

Muddy River Flood Damage Reduction Project
Phase 2 Construction Activities Next 90 Days
November 2021

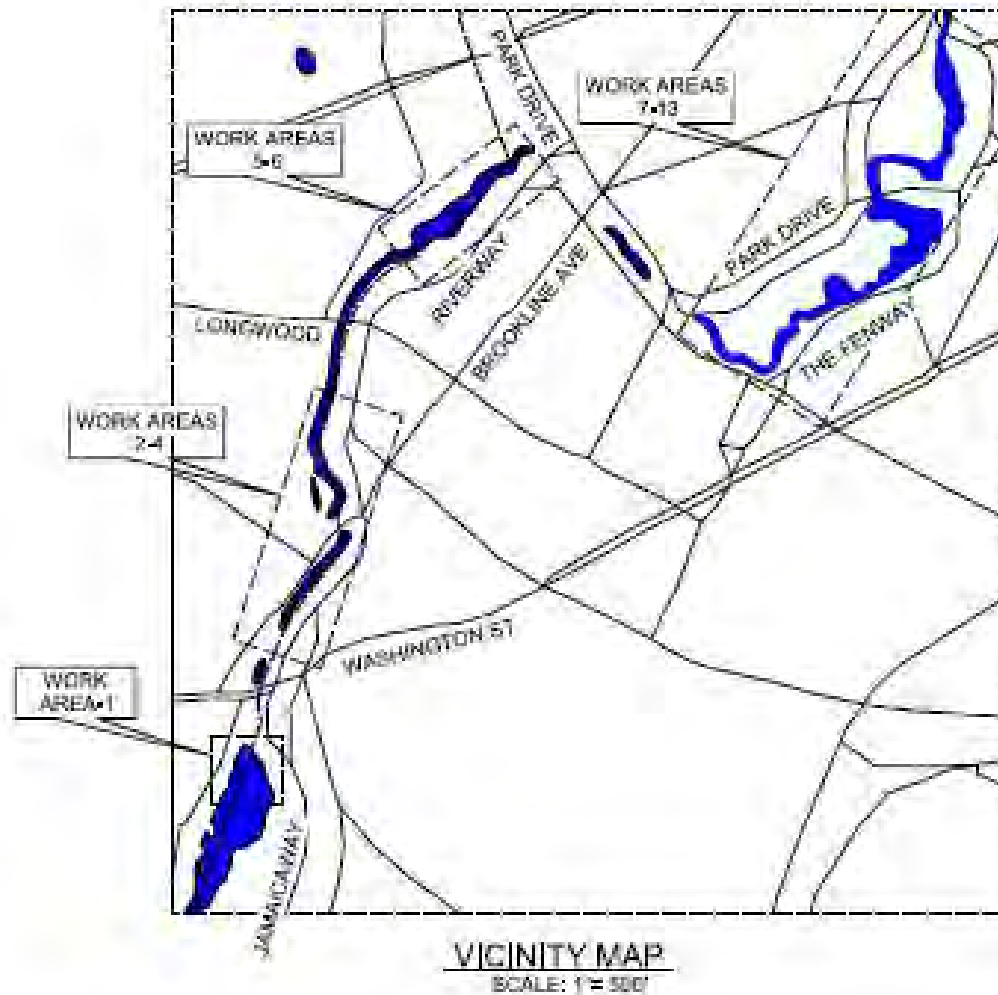
General: The Muddy River Flood Damage Reduction Phase 2 Construction Project is located in the footprint generally between Leverett Pond to Boylston Street in Boston and Brookline. The major project components involve dredging 1 to 8' of sediment for flow conveyance in the Back Bay Fens and the Riverway sections of the Muddy River. It also includes excavation of the sandbar and island at Leverett Pond. Work also includes the removal of *phragmites* from the wetland and riparian areas which affect flow conveyance. After removal of river sediments and *phragmites*, preservation and restoration of the historic park shoreline in construction areas will consist of planting emergent wetland plants and restoring riparian vegetation in upland areas by planting trees and shrubs. This Notice is intended to identify the general construction activities that will be performed in the next 90 days. A figure that shows a typical flood control channel and the proposed improvements is at the end of this report.

November 2021 through January 2022 Period:

- Since the award of the construction contract and issuance of the Notice to Proceed over 18 months ago, the contractor has been actively dredging the sediment from the river and properly disposing of the material at disposal facilities. Utilization of two crews has maximized productivity of dredged sediments.
- Dredging of the Muddy River is divided into 12 work areas as shown in the Vicinity Map, with 6 work areas upstream of the Riverway and 6 work areas downstream of Ave. Louis Pasteur. At this time, the contractor continues dredging in Work Area #10.
- **Work Area #2** – section of river at Brookline Avenue and the Riverway – near Beth Israel Deaconess Hospital – the contractor completed dredging this section mid-February 2021. Surveying was done in February to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Planting of Work Area #2 was deferred to the Spring 2022 so that a collapsed drain line can be repaired this winter.
- **Work Area #3** – section of river at Brookline Avenue, the Riverway, and Netherlands Road – near Beth Israel Deaconess Hospital – the contractor completed dredging this section late-March 2021. Surveying was done in May to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction began late September and all trees, upland planting, and seeding were completed by October. Stonedust path restoration will begin late November and continue into early December. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- **Work Area #4** – section of river immediately downstream of Work Area #3, across Netherlands Road – the contractor completed dredging this section early April 2021. Surveying was done late May to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction began late September and all trees, upland planting, and seeding were completed by October. Stonedust path restoration will begin late November and continue into early December. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- **Work Area #1** – Leverett Pond – Additional sampling has been completed and resultant test results have been reviewed. A revised dredge footprint was engineered to address the recent information received. The contractor began dredging in Work Area #1 early May and completed dredging at the end of June. Surveying was done in mid-July to confirm new flood risk management cross sections. Since that time, materials and equipment in this area have been relocated to other active work areas. Planting and restoration of Work Area #1 was deferred to Spring 2022 to coincide with the Spring planting window as we focused our planting efforts to Work Areas #3-#4 and #7-#9 this fall.

- **Work Area #7** – section of river immediately downstream of Avenue Louis Pasteur – the contractor completed dredging this section at the end of December 2020. Surveying was done in early January to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction and all trees, upland planting, and seeding were completed by October. Stonedust path restoration was completed late-November. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- **Work Area #8** – section of river immediately downstream of Work Area #7 – the contractor completed dredging this section before the end of February 2021. Surveying was done in late February to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction and all trees, upland planting, and seeding were completed by October. Stonedust path restoration was completed late-November. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- **Work Area #9** – section of river immediately downstream of Work Area #8 – the contractor completed dredging this section mid-April 2021. Surveying was done in late June to confirm new flood risk management cross sections. Since that time, a review of the as-dredged conditions has taken place to confirm plant locations and topsoil quality to optimize planting success. Grading of the site and wetland construction and all trees, upland planting, and seeding were completed by October. Stonedust path restoration was completed late-November. Maintenance of the planting will begin immediately during the two-year plant guarantee period.
- **Work Area #10** – section of river immediately downstream of Work Area #9 which ends at Agassiz Road – dredging began in late April 2021 and will continue for several months and work will continue into next year in this work area. Work Area #10 has the largest quantity of dredged sediment to be removed at about 35,000cy. As planned, the dredge equipment (amphibious excavator) from Work Area #1 was mobilized to Work Area #10 in mid-July to supplement the dredging efforts. As we approach the narrower part of the Work Area #10 towards the Agassiz Road Bridge, the 2nd amphibious excavator will no longer be required. This equipment and crew will be diverted downstream to dredge Work Areas #11 and #12 in early December. The sediment processing bins were removed as part of the dredging efforts. Dredging work will continue down near the War Memorial and the Agassiz Road Bridge. Planting and restoration of Work Area #10 will begin once dredging is complete – expected to be Spring 2022.
- **Work Area #13** – Boston Fire Department Building in the vicinity of the Fenway and Agassiz Road – Construction of the new floodwall around the BFD building began with the demolition of the existing security fence and its footing in early May. That led to the excavation for the new wall subbase and foundation. As part of the foundation, helical piles began to be installed late May starting at the north section of the wall and was halted shortly after rounding the corner of the FD Building. This allowed for the excavation of the underground pump station which was set in place mid-June. Helical pile installation was completed at the end of June. Since that time, formwork, rebar, and concrete placement took place for both the wall foundation and the wall. Granite veneer installation began late October and will continue so that we can backfill and pave the parking lot ahead of winter for BFD operations. Electrical panel for the pumps was installed in early November and pumps are scheduled for installation in December.
- **Work Areas #11 and #12** – Victory Gardens Area – Temporary construction fence installation at the Victory Gardens began mid-January to allow for the construction of processing bins of the Central Processing Facility on the left bank of Work Area #11, to supplement the already constructed bins on the right bank near the Duck House. This was required due to the increase of daily dredged material production, necessitating additional bins to store the dredged sediment while it is dewatered and stabilized before the processed sediment is loaded and transported to the final disposal facility. These work areas will continue to see periodic activity as dredged material storage is required. Dredging in the section of the river in these areas will begin in early December once the 2nd amphibious excavator is mobilized to this area. Setup, staging, and access road construction in WA's #11 and #12 began in mid-November in preparation of the dredging.
- **Work Areas #5 and #6** – section of river by Short Street Bridge to Back Bay Yard – near the intersection of Park Drive and Riverway – dredging in the section of the river in these areas will likely begin in late Spring 2022. Site preparation and staging may take place in early Spring 2022 to set up these work areas in preparation of the dredging work.

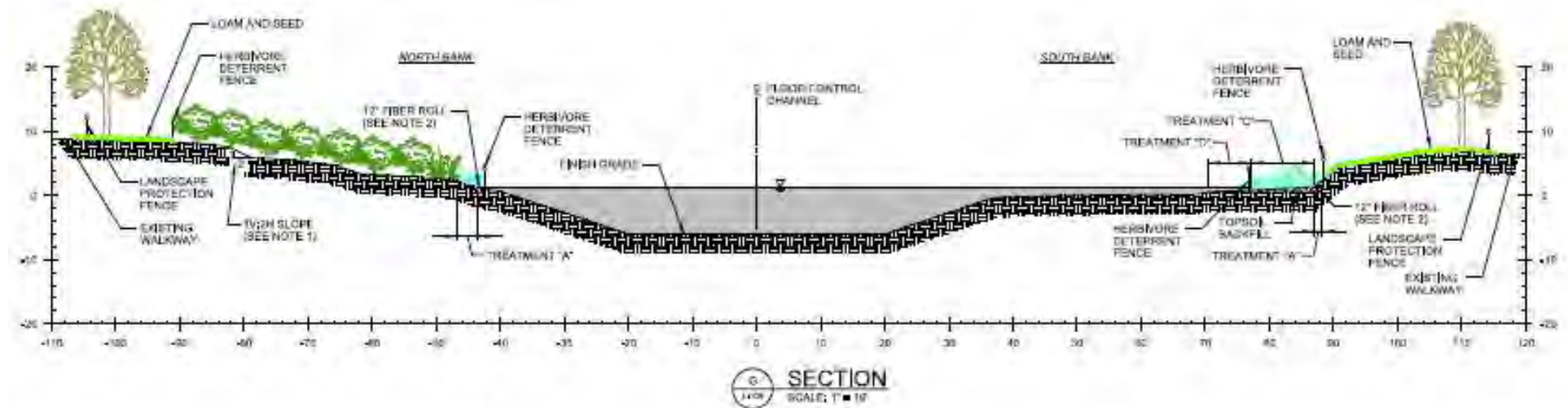
- At the end of this notice we have included some pictures that show the construction progress at Work Areas #3, #4, #7-#10, and #13. We thought folks would be interested in seeing the work occurring behind the fence.
- If you any questions, require additional information or would like to be added to the Project Contact List, please email the project mailbox at MuddyRiver@usace.army.mil



EXTENTS OF PROJECT WORK AREA FOR PHASE 2 CONSTRUCTION



REPRESENTATIVE FIGURE OF FLOOD CONTROL CHANNEL AND PROPOSED IMPROVEMENTS

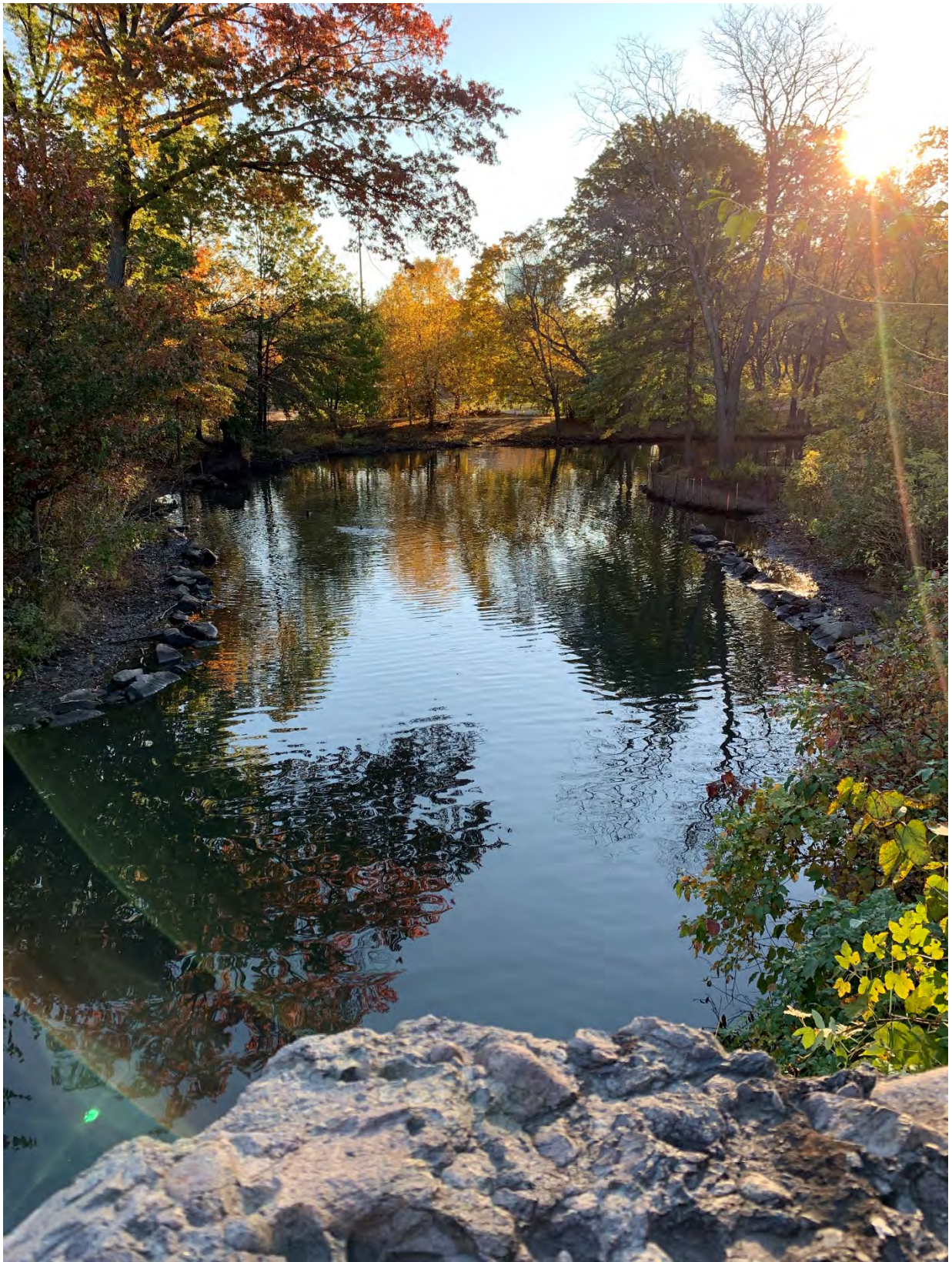




Work Area #3 – section of river at Brookline Avenue, the Riverway, and Netherlands Road – near Beth Israel Deaconess Hospital – view of planted bank on the near and far side and across the river is the constructed wetland shelf with coir log. Also installed is the temporary herbivore deterrent fence.



Work Area #4 – section of river immediately downstream of Work Area #3, across Netherlands Road – view of the planted bank with new tree and shrubs. Note also the habitat log on the bank as part of the restoration.





Work Area #7 – section of river immediately downstream of Avenue Louis Pasteur – newly planted trees and shrubs. Loam and hydroseed installed. Note also the herbivore deterrent fence to protect the planted shrubs during the two-year guarantee period.



Work Area #7 – section of river immediately downstream of Avenue Louis Pasteur – restored staging area with loam and seed.



Work Area #9 – section of river immediately downstream of Work Area #8 – constructed wetland shelf A (pickerel weed emergent plants), wetland shelf B (wetland seed mix), and planted shrubs. Note the layers of temporary herbivore deterrent fence and temporary in-channel carp deterrent fence to allow for plant establishment during the two-year guarantee period.



Work Area #9 – section of river immediately downstream of Work Area #8 – restored open area near pedestrian bridge.
Note the newly planted trees and shrubs; and loam and seed in this area.



Work Area #9 – section of river immediately downstream of Work Area #8 – stonedust pathway restoration – grading and reconstruction of the existing stonedust pathway.



Work Area #10 – section of river immediately downstream of Work Area #9 which ends at Agassiz Road – sediment processing bins were removed as part of the dredging – steel sheeting removed and excavator will be dredging sediment in this location.



Work Area #13 – Boston Fire Department Building in the vicinity of the Fenway and Agassiz Road – granite veneer being installed on the newly constructed floodwall.