

Identification and Assessment of Permits Needed for the Central Pond Restoration Project

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This memorandum presents an overview and assessment of permitting and regulatory review needs for the Central Pond Restoration Project. Manchester-by-the-Sea is in the process of completing an MVP Action Grant for the permit level design to restore Sawmill Brook at Central Pond. The design entails replacing and/or restoring walls along the sides of the Pond, restoring the Pond interior to a tidal salt marsh, and drainage improvements. The Central Pond restoration is proceeding concurrently with the MassDOT small bridge project at Central Street, which involves widening the culvert at Central Street and removing the Sawmill Brook tide gate. This memorandum describes the permits and other regulatory review processes that are anticipated to be required for the Central Pond Restoration, including applicability, permit timelines, and studies needed to support permit applications.

1. Project Overview

The proposed restoration design for the Central Pond area of Sawmill Brook includes reestablishing the native salt marsh within the interior sections of the mud flats, replacing and repairing existing retaining walls along the eastern shore, and implementing bioengineered solutions to stabilize the western shoreline. The goal of the design is to take advantage of the natural in-stream processes to reestablish a channel through the sediments in Central Pond, followed by adaptive management, if needed. This process has already begun, to some extent, with the removal of the tide gate in fall 2020. With this approach, the stream channel would stabilize naturally and reach equilibrium. Adaptive management would be employed to address issues that may arise, such as:

- Adjustment of the stream thalweg (low flow centerline) if the channel were to develop too close to the east or west embankments
- Active plantings of native species to revegetate the former pond to facilitate salt marsh establishment and/or invasive plant management
- Actively promote habitat enhancements if natural processes are not developing

Alternatives for embankment stabilization/restoration along the east and west sides of Central Pond are still under development and presently include segmental retaining walls consisting of mechanically stabilized earth walls and/or gravity walls and gabion walls. In situ subsurface silt and clay layers identified while performing the geotechnical boring program favor flexible wall options, since settlement that may occur due to the compressible soils would more negatively impact rigid wall structures. Poor wall drainage is likely one of the factors contributing to the existing wall failures, so improved drainage features will be included in the final selected option with the goal of improved wall performance and longevity. Living shoreline bioengineering is planned for sections on the western shore.



Figure 1: Full stream restoration alternative at low tide

Numerous State and Federal agencies are supporting partners in this project and are providing grant funding, technical guidance, and public outreach support. Project partners include the Massachusetts Department of Transportation (MassDOT), the Massachusetts Office of Coastal Zone Management (CZM), the Massachusetts Division of Ecological Restoration (DER), the Massachusetts Environmental Trust (MET), the Massachusetts Division of Marine Fisheries (DMF), and the National Oceanic and Atmosphere Administration (NOAA) Restoration Center. The project is supported by dedicated Town Staff, the Board of Selectmen, the Manchester Coastal Resilience Advisory Group (CRAG) and volunteers through the Manchester Stream Team.

2. Overview of Permits Assessed

As part of the work completed previously, Tighe & Bond prepared a memorandum entitled *Identification and Assessment of Permits Needed for Sawmill Brook Culvert, Flood Mitigation and Green Infrastructure Projects* dated January 30, 2016. This memorandum presented, among other items, an overview of anticipated permitting and regulatory reviews that will likely be required for the combination of infrastructure improvement projects in the area. Additional direction was obtained from regulators during the feasibility and alternatives analysis for the Sawmill Brook/Central Pond restoration work completed under a FY17 Massachusetts Environmental Trust (MET) grant and the FY18 MVP action grant.

A single, comprehensive Massachusetts Environmental Policy Act (MEPA) will be filed for the Central Street bridge replacement, tide gate removal, and pond restoration. The cost for the MEPA filing will be covered through a cash match provided by the Town. Any new construction

projects or renovations to existing structures that require funding, licenses, or permits from any state or federal governmental agencies must be reviewed by the State Historic Preservation Officers, which consist of the Massachusetts Historical Commission (MHC) and the Massachusetts Bureau of Underwater Archaeological Resources (BUAR) as well as pertinent Tribal Historic Preservation Officers (THPOs) for impacts to historic and archaeological properties in accordance with Section 106 of the National Historic Preservation Act of 1966. The purpose of this review is to ensure that projects minimize or mitigate adverse effects to properties listed in the National and/or State Register of Historic Places. As part of the MEPA review, the required Historical Review for both the bridge and the pond restoration will be completed.

Both the pond restoration and bridge projects require state approval (i.e., Agency Action), which, in this case, would be a Chapter 91 Waterways License for the bridge replacement with tide gate removal, a separate Chapter 91 Waterways License for the pond retaining walls, and a Section 401 Water Quality Certificate for the pond restoration only.

The project team evaluated additional opportunities for a combined permitting approach for the bridge replacement and pond restoration. Given the varied funding timelines, permit timing, and construction logistics, the two projects could not be permitted jointly as part of the same application under all regulatory programs. The two projects will be submitted as part of the same application for the MEPA review process and will also be submitted within one single Project Notification Form with MHC, BUAR, and relevant THPOs. The following permit filings will be completed separately for the Central Pond Restoration Project:

- Wetlands Protection Act and Manchester-by-the-Sea Wetlands Bylaw Ecological Restoration Notice of Intent (NOI)
- United States Army Corps of Engineers (USACE) Pre-Construction Notification (PCN) under the Massachusetts General Permit (Section 10 of the Rivers and Harbors Act)
- Massachusetts Department of Environmental Protection (MassDEP) Section 401 Water Quality Certification
- MGL Chapter 91, The Massachusetts Public Waterfront Act - Waterways License

This list may be refined as the conceptual design is finalized and resource area impacts are quantified.

The following section discusses further detail on anticipated permits, including preparation time and agency review timelines, fees, and relevant references.

2.1 State and Local Permits and Other Required Reviews

2.1.1 Notice of Intent

A Notice of Intent (NOI) is required for the proposed pond restoration in accordance with the Massachusetts Wetlands Protection Act M.G.L. Chapter 131 Section 40 and its implementing regulations (310 CMR 10.00), along with the Manchester-by-the-Sea Wetlands Bylaw and regulations (Article 17). Work associated with the project is expected to occur within Land Under Water, Coastal Bank, Riverfront Area, Land Subject to Coastal Storm Flowage, and the 100-foot Buffer Zone, at a minimum.

Accordingly, a NOI will be prepared and submitted concurrently to the Conservation Commission and MassDEP. The NOI will demonstrate how the proposed work meets, to the extent practicable, the performance standards established for each resource area where alterations will occur. The NOI application will include the following:

- The appropriate permit application forms
- Project narrative including construction sequence
- Resource maps (e.g., USGS, floodplain, tax map)
- Site photographs
- Site plans and drawings depicting existing conditions and the proposed activities
- MassDEP Stormwater Checklist and Drainage Report
- Request for certified list of abutters and abutter notification
- Alternatives analysis
- Written response to MassDEP comments generated from NOI review
- Attendance at one site walk with the Conservation Commission
- Attendance at two public hearings with the Conservation Commission

Upon receipt of the Order of Conditions issued by the Conservation Commission, the Order will be recorded at the South Essex County Registry of Deeds by the Town and proof of recording will be provided to the Conservation Commission. Following the completion of construction activities, the Town's consultant will develop a Request for Certificate of Compliance to close out the project.

Typically, it takes a minimum of one month to prepare the NOI and then another three months to obtain the Order of Conditions. For Town projects, the fee is waived. The Order of Conditions is for three years and can be extended for up to an additional three years upon formal request.

2.1.2 Army Corps of Engineers Review (Section 10/Section 404) ¹

The New England District of the U.S. Army Corps of Engineers (Corps) regulates activities subject to Corps jurisdiction in waters of the U.S. within the boundaries of, and off the coast of the Commonwealth of Massachusetts through a permitting and review process pursuant to the Massachusetts General Permit.

The proposed project is subject to jurisdiction under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act due to work within wetlands and tidal Waters of the United States. Temporary and permanent impacts to wetlands in excess of 5,000 square feet but less than one acre, or which otherwise do not meet Self-Verification review thresholds, are subject to review under a Pre-Construction Notification (PCN) under the Massachusetts General Permits. A PCN application will be developed that includes the appropriate application forms, a detailed narrative describing the project, site photographs, project drawings and details, resource maps and other required information. It is assumed that the pond restoration will not require an Individual Permit with the Army Corps and that it may be authorized under a PCN. The scope includes time for a site visit with the Army Corps reviewer and time for follow up correspondence with staff during application review. The Corps' SHPO/THPO Notification Form will also be prepared and submitted to the SHPO and applicable THPOs, in accordance with requirements pursuant to Section 106 of the NHPA.

¹ <http://www.nae.usace.army.mil/Missions/Regulatory/StateGeneralPermits/MassachusettsGeneralPermit.aspx>

There is no application fee.

2.1.3 Massachusetts 401 Water Quality Certification ²

The Water Quality Certification regulations implement Section 401 of the federal Clean Water Act (CWA) in Massachusetts by establishing permitting requirements to ensure that dredging projects, or proposed discharges of dredged or fill material, protect the public health and the Commonwealth's water resources.

A Section 401 Water Quality Certification (WQC) is triggered by the filing of a federal permit if the project results in a loss of 5,000 square feet cumulatively of bordering or isolated vegetated wetlands and land under water, the amount of any proposed dredging is greater than 100 cubic yards, or if any of the other thresholds listed in 314 CMR 9.04 are met. This project is anticipated to exceed at least one of these thresholds. A WQC application will be submitted to MassDEP for review and approval. Any material greater than 100 cubic yards, that is moved or removed from below the mean annual high-water line of the site, will require sediment testing. Sediment characterization of the pond was completed as part of previous grant work.

A reasonable timeframe to expect for approval from MassDEP is on average 12 months. Application fees are waived for municipalities.

2.1.4 MGL Chapter 91, The Massachusetts Public Waterfront Act³

The Commonwealth's primary tool for protection and promotion of public use of its tidelands and other waterways is Massachusetts General Law Chapter 91, the waterways licensing program.

Based upon a review of jurisdictional tidelands as mapped by MassGIS, the project area is below the jurisdictional contemporary high water mark. The restoration of Central Pond will require a Chapter 91 Permit, while the retaining wall requires a Chapter 91 License; though Tighe & Bond's experience is that the Chapter 91 Program authorizes both categories under a single Chapter 91 License. Under this sub-task, a Chapter 91 application and project plans in the required format will be developed for submittal to MassDEP. Abutters will be notified and provided with copies of the filing in accordance with MassDEP's distribution requirements. Comments from MassDEP will be addressed during the review process and the plans will be recorded at the Registry of Deeds upon authorization.

Time periods are established in MassDEP's regulations (310 CMR 9.00), but on an average, the estimated timeframe for this process is one year. The ENF filing must occur before filing application for a Chapter 91 License, and the Waterways Program must be in receipt of a valid Order of Conditions from the Conservation Commission as well as the final Section 401 Water Quality Certification before issuance of the License. Following application, the process includes determining water dependency, public notice period (15 to 30 days), public hearing,

²<http://www.mass.gov/eea/agencies/massdep/water/regulations/314-cmr-9-00-401-water-quality-certifications.html>

³<http://www.mass.gov/eea/agencies/massdep/water/watersheds/chapter-91-the-massachusetts-public-waterfront-act.html>

written determination, appeal period, file completion, and finally recording license and paying fee, and certificate of compliance (within 60 days of recording). Application fees are waived for municipal projects.

3. Recommendations

We recommend preparing permit applications only once permit level design plans and analysis to support the selected design (i.e., H&H Analysis, Geotec) has been completed. Much of the information gathered and determined during the analysis of design will be required as part of each permit application. Given, the number of permits required, lengthy review timelines associated with each, and level of effort required to prepare each submittal, Tighe & Bond makes the following recommendations for permit application sequencing.

It is recommended that the MEPA process be initiated and completed prior to preparation and submittal of other permit applications. We have found additional information is required during MEPA review at the request of permitting agencies (that will also need to be incorporated into permit applications) and that minor design changes may also result over the course of the public comment process. Identifying information, design, or narrative deficiencies during the MEPA process allows for a more efficient permitting process, as this information may then be incorporated into permit applications and narratives at the outset, rather than at the request of the agency reviewer at some point during the review timeline, which could further stall the project.

Given the extended review timelines required for both the Section 401 Water Quality Certification and the Chapter 91 License, it is recommended applications for these authorizations are submitted following the conclusion of the MEPA process. MassDEP offers a Joint 401/91 application process, allowing the applications to utilize the same public notice and comment period and provides other minor efficiencies in review that would otherwise not be provided were they submitted separately.

We also recommend that the NOI be submitted shortly after the Joint 401/91 application, to secure an OOC for the work, as the OOC is required by MassDEP to complete both the 401 WQC and Chapter 91 processes. We then suggest submitting the PCN on or around the time of the NOI submittal. Submitting all permit applications over the course of three to four weeks commences a concurrent review from all regulatory authorities and provides more efficiency than a staggered review.