



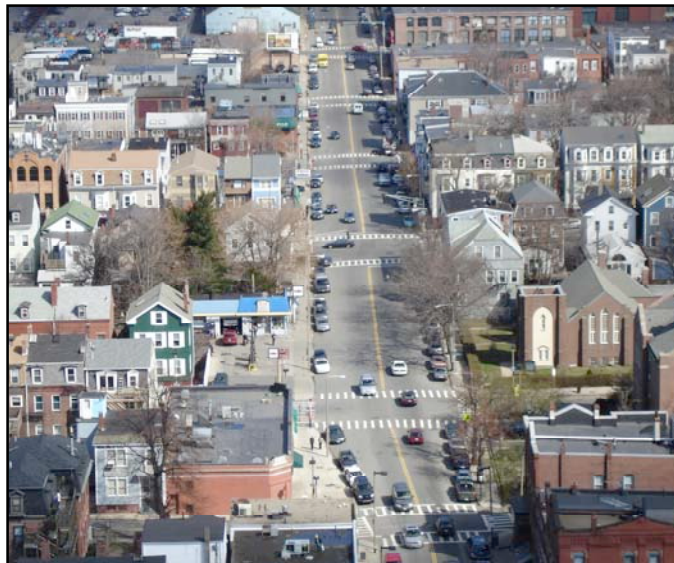
RESERVED CHANNEL SEWER SEPARATION PROJECT

PURPOSE

The Boston Water and Sewer Commission's (BWSC) Reserved Channel Sewer Separation Project involves separating the combined sewer system in the Reserved Channel area of South Boston. The purpose of this federal court ordered project is to reduce pollution levels in Boston Harbor by substantially decreasing the number and volume of Combined Sewer Overflows (CSOs) into the Reserved Channel and Boston Harbor. The separation project is being undertaken by the Boston Water and Sewer Commission (the Commission) on behalf of the Massachusetts Water Resources Authority (MWRA). The project was included in the MWRA's 2004 Supplemental Facilities Plan and Environmental Impact Report on the Long-Term CSO Control Plan for North Dorchester Bay and Reserved Channel.

Combined sewers are found in many older cities and carry both sanitary sewage and stormwater in the same pipe. During dry weather, sanitary flows are conveyed to interceptor sewers which transport the sewage flows to a wastewater treatment facility. During wet weather, the stormwater gradually takes up the greater portion of the space in the pipe and, depending upon the duration and intensity of the storm, may exceed the capacity of the combined sewer system. The excess combined flows are transported to overflow conduits that discharge into a local body of water, in this case Reserved Channel and Boston Harbor. The resulting discharge of both sanitary sewage and stormwater flows from these overflow pipes is known as a CSO (combined sewer overflow).

The existing overflow conduits in the Reserved Channel area currently discharge CSOs into the Reserved Channel at outfalls BOS 076, BOS 078, BOS 079 and BOS 080. This sewer separation project will replace the existing single combined system with two separate systems – one for sanitary sewage and one for stormwater. When



A typical streetscape in the Reserved Channel Sewer Separation Project area of South Boston.

construction is complete, sanitary sewage will be conveyed to the MWRA's Deer Island Wastewater Treatment Plant, while stormwater will be discharged directly into the Reserved Channel resulting in a substantial reduction in CSOs. As a result, the impact on the Reserved Channel and Boston Harbor from the harmful effects of pollution from CSOs will be substantially reduced.

PROJECT AREA

The Reserved Channel Sewer Separation Project encompasses an area roughly delineated by the Reserved Channel/Fargo Street to the north, Farragut Road to the east, East Fourth Street/West Broadway to the south and B Street/C Street near the Haul Road to the west. Land use in the project area is characterized by residential neighborhoods; light industrial and large commercial buildings and complexes; small business and retail districts; civic, cultural and educational facilities; and transportation related sites.

SCOPE OF WORK

Sewer Separation

The **Design Phase** involves:

- Field investigations, including surveys of streets and adjacent areas, television inspection of sewers and outfalls, inspection of manholes and subsurface investigation of utilities by vacuum excavation
- Inspection of residential and non-residential buildings for locations of downspouts and building laterals
- Coordination with abutters and public/private agencies, organizations and utilities
- Preparation of final construction contract plans and specifications

The **Construction Phase** involves:

- Installation of approximately 38,000 linear feet of new storm drains and the rehabilitation/relay of 10,000 linear feet of existing sanitary sewers and 25,500 linear feet of water mains in approximately 37 streets
- Disconnection of residential and non-residential building downspouts and laterals, including catch basins and area drains
- Rehabilitation of existing outfalls and structures and replacement of tidegates
- Restoration of all roadways, curbing, sidewalks and other areas impacted by construction

Building Disconnections

In addition to separating combined sewers in the street, this project will disconnect as many individual building downspouts and laterals from sewers, as is cost effective. Building laterals are pipes that connect a building's internal plumbing to pipes in the street. Many older buildings in the South Boston area have an internal pipe that collects stormwater from the roof and discharges it into the building sewer lateral. Downspouts also collect stormwater from the roof in pipes that run down the sides of buildings. In some cases, these downspouts discharge into the sewer, rather than splashing to the ground. Since the purpose of this project is to remove as much stormwater from the sewer system as possible, these building downspouts will be disconnected, where feasible. This work will be coordinated individually with building owners, as necessary.

OVERALL SCHEDULE

Eight construction contracts (four pipe installation, one building disconnection, one outfall restoration, one sewer cleaning and lining and two paving restoration) will be designed, advertised for bids, awarded and then constructed. The project will be completed in the following phases:

Preliminary Design Phase – August 2006 to February 2008. During this phase, the scope and limits of work for the project area were established.

Final Design Phase – March 2008 through January 2013. During this phase, the eight construction contracts will be prepared, advertised, bid and awarded to the lowest responsible bidder.

Construction Phase – May 2009 through December 2015. During this phase, construction of the eight contracts will be phased, with each contract lasting approximately 18 to 24 months. Permanent pavement restoration work will follow each construction contract.

CURRENT CONSTRUCTION CONTRACT CONTRACT 2 (080 OUTFALL AREA)

Contract 2 construction will begin in May 2009 and be completed in January 2011. The contract area is generally bounded by East First Street in the north, East Fourth Street in the south, M Street in the west and Farragut Road in the east. Construction will take place on Acadia Street, East Broadway, East First Street, East Second Street, East Third Street, East Fourth Street, Farragut Road, N Street, O Street and P Street within the contract area boundaries.

FUTURE CONSTRUCTION CONTRACTS

- Contract 1 (Outfalls Restoration) 2009-2010
- Contract 3A (076S) 2010-2012
- Contract 3B (078E/079) 2010-2013
- Contract 4 (078S/076W) 2011-2013
- Contract 5 (Sewer Clean/Line) 2013-2014
- Contract 6 (Downspouts) 2010-2011
- Contract 7 (Paving #1) 2010-2012
- Contract 8 (Paving #2) 2013-2015

PROJECT COORDINATION AND CONSTRUCTION ACTIVITY

The Commission is committed to working closely with the Mayor's Office; elected officials; Boston Public Works Department (BPWD), Boston Transportation Department (BTD) and other City departments; Massachusetts Port Authority, Massachusetts Convention Center Authority and Massachusetts Bay Transportation Authority; public and private utility companies; state and federal regulatory agencies; and, most importantly, with abutters to ensure the project is successfully completed. Extensive coordination with National Grid will be required because gas main relocations or replacements will be necessary. In addition, the MWRA will be installing a force main in East Broadway and N Street. Effective coordination will also help mitigate many short-term construction related impacts that may be associated with the project.

The Commission will adhere to all city and state regulations and ordinances governing construction in public roadways. All dust, debris and excavate will be strictly controlled and monitored.

RESTORATION

In an effort to streamline and expedite all temporary and permanent roadway resurfacing, the Commission will complete pavement restoration work as part of this project in accordance with the requirements of the BPWD. Similarly, sidewalks and private property impacted by construction will be restored under this project.

COMMUNITY RELATIONS PROGRAM

The Commission is committed to a proactive community relations program during both the design and construction phases of this project. The program is designed to keep residents, businesses and elected officials informed about the project by holding public meetings, placing notices in local newspapers and posting updates on the project webpage (<http://www.bwsc.org/channel.htm>). Prior to the start of construction, public meetings will be held to introduce the contractor and provide specific information and anticipated schedules for upcoming work. In addition, before construction begins on a street, a notice will be sent in the mail announcing the work to be performed on the street. Project staff will meet periodically with residents, businesses, civic groups, educational and cultural institutions and elected officials to provide updates, as requested or appropriate.

Commission staff will work closely with affected neighborhoods regarding issues such as pedestrian and vehicular traffic management, access to residences and business establishments, maintaining access for deliveries and trash and snow removal, and issues specific to traffic entering and exiting Conley Terminal.

BWSC AND MWRA AGREEMENT AND COSTS

The Reserved Channel Sewer Separation Project is mandated by a federal court order as part of the Boston Harbor Project. Because BWSC has extensive experience in managing sewer separation projects and is well equipped to complete these projects, MWRA asked BWSC to implement the separation project.

Under the provisions of the agreement between MWRA and BWSC, MWRA will be responsible for eligible construction costs. The remainder will be funded by BWSC through its Capital Improvement Program (CIP) for additional water and sewer system improvements being completed concurrently with this project.

PROJECT CONTACTS

For further information on the project or to be added to the mailing list, please contact:

Boston Water and Sewer Commission
617-989-7000

Edward Duggan, Senior Design Engineer

Irene McSweeney, Director of Construction

Thomas Bagley, Deputy Director of Communications

If you have questions or concerns about construction, please contact:

Project Field Office
John Doherty, Project Manager
Fay, Spofford & Thorndike
840 Summer Street, South Boston
617-268-2046

In an emergency, contact BWSC's 24-hour, 7-day a week number at 617-989-7000.

Boston Water and Sewer Commission
980 Harrison Avenue
Boston, MA 02119
617-989-7000
www.bwsc.org

