Muddy River Flood Risk Management & Environmental Restoration Project
Phase 1 Construction Activities Next 90 Days
March 2016

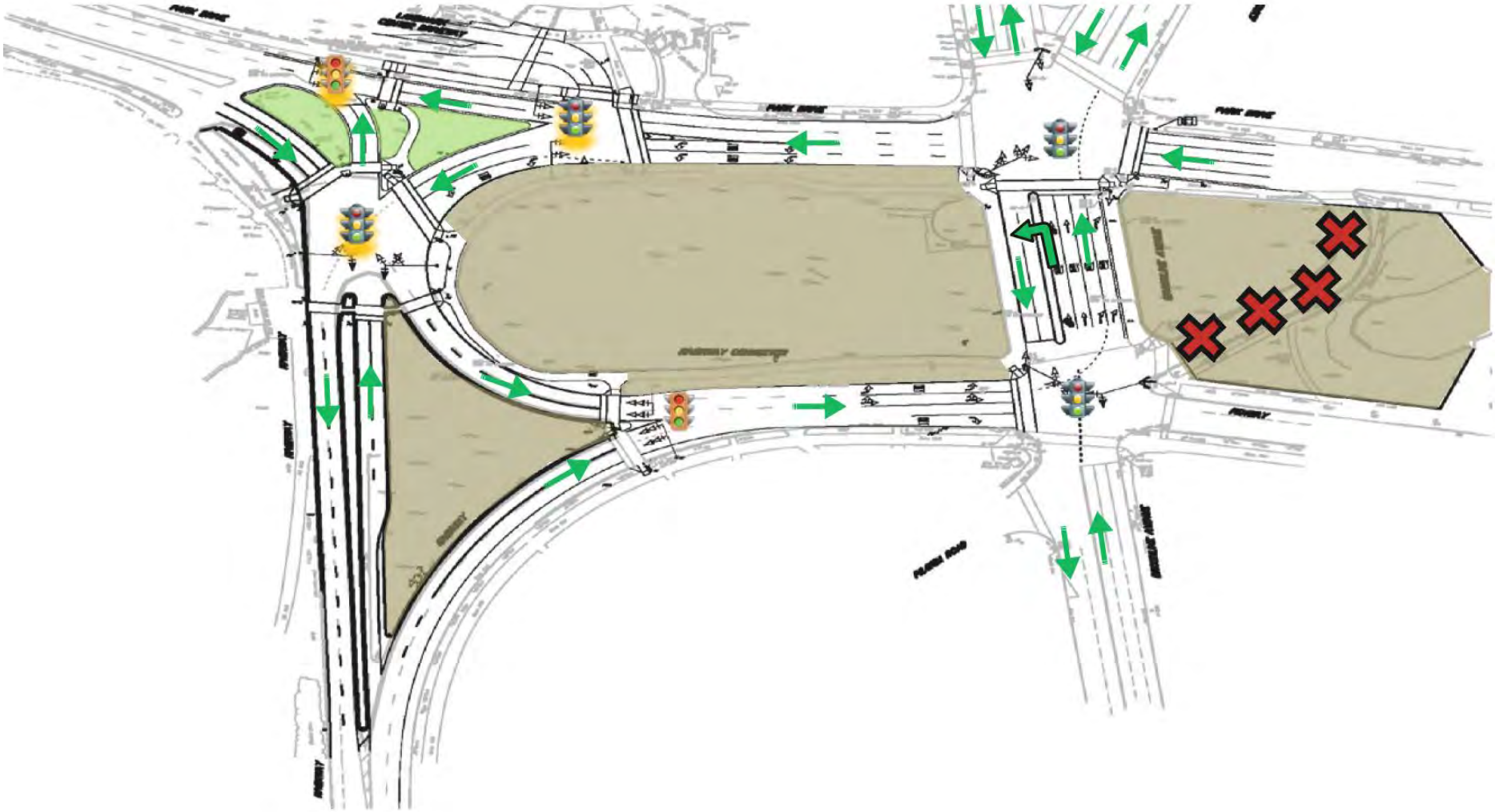
General: The Muddy River Flood Risk Management (FRM) & Environmental Restoration Phase 1 Construction Project is located in the footprint generally between the Riverway downstream to Avenue Louis Pasteur. The major project components involve the installation of a 10-foot by 24-foot box culvert under the Riverway roadway, the installation of 10-foot by 24-foot box culvert under the Brookline Avenue roadway, daylighting of the area between the Riverway and Brookline Avenue, and daylighting of the area between Brookline Avenue and Avenue Louis Pasteur. Daylighting is the removal of existing twin 72" culverts and excavation of the area to return the waterway to a natural state. This Notice is intended to identify the general construction activities that will be performed in the next 90 days. A figure that shows the existing conditions and the proposed improvements is at the end of this report.

March 2016 through May 2016 Period:

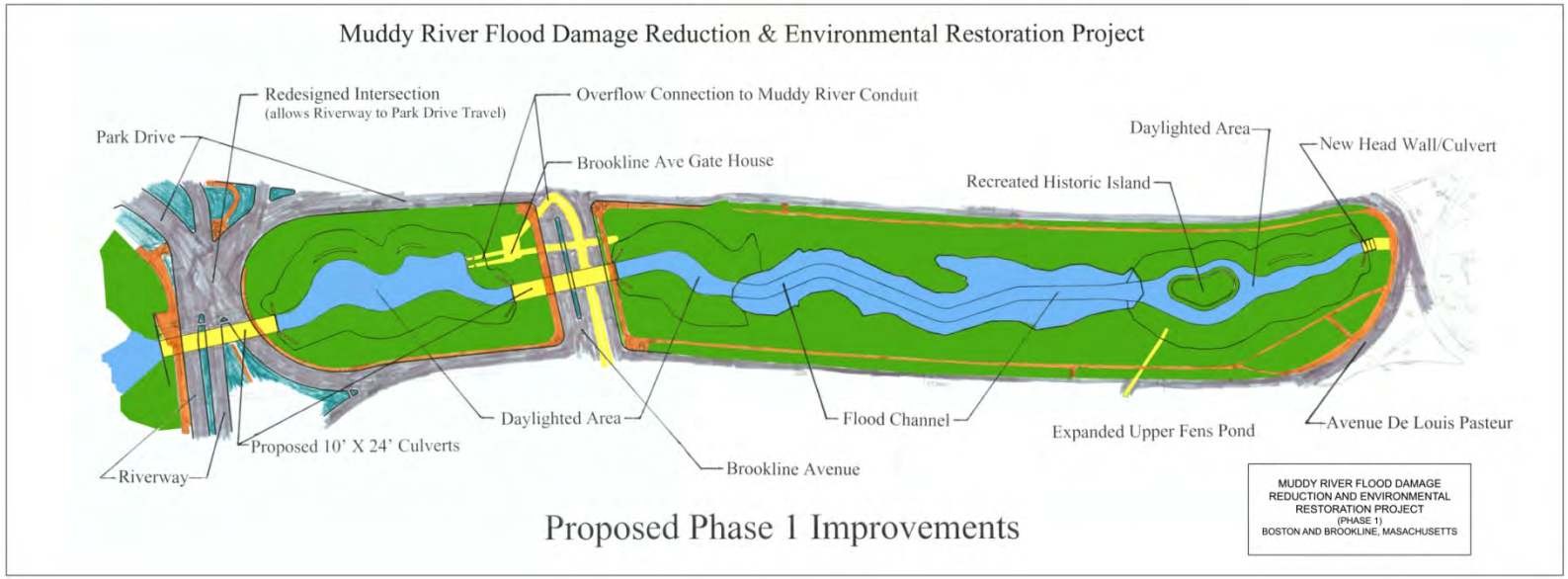
- At the upper end of the project limits, downstream of the Flow Restriction Control Structure (FRCS), the sediment has been removed in order to construct the northside of the flood risk management (FRM) channel, to include stone protection/bank stabilization, at the Riverway. In addition, the removal of the existing Riverway Intake Structure began mid-March. Upcoming activities will include the installation of the support of excavation (SOE), excavation to grade, and installation of the steel pipe piles in order to form and cast the northwest wing wall of the new Riverway Culvert in early May.
- At the downstream end of the new Riverway Culvert, a portion of the existing twin 72” culverts was removed at the end of February in order to construct the northeast wing wall. In early March, the SOE was installed and by mid-March, the steel pipe piles were installed for the wing wall foundation. Once the pipe piles are tested, the concrete pile cap and wing wall will be constructed by late April. Once the wing wall is constructed, in early to mid-May, the continued removal of the existing twin 72” culverts and construction of the northside of the new river channel will take place.
- The relocation of a portion of the existing 24” sewer line in the former Sears Parking Lot began mid October. Since that time, the southern portion of the new sewer line was installed from the existing manhole on Riverway Connector to a new manhole on the street, and has been advanced up to the river diversion sheeting and backfilled. The installation of the northern portion of the sewer line from the river diversion sheeting to a new manhole and the line which connects to the existing sewer line began mid February. The area has been backfilled and this work will be complete by the end of March.
- With the completion of the sewer line work at the upstream end of the new Brookline Avenue Culvert at the end of March, the excavation and removal of the existing twin 72” culverts in that area will begin and the construction of the northside of the new river channel will take place. The activities will include the grading of the new banks and installation of articulated concrete blocks (ACB) at the upstream of the Brookline Avenue Culvert which will continue into mid April. Once the banks are constructed, plantings will begin in the Spring planting season of 1 May.
- In the former Jug Handle roadway, the remaining two drilled shafts for the northeast downstream wing wall of the Brookline Avenue Culvert were installed and the concrete pile cap constructed in early March. Current activities include reinforcement and formwork for the concrete wing wall. Once the concrete wing wall is constructed by early April, the granite veneer will be installed mid April.
- Sections of the existing twin 72” culverts at the former Jug Handle Roadway area have been removed from where it discharged into the Upper Fens Pond now that river is flowing through the southside of the constructed FRM channel. The excavation and removal of the twin 72” culverts will allow for the construction of the northside of the new river channel. The activities will include the grading of the new banks and installation of articulated

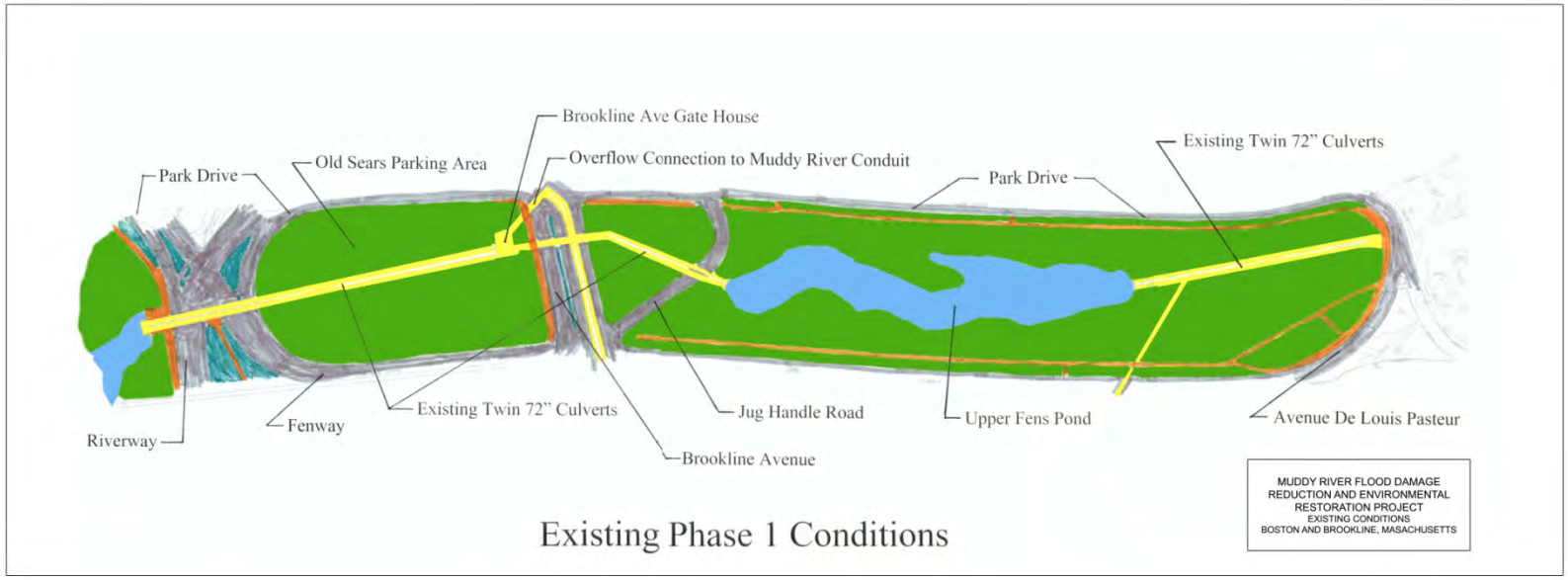
concrete blocks (ACB) at the downstream of the Brookline Avenue Culvert which will continue into late April. Once the banks are constructed, plantings will begin in the Spring planting season of 1 May.

- At the downstream end of the daylighted portion of the Upper Fens Pond, landscaping activities such as grading the upland area of the banks began mid March. With favorable weather, plantings may begin in this area and downstream of the Avenue Louis Pasteur culvert in early April.
- At the end of this notice we have included some pictures that show the Riverway, the former Sears Parking Lot and the Jug Handle work areas. We thought folks would be interested in seeing the work occurring behind the fence.
- If you have 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



TRAFFIC MANAGEMENT PLAN DURING THE DAYLIGHTING OF THE MUDDY RIVER AT THE JUG HANDLE ROADWAY AND THE FORMER SEARS PARKING LOT


Muddy River Flood Damage Reduction & Environmental Restoration Project
Redesigned Intersection
(allows Riverway to Park Drive Travel)
Overflow Connection to Muddy River Conduit
Park Drive
Brookline Ave Gate House
Daylighted Area
New Head Wall/Culvert
Recreated Historic Island
Daylighted Area
Flood Channel
Avenue De Louis Pasteur
Expanded Upper Fens Pond
Proposed 10' X 24' Culverts
Riverway
Brookline Avenue
Proposed Phase 1 Improvements
MUDDY RIVER FLOOD DAMAGE
REDUCTION AND ENVIRONMENTAL
RESTORATION PROJECT
(PHASE 1)
BOSTON AND BROOKLINE, MASACHUSETTS


Brookline Ave Gate House
Existing Twin 72" Culverts
Park Drive
Old Sears Parking Area
Overflow Connection to Muddy River Conduit
Park Drive
Avenue De Louis Pasteur
Upper Fens Pond
Jug Handle Road
Existing Twin 72" Culverts
Fenway
Riverway
Brookline Avenue
Existing Phase 1 Conditions
MUDDY RIVER FLOOD DAMAGE
REDUCTION AND ENVIRONMENTAL
RESTORATION PROJECT
EXISTING CONDITIONS
BOSTON AND BROOKLINE, MASACHUSETTS

Excavator mixing saw dust into the river sediment to help solidify the material for transport off-site – upstream of the existing Riverway Intake Structure – mid February 2016.

Excavating the sediment to construct the floor risk management (FRM) channel on the left side (looking downstream) of the river. Note the existing Riverway Intake Structure and the new Riverway Culvert in the background – late February 2016.

Constructed FRM channel downstream of the Flow Restriction Control Structure (FRCS) at the Riverway – note the stone protection on the excavated bottom and bank of the channel – early March 2016.

Existing Riverway Intake Structure – note elevation 5.0’ marked on the structure for initial partial demolition of the structure – early March 2016.

Partial Demolition of the existing Riverway Intake Structure and laying out of the FRM channel – the existing intake structure will be removed in stages to ensure safety of the public, workers, and equipment – mid March 2016.

Partial removal of the existing Riverway Intake Structure – down to the existing twin 72” culverts. Note also the part of the new FRM channel and bank is constructed – mid March 2016.

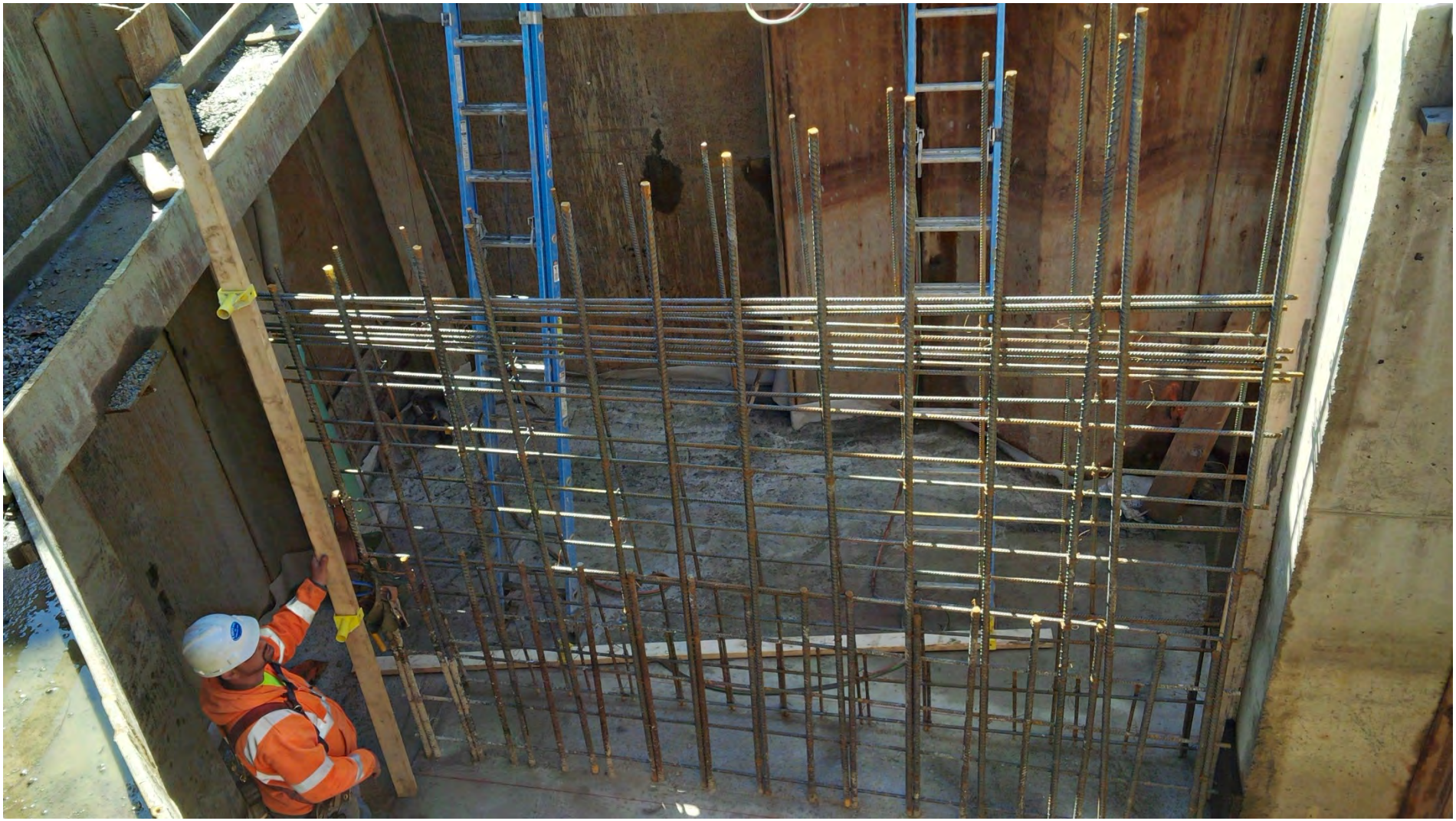
Support of Excavation (SOE) installed in order to excavate down to grade for the new northeast wing wall at the downstream of the new Riverway Culvert – early March 2016.

Downstream Riverway Culvert work area – area has been excavated to bottom of pile cap and the vertical steel pipe piles have been installed. Note the battered steel pipe piles are being installed – mid March 2016.

Area upstream of the new Brookline Avenue Culvert – excavation to install the new relocated sewer line. Note the existing manhole on the far side (adjacent to the ladder) that the new line will connect to – early March 2016.

Last remaining two drilled shafts at the downstream northeast wing wall of the new Brookline Avenue Culvert – the hole has been drilled to depth and awaiting concrete – early March 2016.

Concrete placement of drilled shaft at the downstream northeast wing wall of the new Brookline Avenue Culvert – early March 2016.



Tying rebar and eventual formwork for the downstream northeast wing wall of the Brookline Avenue Culvert – mid March 2016.

Spreading loam on the upland banks of the Upper Fens Pond – mid March 2016.