chelsea Creek Headworks Upgrade: BHD/BEC 2015, A Joint Venture,
Contract 7161, Change Order 7

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Wastewater Policy and Oversight Committee

November 15, 2017

A meeting of the Wastewater Policy and Oversight Committee was held on November 15, 2017 at the Authority headquarters in Charlestown. Chairman Flanagan presided. Present from the Board were Ms. Wolowicz and Messrs. Blackmon, Carroll, Foti, Pappastergion, Peña, Vitale and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Mike Hornbrook, David Parker, Nava Navanandan, Milan Horbaczewski, and Bonnie Hale. The meeting was called to order at 11:35 a.m.

Information

Progress of Cambridge-Implemented CSO Projects and Projected Financial Assistance through June 2018

Staff provided a status update.

Approvals

*Approval of New Member of the Wastewater Advisory Committee

The Committee recommended approval of the appointment of Mr. Philip G. Ashcroft to the Wastewater Advisory Committee (ref. agenda item B.1).

Contract Awards

*Supply and Delivery of Ferrous Chloride to Deer Island Treatment Plant: Kemira Water Solutions, Inc., Bid WRA-4425

The Committee recommended approval of the contract award (ref. agenda item C.1).

Contract Amendments/Change Orders

*Clinton Wastewater Treatment Plant Phosphorus Reduction Design, Construction Administration and Resident Engineering Services: Stantec Consulting Services, Inc., Contract 7377, Amendment 4

Staff gave a presentation and summarized the reasons for the amendment. There was general discussion and question and answer. The Committee recommended approval of Amendment 4 (ref. agenda item C.1).

The meeting adjourned at 11:50 a.m.

* Approved as recommended at November 15, 2017 Board of Directors meeting.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director *F. A. Laskey*
DATE: January 17, 2018
SUBJECT: DeLauri Pumping Station Bar Screens Replacement and Security Upgrades
Daniel O'Connell's Sons, Inc.
Contract 7361

COMMITTEE: Wastewater Policy & Oversight

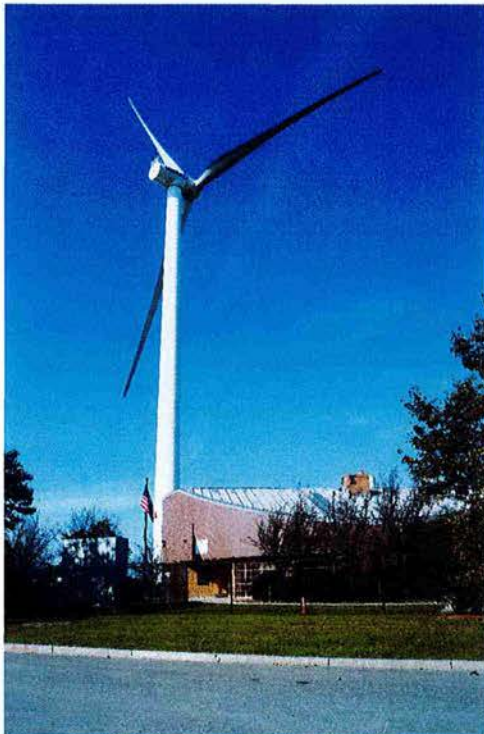
INFORMATION
 VOTE

Jenna S. Silva, Sr. Staff Engineer, Mechanical
A. Navanandan P.E., Chief Engineer
Preparer/Title

Michele S. Gillen
Michele S. Gillen, Director
Director of Administration
Michael J. Hornbrook
Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the award of Contract 7361, DeLauri Pumping Station Bar Screens Replacement and Security Upgrades, to the lowest responsible and eligible bidder, Daniel O'Connell's Sons, Inc. and authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$1,330,000, for a contract term of 365 days from the Notice to Proceed.



Street View DeLauri Pump Station

DISCUSSION:

Construction of MWRA's DeLauri Pumping Station was completed in 1993. The 25-year old facility is located off Alford Street (Route 99) in Charlestown. The facility receives combined sewer flows from Cambridge, Boston and Somerville and can pump over 100-mgd to the Chelsea Headworks during wet weather.

The two existing 93-mgd catenary screens are part of the facility's original equipment. After 25 years of operation, the screens have considerable wear, require frequent maintenance, and are past their useful life.



Broken and Corroded Bars

The catenary screens' steel supports that provide alignment are corroded, the screening bars are damaged and heavily corroded and have broken off the screens at several locations. Additionally, the screen gearbox requires replacement due to frequent failures.

Contract 7361 includes replacing the two catenary bar screens and associated local controls, motors and sensors and upgrading the station's security system.

The security upgrades will add entry door card readers, motion sensors, and door switches to bring the facility's security system up to MWRA's current security standards.

Procurement Process

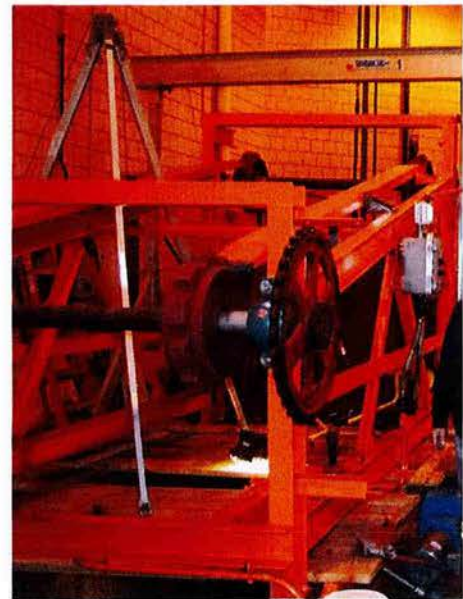
Contract 7361 was advertised in Central Register, the Boston Herald, El Mundo Banner Publication and COMMBUYS and bid in accordance with Chapter 149 of Massachusetts General Laws.

On October 18, 2017, a pre-bid conference was held and, on December 27, 2017, two bids were opened with the following results:

<u>Bidders</u>	<u>Bid Amount</u>
Daniel O'Connell's Sons, Inc.	\$1,330,000.00
<i>Engineer's Estimate</i>	<i>\$1,430,000.00</i>
WES Construction Corp	\$2,123,000.00

Daniel O'Connell's Sons bid is 7.5% lower than the Engineer's Estimate prepared by Hazen and Sawyer prior to the bid opening. Staff reviewed the bid and qualifications of Daniel O'Connell's Sons and spoke with the company's representative.

Daniel O'Connell's Sons has demonstrated a complete and thorough understanding of the project work. References were checked and found to be favorable, including favorable responses relative to a project at MWRA's Clinton Wastewater Treatment Plant, where Daniel O'Connell's Sons recently performed \$7.3 million of general contracting work.



Catenary Bar Screens

Staff have determined Daniel O'Connell's Sons possesses the skill, ability, and integrity necessary to perform the work under this contract and can perform the work for the price bid, which is reasonable and includes the payment of prevailing wages. Therefore, staff recommend the award of Contract 7361 to Daniel O'Connell's Sons, Inc. as the lowest responsible and eligible bidder.


BUDGET/FISCAL IMPACT:

The FY18 CIP includes a budget of \$1,078,570 for Contract 7361. The contract award amount is \$1,330,000.00, or \$251,430 over budget. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

There are no MBE/WBE participation requirements established for this contract due to limited opportunities for subcontracting.

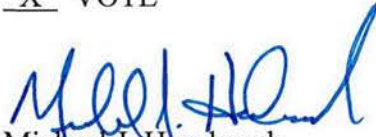
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 17, 2018
SUBJECT: Prison Point CSO Facility Improvements, Design, Construction Administration and Resident Engineering Services
Arcadis U.S., Inc.
Contract 7359, Amendment 1

COMMITTEE: Wastewater Policy & Oversight

INFORMATION
 VOTE

Andrea K. Adams, P.E., Project Manager
A. Navanandan, P.E., Chief Engineer
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 7359, Prison Point CSO Facility Improvements Design, Construction Administration and Resident Engineering Services with Arcadis U.S., Inc. to increase the contract amount by \$302,189 from \$2,838,370 to \$3,140,559, and increase the contract term by three months, from August 11, 2021 to November 11, 2021.

DISCUSSION:

The Prison Point CSO Facility in Cambridge, came on-line in 1981. It provides screening and pumping of dry weather wastewater flows from portions of Cambridge and Boston to the Charlestown Branch Sewer. During wet weather, the facility provides screening, chlorination, detention and dechlorination of combined sewer flows from Cambridge, Boston and Somerville.

On July 13, 2016, the Board approved the award of Contract 7359 to Arcadis, U.S., Inc. in an amount not to exceed \$2,838,370, for a term of 60 months for design, construction administration and resident engineering services for the Prison Point CSO Facility Improvements project.

This project includes replacement of dry and wet weather mechanical bar screens, screenings conveyor system, grinder, influent and effluent sluice gates, several chemical feed and sampling



Prison Point CSO Facility – Main Building

pumps, diesel engines driving the wet weather pumps; replacement of the underground fuel storage tank, five chemical tanks and two chemical waste tanks; installation of chemical induction units and additional sample lines; security updates; SCADA system upgrades; structural modifications including concrete repairs throughout the facility; and electrical and HVAC improvements.

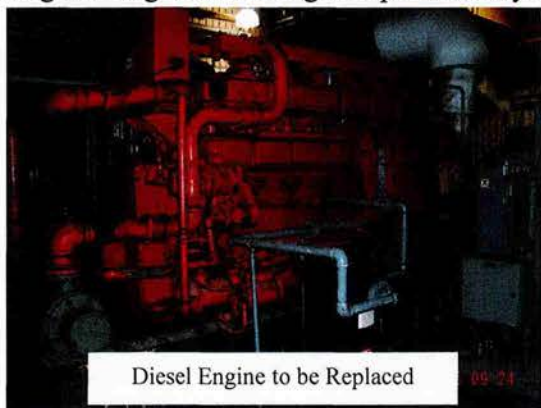
This Amendment:

Arcadis has completed the Preliminary Design Report for the project, and recommends several out of scope improvements to the design. Staff have reviewed the recommendations and agrees to the following design improvements and continued related services as described below.

Amendment 1 will increase the contract amount by \$302,189 from \$2,838,370 to \$3,140,559, extend the contract term by three-months from August 11, 2021 to November 11, 2021, and includes the following:

Two Additional Diesel Engines for Storm Pumps \$105,000

The contract included designing the replacement of two of the four existing diesel engines. Staff intended to use the spare parts from the replacement diesel engines for the remaining two original engines. During the preliminary design effort, further evaluation of the existing engine conditions, availability of additional spare parts and consideration of the criticality of engine operation has led to the recommendation to replace all four engines.



The engine manufacturer, Waukesha, has stopped manufacturing diesel engines and engine parts. Through its investigation, Arcadis has determined that critical components will become obsolete and will not be available in the coming years. The installation of four new engines will ensure reliable operations and maintenance of these critical engines.

Automatic Transfer Switch and Standby Generator \$45,100

A load analysis performed during preliminary design showed that the existing 410kVA standby generator will have insufficient capacity to accommodate new and updated equipment. A larger generator must be designed for the additional load for hydraulically operated bars screens and conveyors being changed to electric operators. New chemical induction units and sampling pumps are being added. The generator size increase requires a larger automatic transfer switch.

Lining of Discharge Pipe \$45,000

Interior lining of the wet weather discharge piping was originally part of Contract 7459, Suction and Discharge Pipe Rehabilitation at Prison Point CSO Facility; however, the work was removed from the contract (and a credit for this work was provided) due to the limited access to install the liner and time restrictions to perform the work between station activation during storm events. Protective lining of the discharge piping will now be included in this project. Additional design

services will include review of the previously designed lining, design of a new manway to permit greater access into the piping, and preparation of specifications and drawings to complete this work.

Final Design of Electrical Room \$28,064

It is recommended that the electrical room be moved from its current space-limited location to an available storage room. All new electrical equipment (MCC, transformer, ATS, switchgear) and cabling/conduit will be installed in the storage room. This approach will limit electrical outages, reduce temporary power needs and sequencing issues during construction and will allow replacement of obsolete and/or old electrical equipment while the existing electrical room remains in service.

MA Building Code 9th Edition Review \$23,500

The Preliminary Design Report was prepared in accordance with the 8th Edition of the Massachusetts Building Code. The 8th Edition was revised and the 9th Edition of the Massachusetts Building Code went into effect as of October 2017, after the PDR was complete. The 9th Edition of the Code will be reviewed against the proposed design to identify and incorporate any changes required.

Lightning Protection \$19,900

The contract includes designing the removal and replacement of the roofing system on the Chemical Building. Roof removal is required to accommodate replacement of the chemical tanks resulting in demolition of the 17-year-old existing lightning protection system. Therefore, the lightning protection system must be included in the final design.

Project Administration \$16,500

Project administration for a three-month extension of the contract associated with design of the additional out of scope items is included in Amendment 1.

Bidding Services \$13,000

The increase in equipment design and integration for the automatic transfer switch, generator, control panel, lightning protection system, sewer force main lining system and manway installation for access will require increased level of effort to respond to bidder's questions and address addenda for the revised scope.

Construction Administration and Resident Engineering Services Escalation \$6,125

The labor rate escalation for construction administration services and resident engineering services to be performed three months later than anticipated is included in Amendment 1.

CONTRACT SUMMARY:

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Contract Amount:	\$2,838,370	1,825 days	9/1/16
Proposed Amendment 1:	<u>\$302,189</u>	<u>93 days</u>	Pending
Adjusted Contract Amount:	\$3,140,559	1,918 days	

Amendment 1 increases the total contract amount by 10.6%.

BUDGET/FISCAL IMPACT:

The FY18 CIP includes a budget of \$2,838,370 for Contract 7359. Including this amendment in the amount of \$302,189 the adjusted contract total will be \$3,140,559 or \$302,189 over budget. This amount will be covered within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

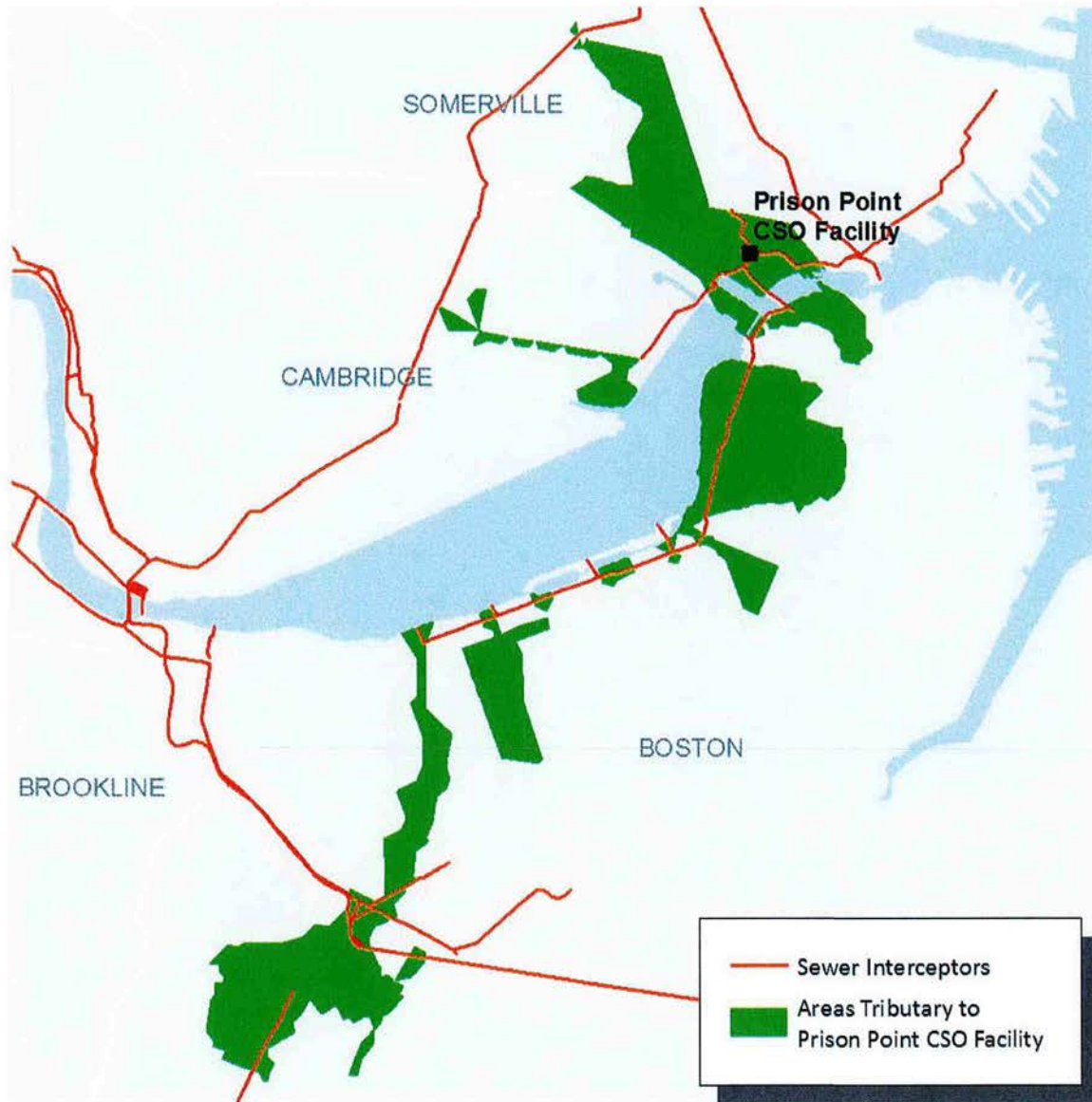
The minimum MBE and WBE participation requirements for this contract are 15% and 5.77%, respectively, and will be unchanged by this amendment.

ATTACHMENT:

Attachment A – Tributary Area Map of Prison Point CSO Facility

Attachment A

Tributary Area Map of Prison Point CSO Facility



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 17, 2018
SUBJECT: Alewife Brook Pump Station Rehabilitation
Stantec Consulting Services, Inc.
Contract 7034, Amendment 4




COMMITTEE: Wastewater Policy & Oversight

 INFORMATION

 X VOTE

A. Navanandan, P.E., Chief Engineer
David K. Pottle, P.E., Program Manager
Preparer/Title

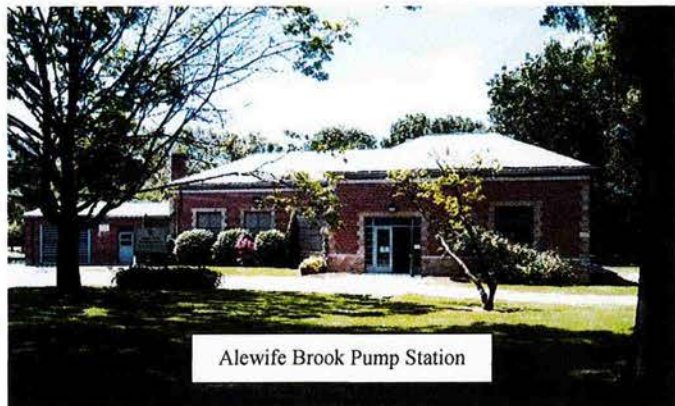

Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 4 to Contract 7034, Alewife Brook Pump Station Rehabilitation, with Stantec Consulting Services, Inc., to increase the contract amount by \$195,495.57 from \$1,908,291.63 to \$2,103,787.20, and increase the contract term by 194 days from May 17, 2019 to November 27, 2019.

BACKGROUND:

Constructed in 1951, the Alewife Brook Pump Station in Somerville (shown on the right) receives wastewater from portions of Arlington, Belmont, Cambridge, Medford, and Somerville. All flow is pumped to the North Metropolitan and North Metropolitan Relief Sewers, and ultimately conveyed to Deer Island for treatment.



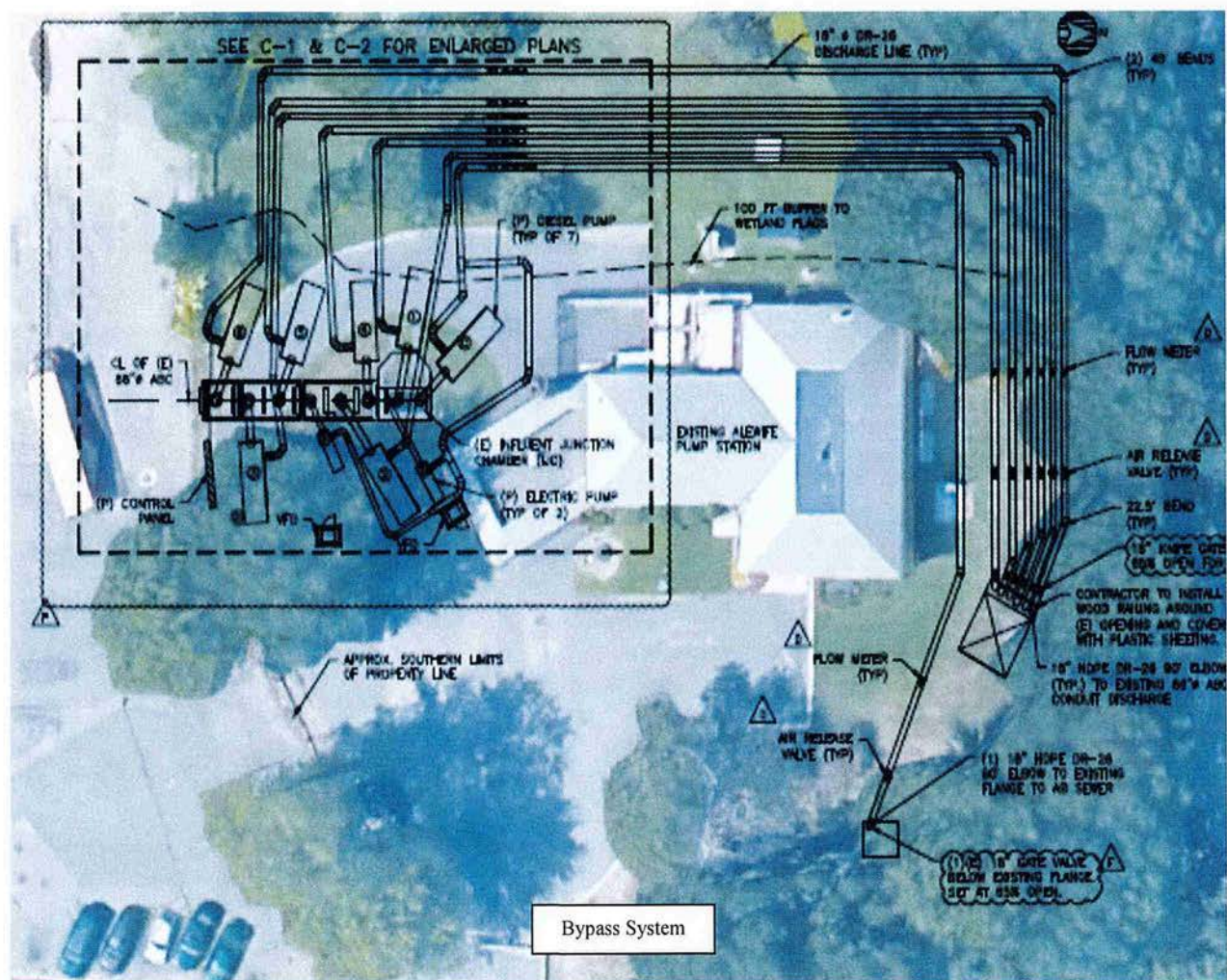
On February 15, 2012, the Board approved the award of Contract 7034 in an amount not to exceed \$1,558,446.39, for a term of 1,703 calendar days for final design, and construction administration and resident engineering services for the Alewife Brook Pump Station Rehabilitation project.¹ The project includes: replacement of wet-weather pumps, motors, gear drives, variable frequency drives, motor control center, influent screens, sluice gates, standby generator, roof, programmable logic controller, and air handling and air conditioning units; remediation of PCB-containing paints;

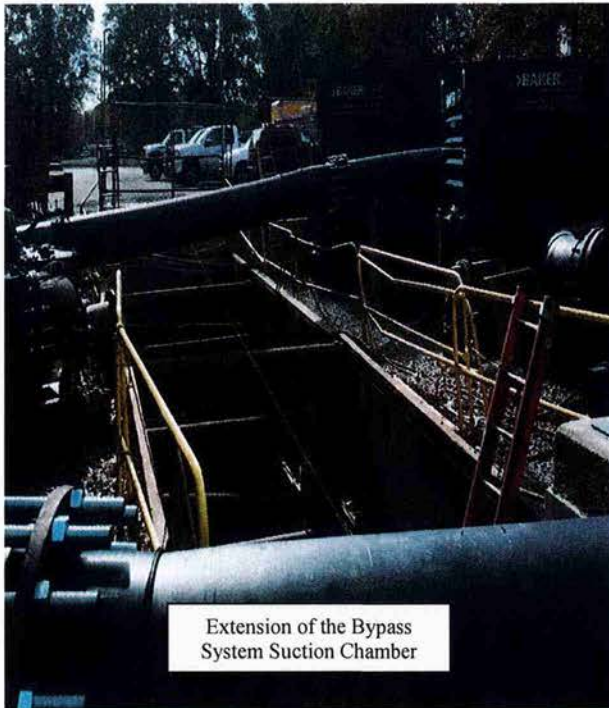
¹ Contract 7034 was awarded to Fay, Spofford & Thorndike, LLC. On October 31, 2015 all assets and liabilities of FST were transferred to Stantec Consulting Services, Inc. Contract 7034 was assigned from FST to Stantec by vote of the Board of Directors on February 10, 2016.

remediation of asbestos-containing roofing and insulation materials; installation of a flow meter on the 66-inch downstream Alewife Brook Conduit; flood control measures; and energy efficiency improvements.

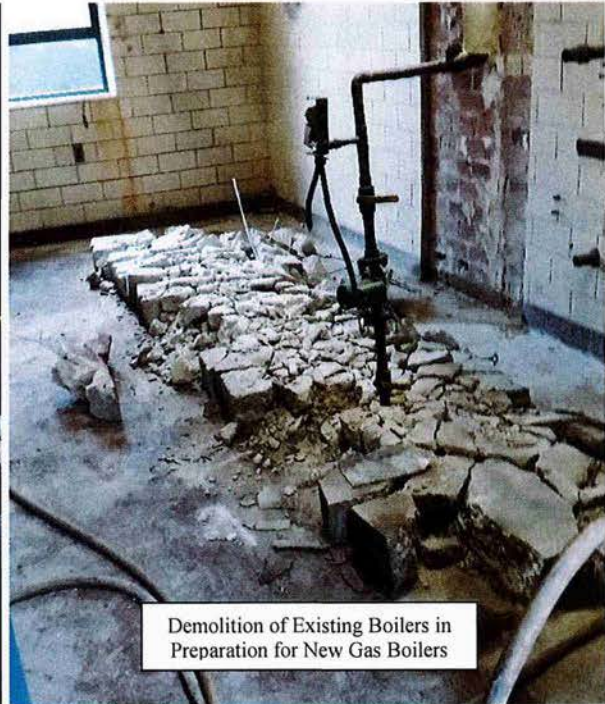
On November 18, 2015 the Board approved the award of Contract 6797 to Barletta Engineering Corporation for construction of the improvements. The Notice to Proceed for construction was issued on January 29, 2016 and Substantial Completion is to be achieved by November 27, 2018.

Construction work is approximately 31% complete. The work performed to date includes installation of flood protection measures, installation of the bypass pumping system including the discharge vault, pumps, piping and valves, modifications to the bypass system suction chamber and piping, installation of the new gas service, demolition of existing heating equipment, and PCB remediation of the storage room and a portion of the pump room.





Extension of the Bypass System Suction Chamber



Demolition of Existing Boilers in Preparation for New Gas Boilers

DISCUSSION:

Amendment 1 increased the contract amount by \$181,274.24 and extended the term by 182 days for: additional design services for flood protection measures, replacement of the programmable logic controller, energy efficiency improvements and modifications to the generator exhaust and chimney; review of additional contractor submittals; preparation of additional record drawings; and additional project administration services associated with the extended term. Amendment 2 increased the contract amount by \$73,305 and extended the term by 748 days for: additional review, comments and revisions of construction documents associated with the added design work; bid protest assistance services; additional design services to account for statutory and regulatory changes; building permit assistance services; and additional project administration services and hourly rate escalation associated with the extended term. Amendment 3 increased the contract amount by \$95,266 with no increase in contract term for additional contractor submittal review services.

This Amendment

Amendment 4 will increase the contract amount by \$195,495 from \$1,908,291.63 to \$2,103,787.20, and increase the contract term by 194 days from May 17, 2019 to November 27, 2019.

Additional Contract Time

194 days

Contract 7034 provides construction administration and resident engineering services for oversight of Construction Contract 6797. This professional services contract, Contract 7034, currently expires on May 17, 2019. The Substantial Completion date for Construction Contract 6797 is November 27, 2018, with the one-year warranty period extending through November 27, 2019. If

approved, Amendment 4 will extend the professional services contract by 194 calendar days to align it with the expiration of the construction contract's warranty period.

Indirect Cost Rate Changes and Hourly Rate Escalation \$125,949.78

If approved, Amendment 4 provides funding for hourly rate escalation for construction administration and resident engineering services to be performed 194 days later than anticipated due to the contract extension. In addition, Contract 7034 caps the office and field overhead rates through the original contract term. Those rates will be increased to Stantec's current rates for services performed after May 27, 2018 through the extension period of November 27, 2019.

Additional Contract Administration Services \$39,545.79

Additional contract administration and management services, including management of subconsultants, on-site meetings and inspections, progress, accrual, and M/WBE reporting, and invoicing, will be performed throughout the extended six-month construction period.

Additional Hazardous Materials Abatement Oversight Services \$20,000.00

Contract 7034 includes an allowance of \$40,000 for inspections, sampling, laboratory testing, documenting and reporting on abatement of hazardous materials. This amount, established by the Authority, will not be sufficient to complete required services. To date, approximately \$9,500 has been spent for abatement oversight services. Approximately 20% of the abatement work is complete. Significant abatement activities remain including PCB abatement of the screen room, operating room and remainder of the pump room, and asbestos abatement associated with replacement of the roof. Each containment area must be inspected prior to abatement, abatement activities monitored, samples of air and substrates taken, laboratory tests performed, disposal of materials tracked and each area declared clean prior to removal of containment. Upon completion of all abatement activities PCB and asbestos abatement reports will also be prepared to document the remediation. Additional funding is required due to the contractor's chosen sequencing of abatement activities, which is segmenting the work into a greater number of containment areas than anticipated requiring a higher level of effort for oversight services.

Additional Shop Test Witnessing Services \$10,000.00

Contract 7034 includes an allowance of \$5,000 for in-person witnessing, documenting and reporting on factory testing of equipment. This amount, established by the Authority, will not be sufficient to complete required services. Additional funding is required due to the need for multiple days to shop test the three wet weather pumps, and failure of one of the pumps to pass the first round of testing, necessitating a second round of testing be performed following modifications to the pump's impeller.

CONTRACT SUMMARY:

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Contract Amount:	\$1,558,446.39	1,703 Days	03/01/12
Amendment 1*	\$181,274.24	182 Days	07/31/13
Amendment 2	\$73,305.00	748 Days	12/16/15
Amendment 3	\$95,266.00	0 Days	04/12/17
Proposed Amendment 4	<u>\$195,495.57</u>	<u>194 Days</u>	Pending
Adjusted Contract Amount:	\$2,103,787.20	2,827 Days	

*Approved under delegated authority

Amendments 1 through 4 increase the total contract amount by 35%.

BUDGET/FISCAL IMPACT:

The FY18 CIP includes a budget of \$1,911,292 for Contract 7034. Including this amendment for \$195,495.57 the adjusted contract total will be \$2,103,787.20 or \$195,495.57 over budget. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

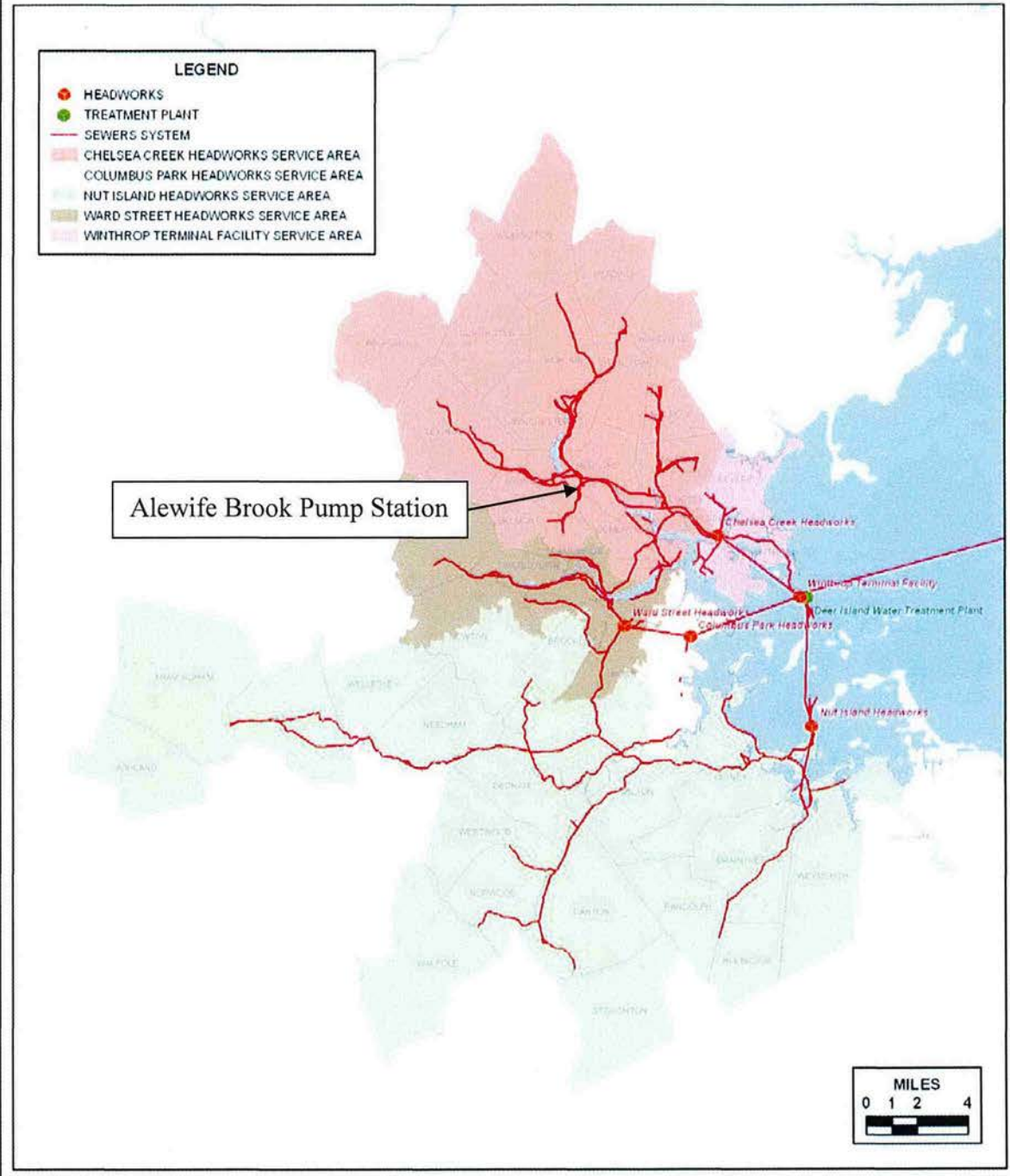
Stantec Consulting Services, Inc. has committed to 9.84% MBE and 6.76% WBE participation; these percentages will be unchanged by Amendment 4.

ATTACHMENT:

Attachment A – Alewife Brook Pump Station Location.

Attachment A

Location of Alewife Brook Pump Station



STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 17, 2018
SUBJECT: Chelsea Creek Headworks Upgrade
BHD/BEC 2015, A Joint Venture
Contract 7161, Change Order 7



COMMITTEE: Wastewater Policy & Oversight

Martin E. McGowan, Construction Coordinator
Corinne M. Barrett, Director, Construction
Preparer/Title

INFORMATION
 VOTE



Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 7 to Contract 7161, Chelsea Creek Headworks Upgrade, with BHD/BEC 2015, A Joint Venture, for an amount not to exceed \$1,400,320.00, increasing the contract amount from \$75,198,815.46, to \$76,599,135.46, with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7161 in an amount not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

The Chelsea Creek Headworks is one of three remote headworks facilities that provides preliminary treatment and flow control of the wastewater from MWRA's Northern Service Area before reaching the Deer Island Treatment Plant. Preliminary treatment at the headworks facilities includes grit and screenings removal, which prevents excessive wear and maintenance of equipment at the North Main Pump Station, and protects the cross harbor tunnels from filling with debris. The Chelsea Creek Headworks was constructed in the 1960s and received its last significant upgrade in 1987.

This project is the first of the complete upgrade to the three headwork facilities and includes automation of the screenings collection and solids conveyance system, allowing the facility to be unstaffed during dry weather flows. The following items are being replaced:

- grit collection system;
- catenary screens are replacing climber screens;

- pneumatic ejection system;
- electric operated influent and effluent sluice gates are replacing hydraulic operated gates;
- HVAC systems are being replaced and upgraded;
- carbon adsorbers are replacing wet scrubbers for the odor control system;
- emergency generator and fuel oil tank;
- electrical distribution system;
- instrumentation and control systems;
- communications tower with a new communications building;
- fire suppression systems;
- plumbing systems; and
- windows, doors, exterior brick and siding and roofing;

In addition, the project is abating all hazardous building materials including paint containing PCBs and installing flood protection measures to protect the facility to the 100-year flood elevation plus 2.5 feet, and upgrades to meet current code requirements for egress, plumbing, electrical and fire suppression.

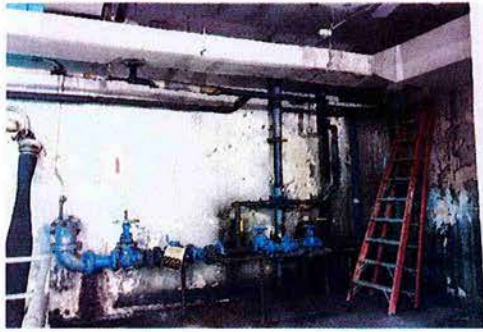
This Change Order

Change Order 7 consists of the following four items:

Demolish and Replace Corroded and Deteriorated Plumbing Systems Not to exceed \$900,000

After the hazardous material abatement activities commenced with the removal of asbestos pipe insulation and PCB paint removal, most of the potable water, non-potable water and sanitary waste and vent lines were exposed for the first time. The condition of the piping systems was identified as poor and requiring replacement. The copper piping on the potable and non-potable systems, particularly in the process areas exposed to hydrogen sulfide gas, had signs of significant deterioration and corrosion. It was determined that these systems exposed to this harsh environment had reached or exceeded their useful life and should be replaced in their entirety. This also included the cast iron sanitary lines. There was evidence of numerous previous leak repairs with some joints showing signs of active leaks. Similar to the copper piping, it was determined that this piping had reached its useful life and should also be replaced in its entirety as part of this contract.

The Plumbing Subcontractor will demolish the existing plumbing systems and replace them with new copper and cast iron. To avoid premature pipe failures in the future, the Painting Subcontractor will coat the copper piping prior to insulation to provide an additional level of protection against the hydrogen sulfide gas attacking the pipe. The new insulation will then be covered with an aluminum jacket typical in industrial facilities. Likewise, the Contractor will demolish and rebuild an existing masonry wall in the first-floor bathroom to allow replacement of concealed plumbing systems. The Plumbing Subcontractor will update the coordination drawings to reflect this additional scope of work.



Deteriorated plumbing systems



Existing piping condition concealed by insulation

The approved PCO for this item has been identified by MWRA staff as an unforeseen condition. MWRA staff, the Consultant, and the Contractor have agreed to an amount not to exceed \$900,000 for this additional work with no increase in contract term. Staff and the Contractor are currently negotiating the final cost of this item. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

Furnish and Install Plumbing Systems to Meet Plumbing Code

Not to exceed \$350,000

After commencement of the contract, the State Plumbing Inspector would not issue a plumbing permit because portions of the design did not meet the current Plumbing Code. Many of the existing plumbing systems at the Chelsea Creek Headworks date back to the facility's original construction in the 1960s, and pre-date the current codes. The entire facility must be brought up to current code as part of this contract. As a result, a number of changes in the design were required to bring the design into code compliance. All of the code violations listed below were in effect at the time of design and should have been addressed in the as-bid contract documents.



Janitor sink with "S" trap not properly vented

The existing storm water drainage from the roof discharges directly into the process channels. The code prohibits storm water from draining into sewers intended for sewage only. To comply with the code, the new roof drain piping will direct all water to the nearest storm collection system located in the yard. The code also requires interceptors and gas/oil/sand separators for all buildings which utilize garage or overhead doors for a truck or automobile entrance. The existing sanitary floor drains located in the garage do not meet this provision and there were no requirements in the contract to modify this piping arrangement. To comply with the code, a new gasoline, oil and sand separator will be installed for the five floor drains located in the garage to prevent these potential hazards from entering the sanitary collection system.

Finally, the as-bid plumbing design required the replacement of three, lead-paint-coated janitor sinks located on the operating levels of the facility. The existing sinks have "S" traps and are not

vented. The code prohibits the installation of “S” traps and requires all traps be vented to prevent siphoning. To comply with the code, all of the new janitor sinks will be installed with code compliant “P” traps that are properly vented and faucets with integral check valves and vacuum breakers.

The approved PCO for this item has been identified by MWRA staff as a design error. MWRA staff, the Consultant, and the Contractor have agreed to an amount not to exceed \$350,000 for this additional work with no increase in contract term. Staff and the Contractor are currently negotiating the final cost of this item. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

Remove, Containerize and Dispose of Black Tar Paper Containing Asbestos from the Building Exterior Walls

\$75,320

The Contractor is required to abate all known asbestos-containing materials in accordance with Environmental Protection Agency standards and the National Emission Standard for Hazardous Air Pollutants prior to disturbance by demolition or renovation activities. In September 2014, during the design phase, the Consultant conducted a survey of the facility to identify and quantify all accessible and observable asbestos-containing materials, which were included in the contract documents identifying the material type, location and quantity. One of the materials listed is 3,400 square feet of black tar paper adhered to the perimeter walls on the second and third floors. After commencement of the contract, when the Contractor began removing the exterior metal panels, it was discovered that this same tar paper was also adhered to the wall panels concealed by the masonry walls on the first floor. The black tar paper was not visible on these walls until the exterior panel removal work began. The Contractor must remove, containerize and dispose of an additional 2,100 square feet of black tar paper in accordance with the EPA standards and the National Emission Standard for Hazardous Air Pollutants.



Black tar paper on exterior building panels containing asbestos

The approved PCO for this item has been identified by MWRA staff as an unforeseen condition. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of \$75,320 for this additional work with no increase in contract term. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

Saw Cut Floor, Excavate to Install New Drain Piping and Install a New Reinforced Concrete Floor

Not to exceed \$75,000

The Plumbing Subcontractor is required to install new floor drains and sanitary piping in the grit bin room. The contract drawings incorrectly indicate a basement crawl space below the grit bin room. This portion of the facility is built on a slab on grade. If there were a basement as indicated, the Plumbing Subcontractor could core holes through the first floor to install the new piping from below. Since the floor slab is on grade, the Contractor must saw cut the floor of the grit bin room

and excavate the space below so the drain piping can be installed. A new reinforced concrete floor will be placed once the new piping is installed.

The approved PCO for this item has been identified by MWRA staff as a design error. MWRA staff, the Consultant, and the Contractor have agreed to an amount not to exceed \$75,000 for this additional work with no increase in contract term. Staff and the Contractor are currently negotiating the final cost of this item. The work has not begun.

CONTRACT SUMMARY:

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Original Contract:	\$72,859,000.00	1,460 Days	11/22/16
Change Orders:			
Change Order 1	\$252,512.00	0 Days	06/29/17
Change Order 2*	\$208,431.00	0 Days	07/24/17
Change Order 3	\$1,129,740.20	0 Days	07/24/17
Change Order 4*	\$237,870.00	0 Days	10/18/17
Change Order 5	\$304,036.26	0 Days	12/21/17
Change Order 6*	\$207,226.00	0 Days	Pending
Change Order 7	<u>\$1,400,320.00</u>	<u>0 Days</u>	Pending
Total of Change Orders:	\$3,740,135.46	0 Days	
Adjusted Contract:	\$76,599,135.46	1,460 Days	

*Approved under delegated authority

If Change Order 7 is approved, the cumulative value of all change orders to this contract will be \$3,740,135.46 or 5.1% of the original contract amount. Work on this contract is approximately 28% complete.

BUDGET/FISCAL IMPACT:

The FY18 Capital Improvement Program budget includes \$76,059,000 for Contract 7161. Including this change order for \$1,400,320, the adjusted subphase total is \$76,599,135.46 or \$540,135.46 over budget. This amount will be absorbed within the five-year CIP spending cap. The Proposed FY19 budget includes \$77,462,553 for this contract.

MBE/WBE PARTICIPATION:

The MBE/WBE participation requirements for this project were established at 3.4% and 3.8%, respectively. The Contractor has been notified that these requirements are still expected to be met.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
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WATER POLICY AND OVERSIGHT COMMITTEE MEETING

to be held on

Chair: A. Blackmon
Vice-Chair: B. Peña
Committee Members:
J. Carroll
J. Foti
A. Pappastergion
H. Vitale
J. Walsh
J. Wolowicz

Wednesday, January 17, 2018

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following Wastewater Comm.

AGENDA

A. Information

1. Report on 2017 Water Use Trends

B. Contract Awards

1. HVAC Systems Maintenance for Western Operations: ENE Systems, Inc., Contract OP-367

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Water Policy and Oversight Committee

December 20, 2017

A meeting of the Water Policy and Oversight Committee was held on December 20, 2017 at the Authority headquarters in Charlestown. Chairman Blackmon presided. Present from the Board were Ms. Wolowicz and Messrs. Carroll, Cotter, Flanagan, Foti, Pappastergion, Peña, Vitale and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Pam Heidell, Dave Coppes, Cori Barrett, Jerry Sheehan, and Bonnie Hale. The meeting was called to order at 12:10 p.m.

Approvals

***Renewal of Water Supply Continuation Agreements with Chicopee Valley Aqueduct Communities**

The Committee recommended approval of Water Supply Continuation Agreements with Chicopee, South Hadley Fire District #1 and Wilbraham (ref. agenda item A.1).

Contract Amendments/Change Orders

***Northern Intermediate High Section 110 – Reading and Woburn: Albanese D&S, Inc., Contract 7471, Change Order 14**

Staff gave a presentation on the overall project and this particular contract and change order. There was general discussion and question and answer. The Committee recommended approval of Change Order 14 (ref. agenda item B.1).


***Northern Intermediate High Section 110 – Stoneham and Wakefield: Albanese D&S, Inc. Contract 7478, Change Order 5**

The Committee recommended approval of Change Order 15 (ref. agenda item B.2).

The meeting adjourned at 12:20 p.m.

* Approved as recommended at December 20, 2017 Board of Directors meeting.

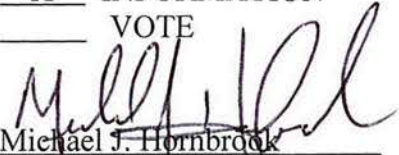
STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 17, 2018
SUBJECT: Report on 2017 Water Use Trends and Drought Status

COMMITTEE: Water Policy & Oversight

X INFORMATION
 VOTE

Carolyn Fiore, Deputy Chief Operating Officer
Daniel Nvule, Senior Program Manager
Stephen Estes-Smargiassi, Director, Planning
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

The severe regional drought that started in 2016 came to an end in 2017. The end of the drought reduced the stress on the partially-supplied communities and they required less MWRA water during 2017. Overall system demand was lower by 6.4 percent compared to the previous year. Quabbin levels recovered to normal levels in June and then dipped to just below normal at the very end of 2017. Adequate supply exists in Quabbin and Wachusett Reservoirs to meet the needs of MWRA fully and partially supplied communities.

RECOMMENDATION:

For information only. Each January, staff provide the Board with a review of the previous year's water use data and discuss trends.

DISCUSSION:

Calendar Year 2017 saw an end to severe drought conditions in the region and the MWRA service area. However, due to the multi-year storage volume of the Quabbin Reservoir and the continued weather pattern of most significant rain storms bypassing the watersheds, the improvement seen in the service area was not fully matched by a comparable improvement in Quabbin levels. Although Quabbin levels were in the normal range for most of the year, they started and ended the year in Below Normal status, albeit with 24 billion gallons more in storage at year's end.

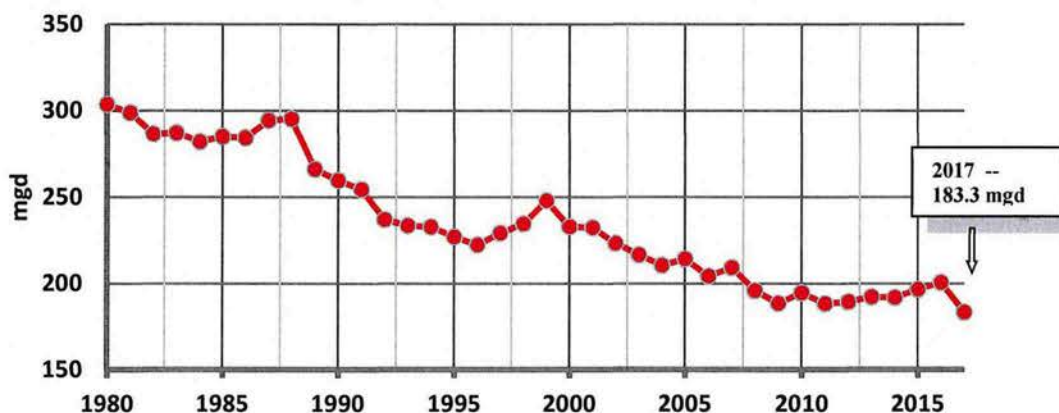
From a watershed yield perspective, 2017 was an interesting year. A wet spring increased storage in both Quabbin and Wachusett Reservoirs, with Wachusett rising to well above MWRA's normal operating range in April. Mindful of the just receding drought conditions, staff held water in Wachusett, rather than releasing the excess to the Nashua River, delaying normal transfers from Quabbin Reservoir. As the year progressed, precipitation within the service area was closer to normal, but many storms seemed to bypass the watersheds, resulting in lower than normal system yields through the summer and most of the fall. In late October, almost nine inches of rain fell over the Quabbin watershed, resulting in a ten-billion-gallon jump in storage volumes in less than two weeks. Then November and December had only about one half the typical rainfall, setting the stage for Quabbin to dip back into Below Normal status on December 30, 2017.

Calendar Year 2017 water use and reservoir withdrawals were lower than in 2016 and 2015 largely because there was no emergency drought use by Cambridge or Worcester and reduced summer demand by the partially supplied communities was reduced.

Water Consumption by MWRA Communities

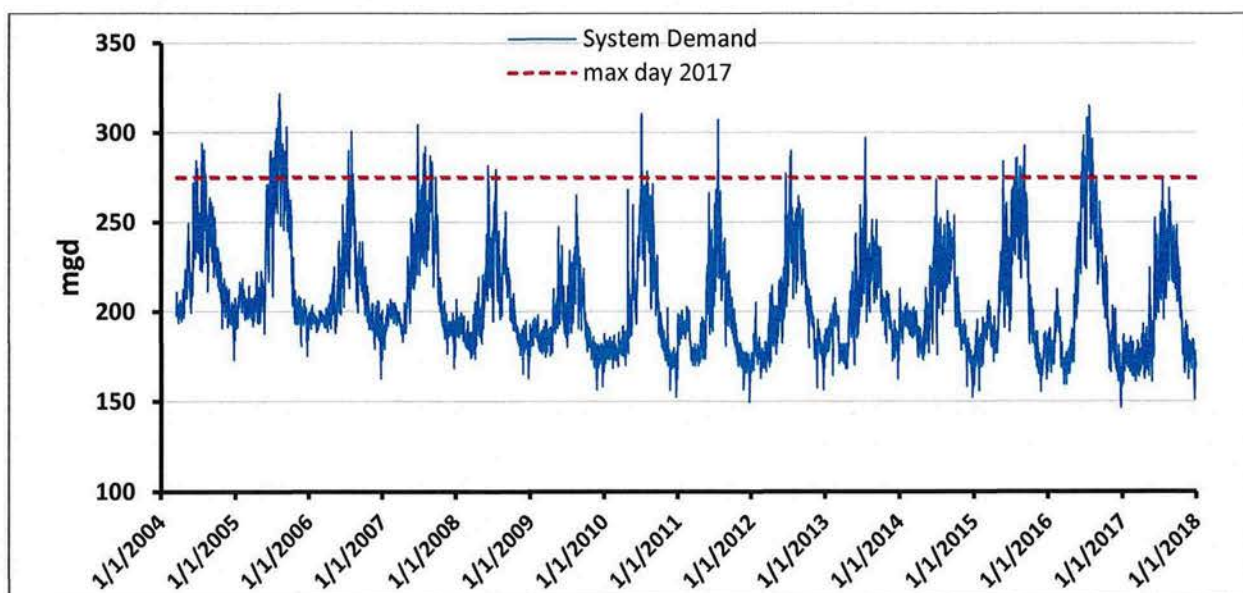
Calendar Year 2017 water consumption by all MWRA communities of 183.3 million gallons per day (mgd) was about 17.2 mgd (8.6 percent) lower than 2016, as shown on Figure 1 below.

Figure 1 – Total Consumption by MWRA Communities (1980 to 2017)



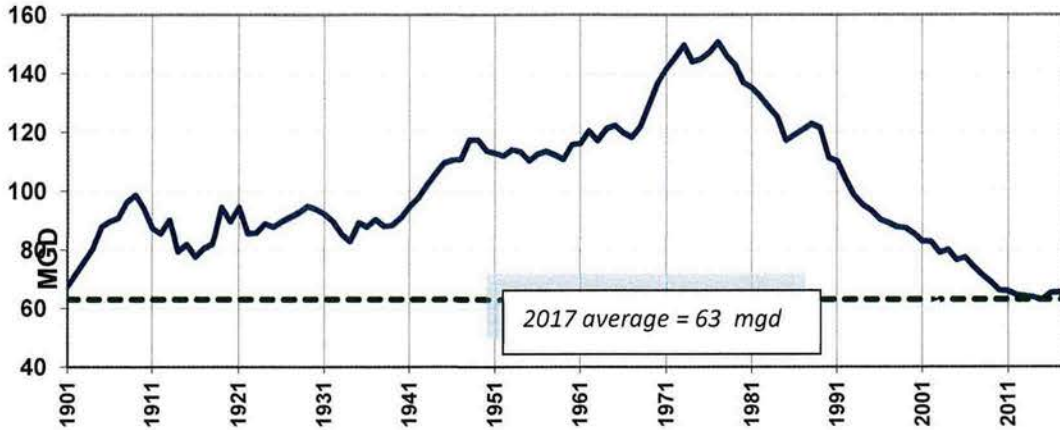
System wide, 2017 had a maximum day demand of 274.65 mgd (12.9 percent lower than 2016) on July 21st. At the opposite extreme, Christmas day had the lowest demand for the year at 151.2 mgd, about 4.4 mgd higher than Christmas 2016 which still has the record for the lowest single day demand since the creation of the MWRA. Figure 2 below shows daily system demand.

Figure 2: Daily System Demand



Demand from MWRA's largest customer, the Boston Water and Sewer Commission, was 63 mgd, which was lower than last year by about 2.5 mgd (3.8 percent). Current Boston demand continues to be lower than demand before 1900.

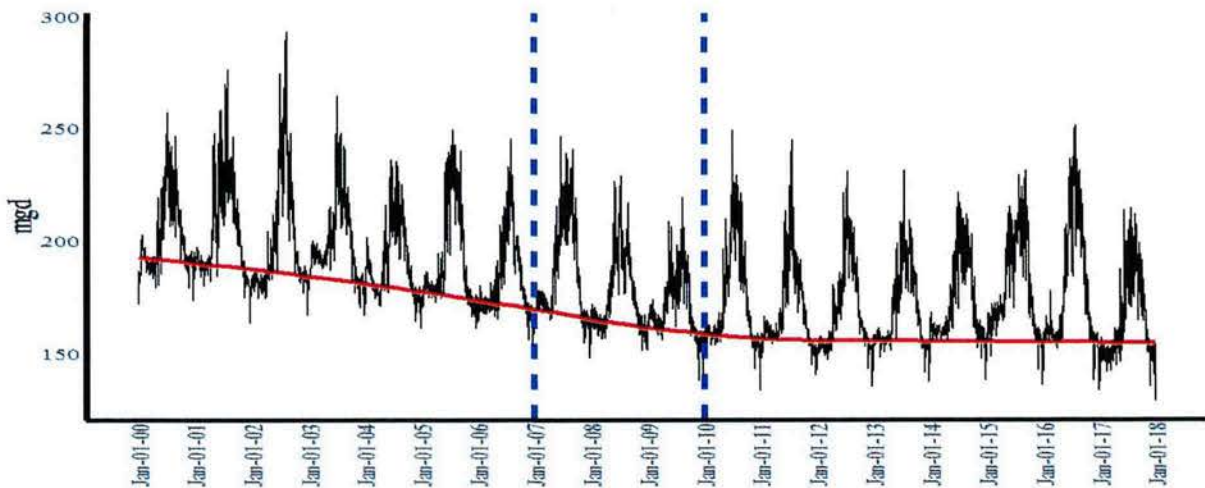
Figure 3: Boston Water Use (1900-2017)



Base or Indoor Demand

Over time, water use reductions have been in both base (or indoor) use, defined as water use from November to March, and outdoor use (or seasonal use), defined as the increase over the base demand during the irrigation season of May to September. Indoor water use has dropped substantially over the past several decades. Decreases from 2001 to 2010 ranged from around one to two percent per year. Post-recession, decreases appear to be much slower. This is likely due to the improvements in the efficiency of water use in homes and businesses as water-saving technologies continue to increase market share and consumers react to price increases (as well as reduced pipeline leaks), being counterbalanced by increased use due to the improving regional economy and population growth.

Figure 4: Fully-Supplied Communities Demand (1999 to 2017)



Seasonal or Outdoor Demand

Seasonal water use is more variable than indoor demand and driven in large part by weather during the irrigation season. Factors influencing seasonal use include the total irrigation season precipitation, the number of dry days between rainfall events, temperature, and the total amount of sunshine. Over time, water price also influences seasonal use.

Figures 5 and 6 show the variation in seasonal water use over time, and both the relatively small impact that seasonal demand has on total water use and the longer-term decline in both base and total use. Figure 5 shows a reduction in seasonal use of about 45 percent between 2016 and 2017.

Figure 5: Fully-Supplied Communities' Annual Seasonal Demand
(labels show demand in mgd)

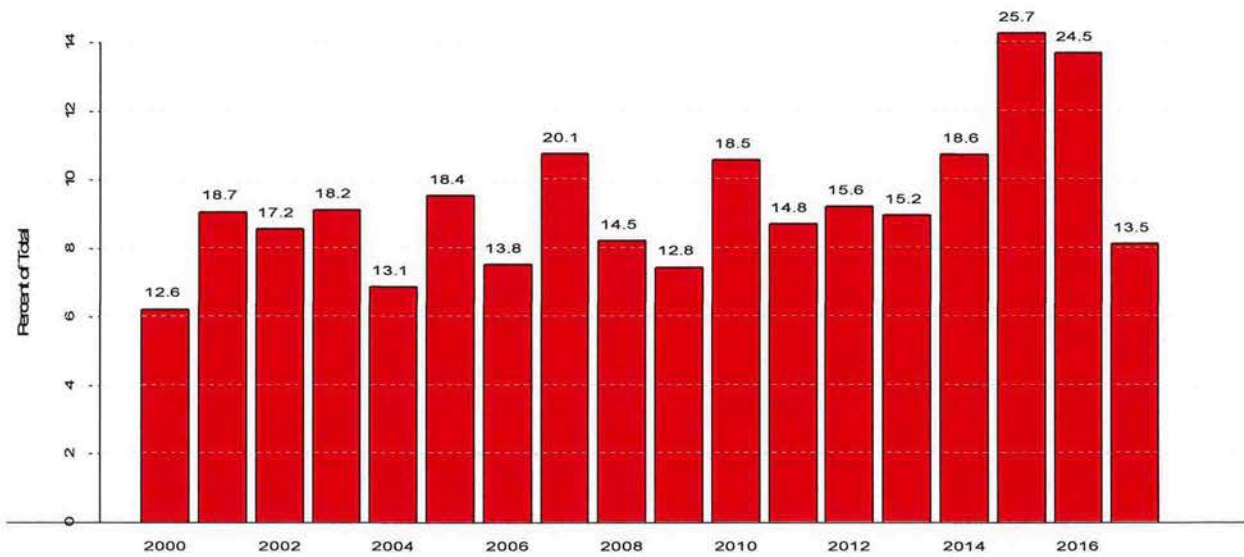
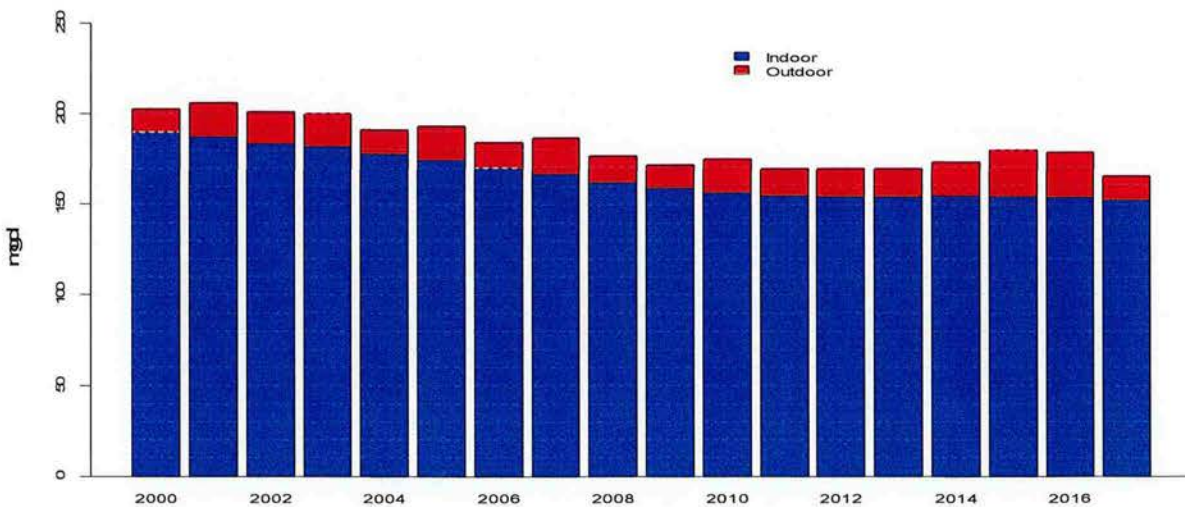


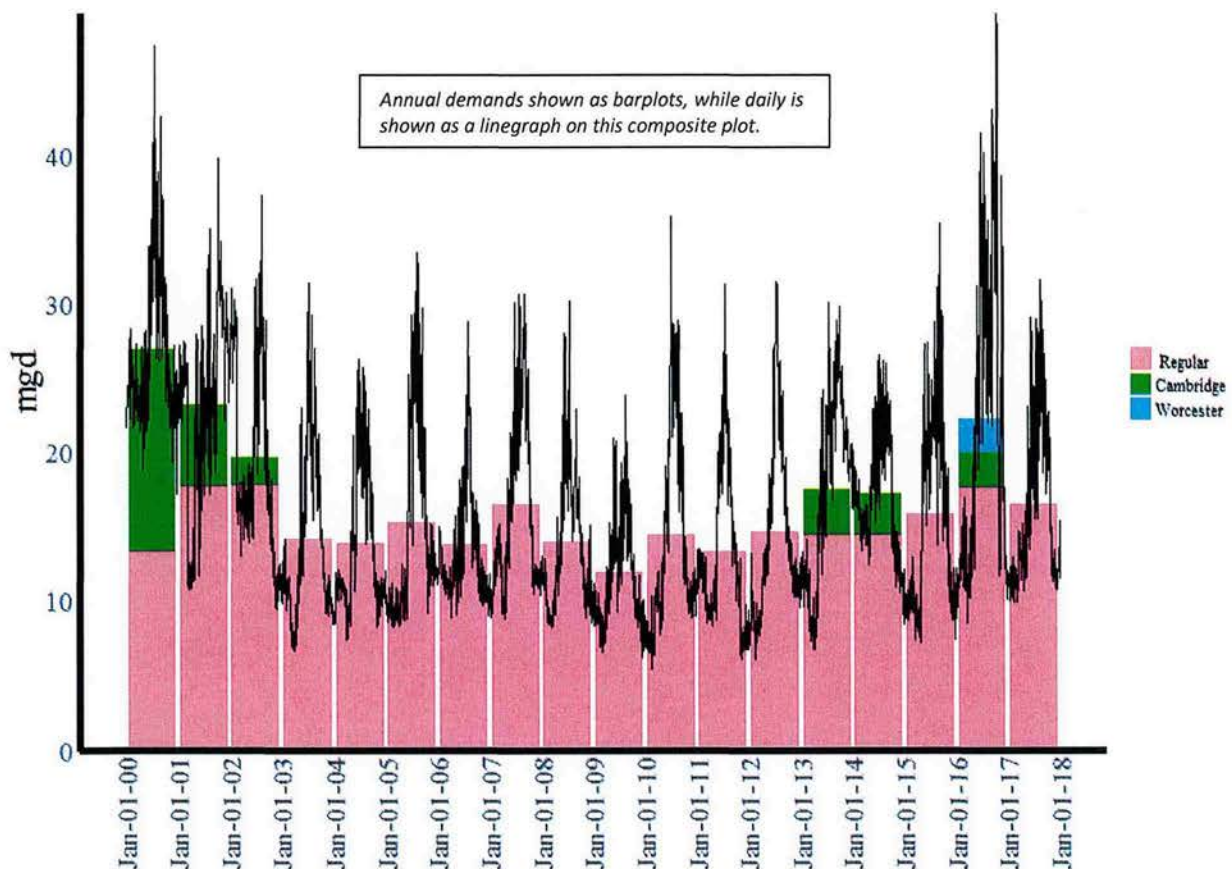
Figure 6: Fully-Supplied Communities Annual Base and Seasonal Demand



Partially Supplied Communities

The absence of the summer drought in 2017 following a year with a dry summer gave staff a rare opportunity to evaluate the impact of drought conditions on the partially supplied communities. This impact can be seen on Figure 7 below. The total reduction between 2016 and 2017 was 26 percent, primarily driven by Worcester and Cambridge. The remaining partial users demand reduced by 7 percent

Figure 7: Partially Supplied Communities – MWRA Supplied Demand (Daily and Annual)



Reservoir Withdrawals and Releases

Reservoir withdrawals are the metric used to compare to the 300 mgd safe yield of the watershed/reservoir system¹. Withdrawals include water sold to MWRA communities, as well as other uses in the watershed and MWRA system. Total MWRA water withdrawals decreased by 6.4 percent in 2017, from 208.94 mgd in 2016 to 195.64 mgd. Worcester, the State's second largest city, pumped 5.22 mgd from its reservoirs in the portion of the Wachusett watershed that it shares with MWRA but pumped no water from Shaft 3 of the Quabbin Tunnel².

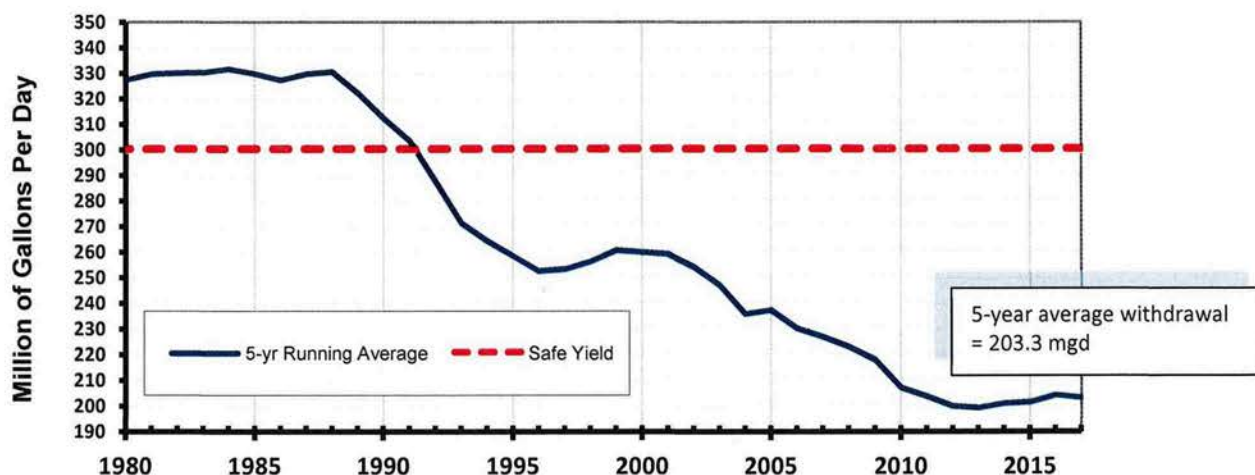
¹ The 300-mgd safe yield is based on the drought of the 1960s. Use of a less conservative 20-year recurrence drought, as allowed by DEP, would result in a safe yield as high as 350 mgd. MWRA's Water Management Act registration is for 312 mgd.

² When Worcester must use water from the Quabbin Aqueduct it is a purchase from MWRA, whereas its

The new pipeline suppling the McLaughlin Fish Hatchery was in service for the entire year, with an average withdrawal of 5.49 mgd. Without that new withdrawal, total reservoir withdrawals in 2017 would have been the lowest since the 1940s.

Figure 8 below shows five-year averages of withdrawals from 1980 to present. The five-year averaging reduces the effects of year-to-year variability due to weather, and provides a good indication of longer-term trends. The average shows a slight decrease from 2016. As the economy continues to stabilize and grow over the next few years, staff will monitor any changes in water use, to see if the longer-term downward trend resumes.

Figure 8: Total Reservoir Withdrawals – Five-Year Running Average 1980 to 2017

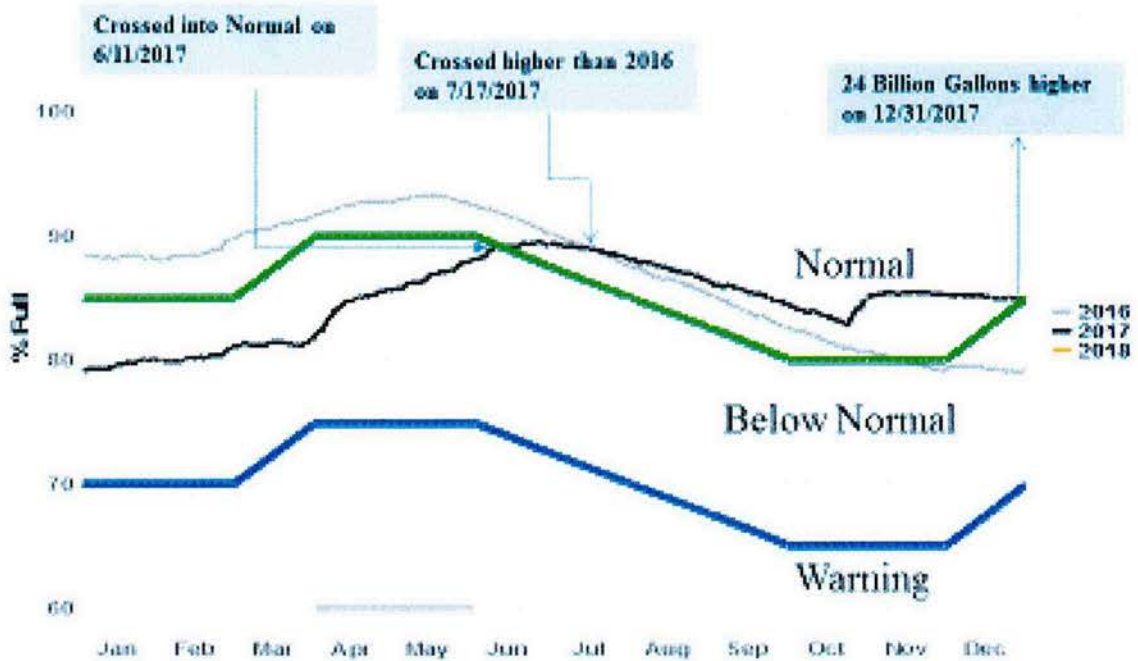


Drought Outlook

On May 11, 2017, Secretary Beaton declared all regions of the Commonwealth to be in Normal status. At the time of the declaration, Quabbin was gradually filling and was at 86.3 percent full, which was about 3.7% below normal for that time of the year. Quabbin levels rose to above normal in June, where they stayed until the end of the year. The reservoir reached its greatest storage volume near the end of June at 89.5 percent full. As is typical, reservoir elevations declined over the summer, then increased during the fall reaching 85.5 percent full just before Thanksgiving, with about 24 billion gallons more in storage than a year earlier. With the somewhat drier end to the year, storage volumes slowly drifted down to just below 85 percent on December 30, still about 24 billion gallons higher than a year earlier. Figure 9 on the next page shows a comparison of Quabbin volume levels between 2016 and 2017.

withdrawals from its Quinapoxet Reservoir system within the Wachusett watershed are not.

Figure 9: Quabbin Reservoir Volumes for 2016 and 2017



Quabbin Reservoir levels have been modeled for the next 12 months (January 2018 – December 2018) given varying yield conditions, and an annual demand of 220 mgd (conservatively includes a potential 20 mgd increase from current annual demand levels). The modeling shows a continuing slow recovery of the multi-year storage at Quabbin Reservoir. Under almost all conditions, the reservoir will likely return to, and remain in, Normal status. Even if the driest conditions seen since the creation of Quabbin were to occur over the next 12 months, the system will likely stay within Below Normal status, and not drop into Drought Warning. Adequate supply exists in Quabbin and Wachusett Reservoirs to meet the needs of MWRA fully and partially supplied water communities and also, if needed, to augment the supplies of some of the adjacent stressed communities.

ATTACHMENT:

Community Water Use Data.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: January 17, 2018
SUBJECT: HVAC Systems Maintenance, Various Facilities
ENE Systems, Inc.
Contract OP-367




COMMITTEE: Water Policy and Oversight

 INFORMATION
 X VOTE


Michele S. Gillen
Director, Administration

James L. McGrath, Project Manager
David Coppes, Director, Waterworks
Guy M. Foss, Director, Western Operations
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the award of Contract OP-367, HVAC Systems Maintenance, Various Facilities, to the lowest responsible and eligible bidder, ENE Systems, Inc. and authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount of \$664,820, for a term of 730 calendar days from the Notice to Proceed.

DISCUSSION:

Contract OP-367 is a two-year contract to provide preventive maintenance and repair services for the entire HVAC systems at the John J. Carroll Water Treatment Plant; the Clinton Wastewater Treatment Plant; 33 other locations in Western Operations; and repair services, as needed, at the Chelsea Administration Building. The Authority's network of equipment covered under this contract includes 28 air-cooled condenser units, 47 air handling units, 31 gas/oil fired hot water/steam/hot air boilers and furnaces, 60 hydronic unit heaters, 30 dehumidifiers, 2 chillers, 1 cooling tower, 120 fans, 18 fan-powered terminal units, 90 motorized dampers, 55 condensate and circulating pumps, and 30 air conditioning units, as well as heat pumps, control systems and related ductwork, valves, and piping. All of this equipment requires maintenance and testing on a regularly scheduled basis to ensure proper operation and reliability, and to maintain any existing warranties.

This contract includes scheduled service checks and maintenance, testing of equipment, repair and replacement of failed equipment components, and technical assistance as-needed.

Procurement Process

Contract OP-367 was publicly advertised in the Boston Herald, Banner Publications, El Mundo, Central Register and COMMBUYS, and bid in accordance with Chapter 149 of the Massachusetts General Laws. In addition, bids were made available for public downloading on MWRA's e-procurement system (Event #3216). In an effort to increase competition, staff also emailed the advertisement for this contract to six DCAMM certified firms. A pre-bid meeting was held on November 29, 2017. Bids were opened on December 14, 2017 with the following results:

<u>Bidders</u>	<u>Bid Amount</u>
Daikin Applied	\$615,648*
<i>Engineer's Estimate</i>	\$638,400
ENE Systems, Inc.	\$664,820
Associated Mechanical Services	\$730,950
Ambient Temperature Corporation	\$747,904

* Daikin Applied requested that its bid be withdrawn due to a clerical error of a substantial nature. Daikin's clerical error resulted in its bid being \$59,072 (44.8%) lower for scheduled maintenance work than it would have been but for the error. Daikin satisfied staff that a clerical error was made, and its request for withdrawal was allowed.

ENE Systems Inc.'s bid is \$26,420 (4.1%) higher than the Engineer's Estimate. This is due primarily to an increase of approximately \$25,000 for preventative maintenance work scope added after the initial Engineer's Estimate was prepared, including equipment at the Clinton Wastewater Treatment Facility, the Wachusett Aqueduct Pump Station, the Marlborough Maintenance Facility, and the Carroll guard house.

Staff have discussed the scope of work and the Authority's service level expectations with ENE. ENE was awarded two HVAC service contracts for western operations facilities (OP-185 and OP-244) in the past, spanning a four-year period and has performed in a very satisfactory manner. ENE has a strong knowledge of the MWRA's equipment and maintenance requirements. The bid submitted by ENE was reviewed and staff have determined that it is reasonable, complete, and includes the payment of prevailing wage rates, as required. References were checked and found to be favorable. Staff have determined that ENE possesses the resources, skills, abilities, and integrity necessary to perform the work, and is qualified to do so. Therefore, staff recommend the award of Contract OP-367 to ENE Systems, Inc. as the lowest responsible and eligible bidder.

BUDGET/FISCAL IMPACT:

There are sufficient funds available for the first portion of this contract in the FY18 Current Expense Budget under account 33924-07420. Appropriate funding will be included in subsequent Proposed CEB requests for the remaining term of the contract.

MBE/WBE PARTICIPATION:

No MBE/WBE participation requirements were established for this contract due to the limited opportunities for subcontracting.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

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PERSONNEL & COMPENSATION COMMITTEE MEETING

Chair: J. Wolowicz
Vice-Chair: K. Cotter
Committee Members:
J. Carroll
P. Flanagan
J. Foti
A. Pappastergion
H. Vitale
J. Walsh

to be held on

Wednesday, January 17, 2018

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following Water Comm.

AGENDA

A. Approvals

1. Appointment of Program Manager, PICS Control

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Personnel and Compensation Committee

December 20, 2017

A meeting of the Personnel and Compensation Committee was held on December 20, 2017 at the Authority headquarters in Charlestown. Chair Wolowicz presided. Present from the Board were Messrs. Blackmon, Carroll, Cotter, Flanagan, Foti, Pappastergion, Peña, Vitale and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Karen Gay-Valente, and Bonnie Hale. The meeting was called to order at 12:20 p.m.

Ms. Wolowicz asked if it would be possible to change around the order of the Committee meetings so that the Personnel and Compensation Committee would not always be held last. Mr. Laskey replied that the order of the meetings could be rotated going forward.

Approvals

*Revisions to Management Policy for Staff Appointments

The Committee recommended approval of revisions to the Management Policy regarding staff appointments (ref. agenda item A.1).

*PCR Amendment – December 2017

The Committee recommended approval of an amendment to the Position Control Register (ref. agenda item A.2).

*Appointment of Senior Program Manager, SCADA Engineering

The Committee recommended approval of the appointment of Mr. Thai Nguyen (ref. agenda item A.3).


*Appointment of Project Manager, Inspections, TRAC

The Committee recommended approval of the appointment of Mr. Walter Schultz (ref. agenda item A.4).

The meeting adjourned at 12:25 p.m.

* Approved as recommended at December 20, 2017 Board of Directors meeting.

STAFF SUMMARY

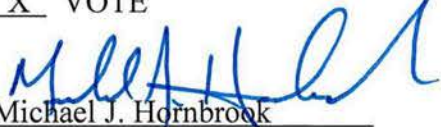
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: January 17, 2018
SUBJECT: Appointment of Program Manager, PICS Control (System Applications)
Operations Division

COMMITTEE: Personnel & Compensation

 INFORMATION

 X VOTE

Karen Gay-Valente, Director, Human Resources
David F. Duest, Director, Deer Island WWTP
Preparer/Title


Michael J. Hornbrook
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. Mark Donnelly to the position of Program Manager, PICS Control (System Applications), Unit 9, Grade 29 at an annual salary of \$110,228.55 commencing on a date to be determined by the Executive Director.

DISCUSSION:

MWRA's Deer Island Process Instrumentation and Control Systems (PICS) group is responsible for Deer Island's industrial control system, one of the largest control systems in the United States with over 30,000 input/output points and 3,000 control screens in Deer Island's Human Machine Interface (HMI). The PICS group is broken down into two groups: PICS network and hardware maintenance group and the plant automation group. The plant automation group develop and maintain the plant automation control algorithms that control most of Deer Island's operational systems. This automation is critical to the second-by-second operation of the treatment plant systems allowing staff to focus on process improvements and failure corrections.

The Program Manager, PICS Control position reports to the Manager, Process Control, and manages all functions of the plant automation group including direct supervision of two staff. This position has overall program management responsibility for the application-based control systems, their associated databases, and the graphical interfaces resident in a large distributed control system commonly referred to as PICS. There are many critical facets this responsibility entails, including oversight of all PICS software development, modification, problem correction, and documentation necessary for assuring the safe, continuous, and cost effective operation of the control system. Additional responsibilities include oversight of the addition and deletion of input/output points, and other control logic, including the modification of alarms, logs, video display graphics, reports, messages, and configuration logic, as well as coordinating all software activities with PICS users (operations staff for the Deer Island Treatment Plant and the on-site

Thermal/Power Plant) to meet user needs. This position works closely with the Program Manager, Systems/Process Engineering in upgrading and/or changing PICS system hardware components, as well as software upgrades and/or changes.

The position of Program Manager, PICS Control became vacant due to the retirement of the incumbent.

Selection Process

The position of Program Manager, PICS Control (System Applications) was posted internally, and one candidate applied for this position. The Manager of Process Control and the current Program Manager, PICS Control interviewed Mr. Donnelly. Mr. Donnelly was unanimously chosen as the recommended candidate for the position based on his education and experience.

Mr. Donnelly has held the position of Project Manager, PICS for the last 18 years. Prior to being hired as the Project Manager, PICS, Mr. Donnelly had held several positions of increasing responsibility in the Instrumentation group at the Deer Island Treatment Plant from 1993 to 1999. As the Project Manager, PICS, Mr. Donnelly was responsible for implementing, modifying, and monitoring control strategies on the PICS distributed control system for the safe and efficient operation of all areas of the treatment plant, as well as those of the on-site Thermal/Power Plant. Mr. Donnelly is routinely involved with coordinating control system development with the Operations, Maintenance, and Capital Engineering Departments, and with various engineering consultants, and is responsible for maintaining the interfaces between PICS and other devices including programmable logic controllers (PLCs), and power tracking meters among others. Mr. Donnelly has experience supervising technical staff. Mr. Donnelly's performance as a Project Manager, PICS has been excellent. He works well with staff and contractors. This combination of knowledge, skills, and experience makes Mr. Donnelly the ideal candidate for this position.

Mr. Donnelly earned a Bachelor of Science Degree in Marine Engineering from the Massachusetts Maritime Academy. He also holds a Grade 7 Massachusetts Wastewater Operator's License, is a registered Professional Engineer in Control Systems, and also holds several other relevant licenses and certifications including a Third Class Steam Engineer's License, a Certified Control Systems Technician-Level 1, a Certificate in IT Service Management, and is a Massachusetts Journeyman Electrician.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the Operations Division's FY18 Current Expense Budget for this position.

ATTACHMENTS:

Resume of Mark Donnelly
Position Description
Organization Chart

Mark E. Donnelly

Problem solver with more than twenty-five years of progressively responsible engineering, maintenance, and operations experience.

Work History

Massachusetts Water Resources Authority

Project Manager - Process Instrumentation and Control Systems - 1999 - Present

- Implements control strategies for the safe and efficient operation of a 1.3 billion gallon/day wastewater treatment plant, high-pressure steam power plant, and related systems.
- Coordinate control system development with Operations, Maintenance, Capital Engineering, and engineering consultants.
- Recent projects include North System Raw Wastewater Pump Motor and Drive Replacement, Digested Sludge Pump Replacement, Primary Scum Tip Tube Replacement, Secondary Flow Control Gate PLC replacement, CEMS Upgrade, Power Plant Sequential Event Recorder upgrade, Wind Turbine Startup, Photovoltaic System Startups, and Combustion Turbine Generator Integration.
- Maintains interfaces between DCS and foreign devices including PLCs and Power Meters.
- Provide documented procedures and training on how to operate plant systems.

Unit Supervisor – Instrumentation - 1997 - 1999

- Supervised eight Instrument Specialists in carrying out instrumentation maintenance for preliminary, primary, and secondary treatment areas of the Deer Island Treatment Plant, including oxygen generation and a chemical tank farm.
- Specified and ordered equipment, developed preventative maintenance procedures, assisted in the preparation of budgets, and tracked overtime, vacation, and time used for payroll accuracy and compliance with union collective bargaining agreement.
- Optimized preventative maintenance efforts for assigned areas. Maintenance tasks were modified or eliminated and task frequencies were adjusted as needed.
- Received MWRA FY98 Excellence in Performance award for Secondary Facilities Start-Up.
- Received MWRA FY99 Excellence in Performance award for D.I. Supervisory Development.

Instrument Specialist - 1995 - 1997

- Inspect, install, repair, and troubleshoot a broad range of field instruments, telemetry equipment, and controllers, used in wastewater, power, and oxygen separation plants, including temperature, level, pressure, flow, motion control and analytical measurement instruments, control valves and variable speed drives.
- Programmable Logical Controller configuration and troubleshooting.

Diesel Power Plant Operator - 1993 - 1995

- Operation of a 17 million gallon per day fresh water pumping station, including diesel and electric pumps, generators, air compressors and associated equipment.
- Supervised two skilled laborers.

United States Merchant Marine

Third Assistant Engineer - 1991 - 1993

- Operation of steam and diesel power plants and auxiliaries on ships.

EDUCATION & LICENSURE

Massachusetts Maritime Academy – Bachelor of Science in Marine Engineering

Massachusetts Registered Professional Engineer – Control Systems

Massachusetts Grade 7 Wastewater Treatment Operator License

Massachusetts Department of Public Safety – Third Class Engineer

ITIL Foundation Certificate in IT Service Management

Massachusetts Journeyman Electrician

Instrument Society of America - Certified Control Systems Technician, Level 1

**MWRA
POSITION DESCRIPTION**

POSITION: Program Manager, PICS Control (System Applications)

PCR#:

DIVISION: Operations

DEPARTMENT: Engineering/Process Control, Deer Island

BASIC PURPOSE:

Supervises the process and instrumentation systems application group. Manages the application based control systems, their associated databases, and graphical interfaces resident in a large distributed control system (DCS) commonly referred to as PICS (Process Instrumentation and Control System).

SUPERVISION RECEIVED:

Works under the general supervision of the Manager, Process Control.

SUPERVISION EXERCISED:

Exercises close supervision of assigned staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Supervises PICS software development, modification, problem correction, and documentation to assure safe, continuous, and cost effective operation. Coordinates all software activities with PICS users.
- Plans, schedules and assigns PICS process control strategy and software change requests. Makes recommendations for software systems modifications and provides information for alternative solutions.
- Reviews and monitors all change requests at predetermined check points to insure compliance with software standards, control of costs, and the proper coordination of user needs.
- Supervises the trouble shooting of PICS control software in order to find and fix latent misapplication and application incompleteness in the control strategies.
- Develops and documents procedures for trouble shooting PICS control software systems.

- Supervises the addition and deletion of input/output points, and control logic including modification alarms, logs, video display graphics, reports, messages, and configuration logic.
- Supervises the addition, integration and control application of 3rd party hardware and software, such as programmable logic controllers (PLCs), hydrostatic tank gauging systems (HTGs), etc. for processing monitoring and control, into the PICS system.
- Ensures that the documentation of new and modified PICS control software and set points are maintained in a standardized and current format.
- Monitors PICS computer capacity utilization in order to identify problems and constraints.
- Administers global control software programs for distributed control units.
- Insures that I/O point listings, control strategies, and operator graphics turned over by vendor(s) have been thoroughly checked out and meet the needs of Plant Operations.
- Provides training to DITP staff.
- Is on-call to provide emergency and routine assistance to plant Operations staff.
- Develops and implements a plan for plant-wide optimization and increased automation.

SECONDARY DUTIES:

- Reviews assigned employees performance in accordance with Authority procedures.
- Assists in maintaining harmonious labor/management relations through application of collective bargaining agreement provision and established personnel policies.
- Assists Program Manager, Systems in the upgrading and/or changing of system hardware components and software upgrade or changes.
- Supports Manager, Process Control so as to ensure vendors meet contract specifications and requirements.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor Degree of Science (or higher) in an engineering discipline (chemical,

mechanical, electrical, civil, etc.) or a related computer science field as normally attained through a four (4) year college degree; and

- (B) Seven (7) to nine (9) years experience in the field of industrial process control with particular emphasis in the areas of control strategy development and the on-line tuning of such strategies and with industrially applied distributed control systems (DCSs) particularly as such experience relates to the configuration and implementation of control applications, development of operator interface graphics, and digital communications technology; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Three (3) to five (5) years experience in the application and integration of third party control and monitoring systems into a distributed control system.
- (B) A minimum of five (5) years of experience working in or associated with an operating process plant (chemical, power generation, wastewater, etc.).
- (C) Demonstrated experience in the development and implementation of industrial training courses and platform delivery with particular emphasis on courses related to industrial process control associated with technologies.
- (D) A demonstrated ability to read and interpret standards associated with industrial process control particularly those Standards published by the Instrument Society of America related to industrial process control.
- (E) Demonstrated verbal and communication skills.

SPECIAL REQUIREMENTS:

Massachusetts Wastewater Treatment Plant Operations Grade VI certification, or ability to obtain within one (1) year.

TOOLS AND EQUIPMENT USED:

Office equipment as normally associated with the use of telephone, personal computer including word processing and other software, copy and fax machine.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an

employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools or controls and reach with hands and arms. The employee frequently is required to sit and talk or hear. The employee is occasionally required to stand, walk, climb or balance, stoop, kneel, crouch, or crawl, taste or smell.

The employee must frequently lift and/or move up to 10 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, peripheral vision and the ability to adjust focus.

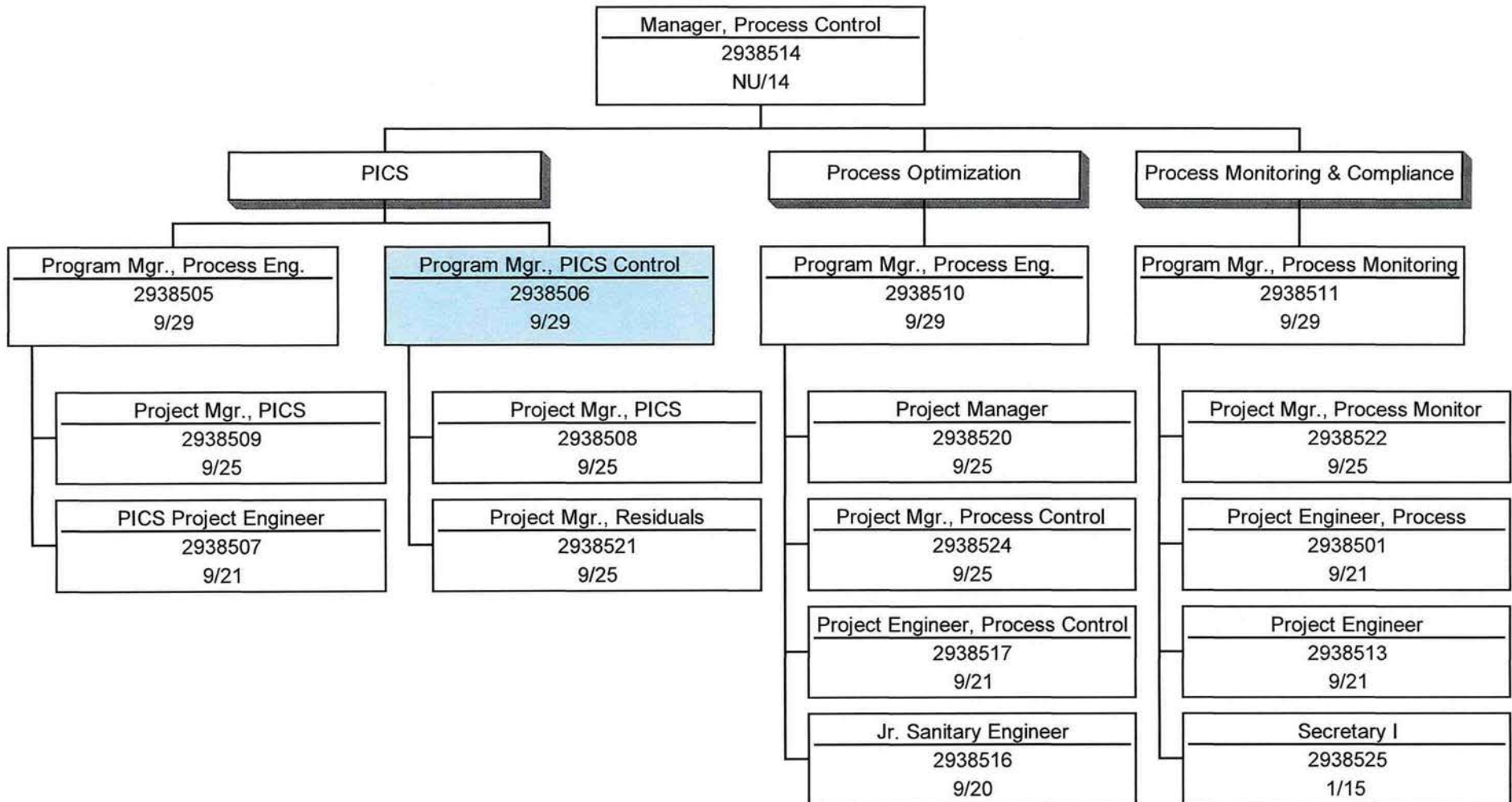
WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock.

The noise level in the work environment is usually loud in field settings and moderately quiet in an office setting.

Operations - Wastewater Treatment
Deer Island - Process Control
 January 2018





MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

Chair: M. Beaton
Vice-Chair: J. Carroll
Secretary: A. Pappastergion
Board Members:
A. Blackmon
K. Cotter
P. Flanagan
J. Foti
B. Peña
H. Vitale
J. Walsh
J. Wolowicz

BOARD OF DIRECTORS' MEETING

to be held on

Wednesday, January 17, 2018

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: 1:00 p.m.

AGENDA

I. APPROVAL OF MINUTES

II. REPORT OF THE CHAIR

- A. Annual Meeting: Election and Appointment of MWRA Officers and Committee Assignments

III. REPORT OF THE EXECUTIVE DIRECTOR

IV. BOARD ACTIONS

A. Approvals

1. Memorandum of Agreement with the Massachusetts Historical Commission and the Southborough Historical Commission for the Demolition of the Oren Nichols Historical Properties (ref. AF&A B.1)
2. Appointment of Program Manager, PICS Control (ref. P&C A.1)

B. Contract Awards

1. DeLauri Pumping Station Bar Screen Replacement and Security Upgrades: Daniel O'Connell's Sons, Inc., Contract 7361 (ref. WW A.)
2. HVAC Systems Maintenance for Western Operations: ENE Systems, Inc., Contract OP-367 (ref. W B.1)

C. Contract Amendments/Change Orders

1. Maximo Update Project: SHI International Corporation and Total Resources Management, Inc., Contract 7287, Amendment 2 (ref. AF&A C.1)
2. Prison Point CSO Facility Improvements Design, CA/RE Services: Arcadis U.S., Inc., Contract 7359, Amendment 1 (ref. WW B.1)
3. Alewife Brook Pump Station Rehabilitation: Stantec Consulting Services, Inc., Contract 7034, Amendment 4 (ref. WW B.2)
4. Chelsea Creek Headworks Upgrade: BHD/BEC 2015, A Joint Venture, Contract 7161, Change Order 7 (ref. WW B.3)

V. CORRESPONDENCE TO THE BOARD

VI. OTHER BUSINESS

VII. EXECUTIVE SESSION

A. Litigation:

1. Richard DaPrato v. MWRA, Suffolk Superior Court, C.A. No. 2015 CV 3687D: Increase to Budget for Outside Trial Counsel – Conn Kavanaugh

B. Security/Real Estate:

1. Wachusett Reservoir Railroad

VIII. ADJOURNMENT

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

December 20, 2017

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on December 20, 2017 at the Authority headquarters in Charlestown. Vice-Chair Carroll presided at the outset. Present from the Board were Ms. Wolowicz and Messrs. Blackmon, Cotter, Flanagan, Foti, Pappastergion, Peña, Vitale and Walsh; Chairman Beaton joined the meeting in progress. Among those present from the Authority staff were Frederick Laskey, Executive Director, Steven Remsberg, General Counsel, Michael Hornbrook, Chief Operating Officer, Thomas Durkin, Director of Finance, Michele Gillen, Director of Administration, and Bonnie Hale, Assistant Secretary. The meeting was called to order at 1:10 p.m.

APPROVAL OF MINUTES

Upon a motion duly made and seconded, it was

Voted to approve the minutes of the Board of Directors' meeting of November 15, 2017, as presented and filed with the records of the meeting.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey welcomed Ms. Bethany Card, MWRA's new Director of Environmental & Regulatory Affairs. He reported on various matters, including: handing out for the Board's consideration a mock-up of a pamphlet similar to the annual water Consumer Confidence Report sent to all households but reporting on the Authority's wastewater program; notice of a meeting regarding the Wachusett Railroad taking place at the Governor's office the next day; and the intention to have the Annual Meeting of the Board in January.

APPROVALS

Transmittal of FY2019 Proposed Capital Improvement Program and FY2019-2023 Spending Cap to the MWRA Advisory Board

Upon a motion duly made and seconded, it was

Voted to approve the transmittal of the FY2019 Proposed Capital Improvement Program and the Proposed FY2019-2023 Spending Cap to the MWRA Advisory Board for its 60-day review and comment period.

Approval of Seventy-Sixth Supplemental Resolution

Upon a motion duly made and seconded, it was

Voted to adopt the Seventy-Sixth Supplemental Resolution authorizing the issuance of up to \$50,000,000 of Massachusetts Water Resources Authority Subordinated General Revenue Bonds and the supporting issuance resolution.

Renewal of Water Supply Continuation Agreements with Chicopee Valley Aqueduct Communities

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to execute ten-year Water Supply Continuation Agreements with Chicopee, South Hadley Fire District Number # 1, and Wilbraham, substantially in the form presented and filed with the records of the meeting.

(Chairman Beaton joined the meeting.)

Revisions to Management Policy for Staff Appointments

Upon a motion duly made and seconded, it was

Voted to adopt an amendment to the Management Policies of the Board of Directors pertaining to Staff Appointments (Part II, Human Resources, Section G) to revise the basis of the Board of Directors' approval of appointments of

employees from an annual salary level threshold to specific position classification levels, as presented and filed with the records of the meeting.

PCR Amendment – December 2017

Upon a motion duly made and seconded, it was

Voted to approve an amendment to the Position Control Register, as presented and filed with the records of the meeting.

Appointment of Senior Program Manager, SCADA Engineering

Upon a motion duly made and seconded, it was

Voted to approve the Executive Director's recommendation to appoint Mr. Thai Nguyen to the position of Senior Program Manager, SCADA Engineering (Unit 9, Grade 30), at an annual salary of \$126,607.94, commencing on a date to be determined by the Executive Director.

Appointment of Project Manager, Inspections, TRAC

Upon a motion duly made and seconded, it was

Voted to approve the appointment of Walter Schultz to the position of Project Manager, Inspections, Toxic Reduction and Control (Unit 9, Grade 25) at the recommended salary of \$104,221.76, to be effective on a date to be determined by the Executive Director.

CONTRACT AWARDS

Financial and Swap Advisory Services: PFM Financial Advisors, LLC, Contract F247

Upon a motion duly made and seconded, it was

Voted to approve the recommendation of the Consultant Selection Committee to select PFM Financial Advisors LLC to provide financial and swap advisory services and to authorize the Executive Director, on behalf of the Authority, to execute and deliver Contract F247 with PFM Financial Advisors LLC

in an amount not to exceed \$580,750 for a term of four years from the Notice to Proceed.

Dental Insurance: Delta Dental of Massachusetts, Contract A613

Upon a motion duly made and seconded, it was

Voted to approve the recommendation of the Consultant Selection Committee to select Delta Dental of Massachusetts to provide dental insurance to eligible employees and to authorize the Executive Director, on behalf of the Authority, to execute Contract A613 with Dental Service of Massachusetts, Inc. d/b/a Delta Dental of Massachusetts for an amount not to exceed \$352,000 for a term of twelve months, with three options to renew for a period of twelve months each, subject to further Board approval.

CONTRACT AMENDMENTS/CHANGE ORDERS

Security Guard Services for Various MWRA Facilities: Universal Protection Service, LLC, d/b/a Allied Universal Security Services, Contract EXE-033, Amendment 2

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to increase the amount of Contract EXE-033 with Universal Protection Service, LLC d/b/a Allied Universal Security Services, Security Guard Services For Various MWRA Facilities, in the amount of \$1,943,420.00 and to extend the term by 365 calendar days to February 5, 2019.

Northern Intermediate High Section 110 – Reading and Woburn: Albanese D&S, Inc., Contract 7471, Change Order 14

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 14 to increase the amount of Contract 7471 with Albanese D&S, Inc., Northern Intermediate High Section 110 - Reading and

Woburn, in an amount not to exceed \$300,000.00, with no increase in contract term; and to authorize the Executive Director to approve additional change orders as may be needed to Contract 7471 in amounts not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

Northern Intermediate High Section 110 – Stoneham and Wakefield: Albanese D&S, Inc. Contract 7478, Change Order 5

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 5 to increase the amount of Contract 7478 with Albanese D&S, Inc., Northern Intermediate High Section 110- Stoneham and Wakefield, in a lump sum amount of \$424,646.00 and extending Milestone 1 by 139 calendar days, with no increase in the overall contract term; and to authorize the Executive Director to approve additional change orders as may be needed to Contract 7478 in amounts not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

REPORT OF THE CHAIR

Chairman Beaton presented Board member John Carroll with an official citation from Governor Baker thanking him for his many years of exemplary public service, particularly his 39-year tenure as Town Manager of Norwood.

EXECUTIVE SESSION

It was moved to enter executive session to discuss litigation and real estate.

Upon a motion duly made and seconded, it was, upon a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Blackmon		
Carroll		
Cotter		
Flanagan		
Foti		
Pappastergion		
Peña		
Vitale		
Walsh		
Wolowicz		
Beaton		

Voted to enter executive session to discuss strategy with respect to litigation and to consider the purchase, exchange, lease or value of real property, in that such discussions in open session may have a detrimental effect on the litigating and negotiating positions of the Authority.

It was stated that the meeting would return to open session solely for the consideration of adjournment.

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EXECUTIVE SESSION

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The meeting returned to open session at 1:40 p.m. and adjourned.

STAFF SUMMARY

TO: Board of Directors

FROM: Matthew A. Beaton, Chairman



DATE: January 17, 2018

SUBJECT: Annual Meeting: Election and Appointment of MWRA Officers, Retirement Board Member and Committee Assignments

RECOMMENDATION:

That the Board of Directors (1) designate this January 17, 2018 meeting as the Annual Meeting which, as provided in the Authority’s by-laws, will be deemed a special meeting of the Board for the purpose of election of officers; (2) elect a Vice-Chairman of the Board; and (3) appoint a Secretary of the Board, an MWRA Treasurer, and such Assistant Secretaries and Assistant Treasurers of the Board as the Board deems appropriate. New Committee Chairs will be appointed approximately every two years.

To ratify the following appointments of Board members to standing Committees:

Administration, Finance and Audit	Wastewater Policy and Oversight	Water Policy and Oversight	Personnel and Compensation
Chair: H. Vitale Vice Chair: J. Foti	Chair: P. Flanagan Vice Chair: J. Walsh	Chair: A. Blackmon Vice Chair: B. Pena	Chair: J. Wolowicz Vice Chair: K. Cotter
A. Blackmon J. Carroll K. Cotter A. Pappastergion B. Pena J. Walsh	A. Blackmon J. Carroll J. Foti A. Pappastergion B. Pena H. Vitale	J. Carroll J. Foti A. Pappastergion H. Vitale J. Walsh J. Wolowicz	J. Carroll P. Flanagan J. Foti A. Pappastergion H. Vitale J. Walsh

DISCUSSION:

Article IV, Section 1, of the by-laws, which specifies the officers to be elected, provides that:

“The Board of Directors shall annually elect one of its members as Vice-Chairman and shall annually appoint a Secretary and a Treasurer, who need not be members of the Board of Directors.”

The by-laws also provide that:

“Upon the recommendation of the Executive Director, the Board of Directors may also elect one or more Assistant Secretaries and Assistant Treasurers.”

Retirement Board Appointments

The provisions of G.L. c. 32 § 20 (4 7/8 D) regarding the MWRA Retirement Board, provide that:

“ . . . the secretary of the Authority shall be a member *ex officio*. . . .”

That same section of that statute further provides that a second member of the Retirement Board “ . . . shall be appointed by the board of directors of the authority for a term of 3 years” It is recommended that Thomas J. Durkin be re-appointed as a member of the Retirement Board for a three-year term beginning on July 1, 2018.

Nomination of Officers

Currently, the following individuals serve as the MWRA’s officers:

Vice-Chairman:	John J. Carroll
Secretary:	Andrew M. Pappastergion
Treasurer:	Matthew Horan
Assistant Secretaries:	Bonnie Hale Rose Marie Convery
Assistant Treasurer:	Robert Belkin Kathy Soni

The Chairman wishes to request that a motion be made to nominate the following as officers, inclusive of appointments of certain MWRA staff as Treasurer, Retirement Board Member, Assistant Secretaries and Assistant Treasurers, as follows:

Vice-Chairman:	John J. Carroll
Secretary:	Andrew M. Pappastergion
Treasurer:	Matthew Horan
Retirement Board Member:	Thomas J. Durkin
Assistant Secretaries:	Bonnie Hale Rose Marie Convery
Assistant Treasurers:	Robert Belkin Kathy Soni

There are no special procedures for election of officers, except as governed by Robert’s Rules of Order. Thus, any Board member may make a nomination to elect an officer, and the nomination will carry upon a majority vote of the quorum.