

UNITED STATES DISTRICT COURT
for the
DISTRICT OF MASSACHUSETTS

.....
UNITED STATES OF AMERICA,

Plaintiff,

v.

METROPOLITAN DISTRICT COMMISSION,
et al.,

Defendants.
.....

CIVIL ACTION
No. 85-0489-RGS

.....
CONSERVATION LAW FOUNDATION OF
NEW ENGLAND, INC.,

Plaintiff,

v.

METROPOLITAN DISTRICT COMMISSION,

Defendants.
.....

CIVIL ACTION
No. 83-1614-RGS

MWRA QUARTERLY COMPLIANCE AND
PROGRESS REPORT AS OF DECEMBER 15, 2011

The Massachusetts Water Resources Authority (the "Authority") submits the following quarterly compliance report for the period from September 16, 2011 to December 15, 2011 and supplementary compliance information in accordance with the Court's order of December 23, 1985 and subsequent orders of the Court.

I. Schedule Seven.

There were no scheduled activities for the last quarter on the Court's Schedule Seven.

A. Progress Report.

1. Combined Sewer Overflow Program.

As previously reported, the Authority and its combined sewer overflow ("CSO") communities have completed 29 of the 35 CSO control projects in the Authority's long-term CSO control plan, and four of the remaining six projects are in the construction phase. The general implementation status of all 35 projects is shown in Table 1. The Authority plans to commence design of the remaining two projects — the control gate and floatables control at Outfall MWR003 and MWRA Rindge Avenue Siphon relief project, and the interceptor connection relief and floatables control at Outfall SOM01A project — in April 2012.

Major construction continues as scheduled on the Reserved Channel sewer separation project being implemented by Boston Water and Sewer Commission ("BWSC"), the Brookline sewer separation project being implemented by the Town of Brookline, and the CAM004 stormwater outfall and detention basin project being implemented by the City of Cambridge. The City of Cambridge completed early construction contracts for the CAM004 sewer separation project several years ago and is now making progress with design of the three additional contracts Cambridge has planned to complete the

project. Cambridge intends to begin construction of the first of the additional CAM004 sewer separation contracts in September 2012.

The North Dorchester Bay CSO storage tunnel and the associated dewatering pumping station and tunnel ventilation building continue to perform as intended for their full environmental function and benefits. In the period September 16, 2011 through December 15, 2011, the Authority captured approximately 63 million gallons of CSO and separate stormwater during the 19 rainfall events. All of the CSO and stormwater gates that direct flows into the tunnel remained open through all of these events, and there was no discharge of CSO or stormwater to North Dorchester Bay and the South Boston beaches. Stored flows were dewatered to the interceptor system for conveyance to treatment at Deer Island after each storm. Since May 4, 2011, when the Authority brought the tunnel and facilities into operation, the tunnel and facilities have prevented approximately 163 million gallons of CSO and separate stormwater from discharging into the bay.

In October, in partnership with the North American Society for Trenchless Technology (NASTT), *Trenchless Technology* magazine announced its annual Projects of the Year for 2011. The Authority is the proud recipient of the 2011 Trenchless Project of the Year for New Installation for its \$85.7 million East Boston Branch Sewer Relief project (interceptor relief at BOS003-014), one of the 35 projects in the Authority's long-term CSO control plan. The project, which the Authority completed in July 2010, involved the replacement and rehabilitation of 4.7 miles of interceptor sewers, including the replacement

of 13,500 feet of sewers by micro-tunneling, the replacement of 6,000 feet of sewers by pipe-bursting, and the rehabilitation of 5,400 feet of sewers with a cured-in-place lining system, all performed in the densely populated and utility congested streets of East Boston. The project has provided long-term hydraulic and structural integrity to an interceptor system that was originally constructed 113 years ago and has greatly reduced the frequency and volume of CSO discharges to Boston Inner Harbor and the Chelsea Creek at ten outfalls, two of which have been permanently closed.

a. Cambridge Sewer Separation.

The City of Cambridge continues to make progress with construction of the \$15.5 million CAM004 stormwater outfall and wetland basin (Cambridge Contract 12), which Cambridge commenced in April of 2011. In the area where the stormwater wetland basin is to be constructed, Cambridge's contractor completed the placement of an 8-inch gas line, a 36-inch electric bundle, three 4-inch telecommunication conduits and City of Cambridge 10-inch water main and 12-inch sewer force main. The contractor also cleared the 3.4-acre area to be used for the wetland basin, commenced excavation of the basin and constructed the wetland basin outlet structure and the placement of the perimeter berm and French drain system. Deeper excavation and shaping of the western portion of the basin will begin shortly.

In addition, the contractor continues with its construction of the new storm drain box culvert and associated special structures that will ultimately convey separated stormwater flows to the basin. The contractor completed

initial sections of the box culvert, including the section that crosses beneath MBTA's high speed commuter rail tracks, construction of a large concrete stormwater diversion structure, and the relocation of an 18-inch sewer behind 70 Fawcett Street. Cambridge anticipates that it will complete Contract 12 in April 2013, in compliance with Schedule Seven.

Work on the design of the remaining three construction contracts to complete the CAM004 sewer separation project (Cambridge contracts 8A, 8B and 9) is progressing. Cambridge's design consultant is scheduled to submit a report soon on the year-long field investigations for these contracts. Cambridge plans to commence construction of Contract 8A by September 2012, in compliance with Schedule Seven, and commence contracts 8B and 9 sequentially thereafter to enable all work to be complete by December 2015, in compliance with Schedule Seven.

- b. Control Gate and Floatables Control at Outfall MWR003 and MWRA Rindge Avenue Siphon Relief; Interceptor Connection Relief and Floatables Control at Outfall SOM01A.

As reported last quarter, the Authority plans to award one design contract that will include the last two projects in its long-term CSO control plan — the control gate and floatables control at Outfall MWR003 and MWRA Rindge Avenue siphon relief project and the interceptor connection relief and floatables control at outfall SOM01A project. The Authority advertised the Request for Qualifications and Proposals on November 2, 2011, and expects to receive qualifications and proposals from interested engineering firms in

January 2012. The Authority plans to award the design contract by April 2012, in compliance with Schedule Seven.

c. Brookline Sewer Separation.

The Town of Brookline continues to make substantial progress on the second of the two construction projects that comprise the \$25.9 million Brookline sewer separation project. As previously reported, Brookline completed the \$1.4 million first construction contract (Contract 1) in January 2010. Contract 1 involved the installation of 5,658 linear feet of storm drain in secondary streets on the north and south sides of Beacon Street.

Brookline commenced construction with the \$16.6 million second and last contract (Contract 2) in January 2011. Contract 2 includes the installation of 3,790 linear feet of storm drain and 1,290 linear feet of sanitary sewer by open trench method and 4,550 linear feet of sanitary sewer by micro-tunneling. The contract involves micro-tunneling large diameter sewers at significant depths along Beacon and Monmouth Streets; installing and/or rehabilitating smaller-diameter sewers along Beacon, Monmouth and St. Mary's Streets; installing storm drains along those streets; and converting a large-diameter combined sewer along St. Mary's Street to a storm drain. As part of this project, Brookline is constructing several large, special structures that will connect the new town sewers to existing town laterals and to the Authority's interceptor system, including the Authority's Charles River Valley Sewer and South Charles Relief Sewer.

As reported last quarter, the Town of Brookline's contractor completed both the 490-foot long micro-tunneling portion and the 180-foot long open cut portion of a new 57-inch diameter sewer on Monmouth Street, as well as the micro-tunneling installation of 1,480 linear feet of 18-inch diameter sanitary sewer in St. Mary's Street and along the portion of Beacon Street from Carlton Street to St. Mary's Street. More recently, the contractor completed the micro-tunneling installation of 2,240 linear feet of 48-inch sanitary sewer in Beacon Street between Carlton and Kent Streets and the open-cut installation of 90 linear feet of 12-inch drain in Carlton Street between Beacon Street and Churchill Street. The contractor has completed the installation of 650-linear feet of 42-inch drain in Beacon Street (inbound) between Carlton Street and St. Mary's Street and has commenced the installations of 12-inch sewer and 30-inch drain in St Mary's Street from Beacon Street to Monmouth Street.

In addition, the contractor poured the base slab for Structure No. 3 and is currently constructing the walls of the structure. The contractor plans to make use of already constructed launching and exit pits that were used for completed sewer installations on Beacon Street as the excavations for construction of Structures Nos. 4 and 5 in the intersection of Beacon and Carlton streets. Structures No. 1 and 2 will be constructed later in the contract schedule. Contract 2 is approximately 50 percent complete, and the Town of Brookline expects to achieve substantial completion of the work in advance of the July 2013 milestone in Schedule Seven.

In the meantime, the Authority is continuing with final design of its plan to clean CSO Outfall MWR010 to ensure that the outfall has adequate capacity to convey Brookline's separated stormwater, as well as existing BWSC stormwater and extreme storm related CSO discharges from the Authority's Charles River Valley Sewer, to the Charles River. The Authority is currently reviewing the 100-percent design plans and specifications and expects to commence the outfall cleaning contract in June 2012 and to complete the work by August 2012, in advance of the completion of Brookline's sewer separation project.

d. Reserved Channel Sewer Separation.

BWSC continues to make scheduled progress with the nine planned construction contracts for the \$62.3 million Reserved Channel Sewer Separation project. As previously reported, BWSC attained substantial completion of the first construction contract (Contract 2) in December 2010. That contract involved the installation of 8,379 linear feet of storm drain, approximately 3,961 linear feet of minor drain (8-inch-diameter or less), and 3,372 linear feet of sanitary sewer to separate combined sewers in an area of South Boston bounded by East First Street, Farragut Road, Broadway and M Street. The work removed stormwater from local sewers tributary to the upstream end of BWSC's South Boston Interceptor - South Branch, reducing CSO overflows to the Reserved Channel at Outfall BOS080.

BWSC issued the Notice to Proceed for the \$4.0 million second construction contract (Contract 1) in November 2010. Contract 1 includes

rehabilitation of the four Reserved Channel CSO outfalls to accommodate the stormwater flows being removed from the sewer system and to provide the outfalls long-term structural integrity. In addition to completing all work at Outfall BOS079 and installing a new tide gate and associated structure at Outfall BOS076 as reported last quarter, the contractor continues to perform headwall construction and site restoration work at Outfall BOS076 and has completed headwall construction at Outfall BOS080. At Outfall BOS078, the contractor completed construction of a new headwall and excavation for a new tide gate structure and is installing a 72-inch storm drain that will allow stormwater from the Contract 3B sewer separation work to discharge to the Reserved Channel through this outfall. BWSC expects Contract 1 to be substantially complete by December 31, 2011.

BWSC issued the Notice to Proceed for the \$9.9 million third construction contract (Contract 3A) in December 2010. Contract 3A involves the installation of 8,900 linear feet of storm drain and 2,900 linear feet of sanitary sewer to separate combined sewers in an area tributary to Outfall BOS076, as well as 7,300 linear feet of replacement water main to remove conflicts with the planned storm drains. The contract also includes the installation of 22 new catch basins and the disconnection of 76 existing catch basins from the sewer system, with reconnection to the new drains.

As previously reported, the contractor completed the installations of an 84-inch diameter storm drain in Pappas Way and 42-inch sanitary sewer in West First Street between E Street and F Street, as well as sections of new 12-

inch diameter and 16-inch diameter water mains in West First Street.

The contractor is continuing with installation of the new 42-inch sanitary sewer in West First Street, between D Street and E Street, and has commenced the installation of storm drains in F Street. The contract is 45 percent complete and has a completion date of July 2013.

BWSC issued the Notice to Proceed for the \$10.9 million fourth construction contract (Contract 3B) in March 2011. This contract involves the installation of approximately 10,000 linear feet of storm drain, 3,800 linear feet of sanitary sewer to separate the combined sewers in a 66-acre area tributary to outfalls BOS078 and BOS079, as well as 10,800 linear feet of replacement water main to remove conflicts with the planned storm drains. Fourteen new catch basins will be installed, and 120 existing catch basins will be disconnected from the sewer system and reconnected to new storm drains.

A considerable amount of water line relocation work is necessary to avoid conflicts with planned installations of new storm drains and sewers. In addition to completing 12-inch and 16-inch water main installations in East First Street as reported last quarter, the contractor is progressing with the installation of the 16-inch water main along Pappas Way from East First Street. The contractor continues to dig test pits and carry out underground utility investigations prior to installing new storm drains and sewers. Related to the work of this contract, NStar has completed the identification and investigation of its manholes in the area. Contract 3B has a completion date of December 30, 2014.

BWSC's design consultant is redesigning portions of work within contracts 3A and 3B to avoid utility conflicts found during construction and not shown on the contract drawings. BWSC is coordinating with NStar, National Grid, Verizon and Comcast to resolve the conflicts and expects to issue associated change orders to the two construction contracts soon.

The \$1.2 million fifth construction contract (Contract 7), which commenced in November 2010, involves pavement restoration of affected streets. The contractor has completed final pavement restoration associated with BWSC's completed Contract 2. Contract 7 runs through April 19, 2012, and the pavement work will follow the phased completion of the various sewer separation contracts.

BWSC also continues to make progress with remaining project design activities. The design plans for Contract 4, the last of the large sewer separation contracts associated with the Reserved Channel project, are approximately 90 percent complete. Contract 4 includes sewer separation in a large area west of Reserved Channel that is tributary to Outfall BOS076 and in a large area south of Reserved Channel, along and near East Broadway. BWSC plans to award Contract 4 in the spring of 2012 and award the remaining three construction contracts for this project (Contract 5 – sewer cleaning and relining, Contract 6 – downspout disconnections, and Contract 8 – additional

final paving) sequentially through April 2013 and complete all work by December 2015, in compliance with Schedule Seven.

Respectfully submitted,

/s/ John M. Stevens
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CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of this document, which was filed via the Court's ECF system, will be sent electronically by the ECF system to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non-registered participants on December 15, 2011.

/s/ John M. Stevens
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Dated: December 15, 2011

Table 1
Status of CSO Project Implementation
December 15, 2011

MWRA Contract	CSO Projects in Schedule Seven	IN DESIGN	IN CONSTRUCTION	COMPLETE
MWRA Managed Projects				
N. Dorchester Bay Tunnel	N. Dorchester Bay CSO Storage Tunnel and Related Facilities			X
N. Dorchester Bay Facilities				
Pleasure Bay Storm Drain Improvements				X
Hydraulic Relief Projects	CAM005 Relief			X
	BOS017 Relief			X
East Boston Branch Sewer Relief				X
BOS019 CSO Storage Conduit				X
Chelsea Relief Sewers	Chelsea Trunk Sewer Relief			X
	Chelsea Branch Sewer Relief			X
	CHE008 Outfall Repairs			X
Union Park Detention/Treatment Facility				X
CSO Facility Upgrades and MWRA Floatables	Cottage Farm Upgrade			X
	Prison Point Upgrade			X
	Commercial Point Upgrade			X
	Fox Point Upgrade			X
	Somerville-Marginal Upgrade			X
	MWRA Floatables and Outfall Closings			X
Brookline Connection and Cottage Farm Overflow Interconnection and Gate				X
Optimization Study of Prison Point CSO Facility				X
Community Managed Projects				
South Dorchester Bay Sewer Separation				X
Stony Brook Sewer Separation				X
Neponset River Sewer Separation				X
Constitution Beach Sewer Separation				X
Fort Point Channel Sewer Separation and System Optimization				X
Morrissey Boulevard Storm Drain				X
Reserved Channel Sewer Separation		X	X	
Bulfinch Triangle Sewer Separation				X
Brookline Sewer Separation			X	
Somerville Baffle Manhole Separation				X
Cambridge/Alewife Brook Sewer Separation	CAM004 Outfall and Basin		X	
	CAM004 Sewer Separation	X	X ⁽¹⁾	
	CAM400 Manhole Separation			X
	Interceptor Connection Relief/Floatables at CAM001, CAM002, and CAM401B			X
	Interceptor Connection Relief/Floatables at SOM01A	Start 2012		
	MWR003 Gate and Rindge Ave. Siphon	Start 2012		
Region-wide Floatables Control and Outfall Closings				X

⁽¹⁾ In 1997-2002, Cambridge completed design and construction of four initial contracts to separate the CAM004 tributary area.