



Union Park CSO Facility

A publication of the Massachusetts Water Resources Authority

NEW BUILDING TO RISE FROM EXCAVATION

After nearly 18 months of work, construction of the Union Park CSO Detention/Treatment Facility (Union Park DTF) project is approaching the midway point. A good deal of progress has been made, but a lot of work remains. The contractor, Barletta Engineering, has completed approximately 80% of the excavation, hauling away nearly 56,000 tons of soil. The large excavation on site bears witness to this progress. Barletta is currently focusing on the underground storage tanks that will hold up to 2.2 million gallons of combined sewage during storm events. Work activities include placing reinforcing steel, forming walls and pouring concrete.



A view of the excavation from the roof of the Pump Station.

Despite some delays and surprises, by early 2005 Barletta will start erecting the structural steel frame for the building. The new facility, which will be next to and somewhat larger than the existing Pump

Station, will house screening equipment and odor control filters. The Union Park DTF is one of 25 projects in the MWRA's Long-Term CSO Control Plan. The facility is required by the federal Court Order that guided the Boston Harbor Project.

The site presents a number of challenges for Barletta and for neighbors on Union Park and Malden Streets. MWRA's Public Affairs Department monitors day to day activities and meets with neighbors and businesses on a quarterly basis in order to address concerns relative to the project and to answer general public inquires. (See the meeting notice in the box at left.) A number of practices are in place to help manage any impacts on the community.

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About the Project

The Massachusetts Water Resources Authority (MWRA) owns and operates five facilities that treat Combined Sewer Overflows (CSOs) during wet weather to improve water quality in Boston Harbor and its tributary rivers. As part of the Federal Court Order guiding the restoration of Boston Harbor, the Authority has upgraded all five existing facilities. The \$38.4 million Union Park CSO Detention/Treatment Facility will detain and treat wet weather flows from the South End neighborhood of Boston that pass through the existing Union Park Pump Station (operated by the Boston Water and Sewer Commission). The facility will include underground detention tanks, screens to remove floating material, disinfection and dechlorination systems and a surface building adjacent to BWSC's Union Park Pump Station that will include odor control.

The new Union Park facility will substantially improve the quality of wet weather overflows reaching the Fort Point Channel. A similar facility at Cottage Farm near the B.U. Bridge on the Charles River has been operated since 1971, first by MDC, then by MWRA, since 1985.

Public Meeting

**Thursday, September 23, 2004
At 7 PM**

St. Helena's House, Dining Room
89 Union Park Street

Please join us for a project update.

A Bird's Eye View



The tower crane at the Union Park DTF site stands 112 feet to the cab. It can handle up to 30,000 pounds of load.

New Building / cont.

A Big Project in a Small Space

The contractor faced site challenges as soon as the job began. Although the MWRA expected to find the foundation of an abandoned Boston Redevelopment Authority (BRA) pump station near the corner of Union Park St. and Albany St., in reality, there was more. Oil from the 1915 era pump station had to be removed properly, and other contaminants assessed. Oil-covered debris and equipment from the old facility also had to be removed. While the extra site remediation delayed the project for about three months, the result is a cleaner site within the residential neighborhood.

The installation of sheet piles to brace the walls of the excavation took longer than expected because of these discoveries. Barletta com-

pleted the sheeting installation in the expected four months, however, and the removal of contaminants made the site safer for the workers and the neighborhood.

The next step was to continue site excavation and bracing to prepare for placing concrete for the new, underground detention tanks. The contractor installed bypass piping to replace pipes within the area of excavation to keep the pumping station in operation.

Concrete placement began in April 2004 and it is expected to continue until the first of the year. Barletta has placed 6,000 cubic yards to date, approximately 45% of the concrete required for the new facility. All of this work is taking place within a very constrained site. The MWRA restricted the contractor's use of bordering streets to limit impacts on neighbors as much as possible. Construction vehicle access on Union Park Street is prohibited. The on-site Boston Water and Sewer Commission (BWSC) Pump Station is also undergoing major renovations, but it must remain in service to do its job: providing essential flood control by pumping combined sewage during large rainstorms.

A new piece of construction equipment arrived on site in July: a very large tower crane. Barletta brought the tower crane on site because of the space constraints. The 112-foot high crane is needed to pick up and move equipment from one location to another within the site. The crane moves materials, such as reinforcing steel and formwork, and equipment into the excavation and is sometimes used to place concrete. Because of its height, the tower crane can pick up materials or equipment at an angle, move it to any corner of the site, then reposition it as needed. The tower crane is expected to remain on site through the spring of 2005.

The project has experienced some delays, and the contractor has started to lengthen the hours of work to make up time. The MWRA recently notified neighbors that Barletta is working a longer day - one to two hours at the end of the shift - to remain on schedule. Most of the activities at the end of the day involve site cleanup and prep, so work areas will be clean and ready for the next day. Concrete finishing activities are taking place, and some tasks in the interior of the existing pump station are also performed during the extended hours. These quieter activities have less impact on neighbors at day's end.

Looking Ahead

In the first quarter of 2005, Barletta will begin erecting the structural steel frame that will form the above ground building. The superstructure will rise fairly quickly, then masons will start placing the brick and block walls. Barring delays due to weather or other complications, the new building should be enclosed by the spring of 2005. Although work will continue on the roof after this time, a great deal of the construction and installation will be taking place inside the new structure.

Over the next few months, work will continue inside the existing Pump Station to prepare for new pumping equipment. The improvements involve replacing the electric pump and installing a new pump and turbine, which requires a fourth stack to be erected this fall. While the capacity of the pump station will remain the same, the reliability will be greatly enhanced because the pump improvements provide for standby capacity in the event a pump is out of service for maintenance or repairs. Excavation work is scheduled in Albany St. to install a sluice gate within an existing manhole located at the intersection of Malden and Albany in the far right,

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WORKING WITH THE COMMUNITY

In pre-construction meetings with residents and businesses in the area around the Union Park Detention/Treatment Facility (Union Park DTF), the MWRA committed to a number of practices to limit the impact of construction. Community issues and concerns are monitored by the MWRA's Public Affairs Department, the Construction Manager and the Resident Engineers from Metcalf & Eddy, Inc., the project engineer.

These ongoing practices include the following:

- Street sweeping to control dust.
- Groundwater monitoring wells to watch for impacts from the contractor's dewatering activities. The goal is to make sure dewatering does not affect off-site groundwater levels. The monitoring well information is recorded and checked regularly.
- Decibel meters to monitor noise levels.
- A licensed rodent control contractor maintains and monitors rodent control efforts. There have been no problems to date.
- A truck detour that directs traffic to Malden and Albany Streets. Trucks that leave the site with debris and other materials or after deliveries turn on to Malden St., then Albany St. and directly to the Expressway.
- Temporary taking of parking meters for in-street work includes compensation to the City of Boston for the lost revenue.

Residents and businesses can reach the MWRA 24 hours a day with problems or complaints. During the work day, Gary Webster in MWRA Public Affairs, 617-788-1170, responds to project concerns. Between 5 PM and 9 AM, emergency calls can be placed to the MWRA's Operations Control Center, 617-305-5950. (The Construction Contacts box on page 4 repeats this information and can be placed in a phone book or on a refrigerator.)

The MWRA recognizes that construction of this magnitude inconveniences neighbors and businesses. We ask for your continued patience as we work to build this vital stormwater retention and treatment facility.



Top: A view of the basin excavation from Malden Street.

Middle: An excavator stockpiles soil to be removed from the site.

Bottom: Interior of the existing pump station after demolition of the interior block walls.

New Building / cont.

northbound lane. This construction will restrict parking and may involve a lane closure. MWRA will notify neighbors and businesses before this work begins. The excavation is tentatively scheduled to begin in September 2004 and should be completed by the end of the year.

Project Contacts

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Public Affairs, MWRA
617-788-1170

Eleanor Duffy
Construction Manager, MWRA
617-788-4906

Nancy Farrell
*Public Involvement Manager,
Regina Villa Associates*
617-357-5772



How Can I Get Involved

To add your name to the project mailing list to receive meeting notices, newsletters and other information, call Gary Webster at MWRA Public Affairs, 617-788-1170.

Project documents will be made available to the public for review at the following location:

Boston Public Library
South End Branch
685 Tremont Street

You can also visit the MWRA web site at www.mwra.com, for project updates.

Construction Contacts

During construction, neighbors and businesses can contact Gary Webster, MWRA Public Affairs, with any problems or questions during business hours. After hours, please contact the MWRA's Operations Control Center at the number below. If you do not have an emergency but want to get information, please leave a message at MWRA Public Affairs, and Mr. Webster will contact you or address the issue during the next business day.

MWRA Public Affairs
Gary Webster
617-788-1170

MWRA Operations Control Center (after hours)
617-305-5950

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