



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
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June 26, 2020

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Ballard Street Culvert Reconstruction
PROJECT MUNICIPALITY : Saugus
PROJECT WATERSHED : North Coastal
EEA NUMBER : 16206
PROJECT PROPONENT : Saugus Department of Public Works
DATE NOTICED IN MONITOR : May 20, 2020

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project involves the installation of a 111-foot (ft) long, 48-inch diameter reinforced concrete pipe (RCP) culvert with a concrete headwall at the intake (southern end) of the culvert and a concrete wingwall and adjustable tide gate at the culvert's outlet (northern end). The tide gate opening will be adjusted to allow for saltwater flow into the marsh; under storm conditions, the tide gate will be closed to prevent the Saugus River from flowing into the marsh and increase potential flooding. The culvert will be installed in a trench to be dug across Ballard Street. Two existing drain pipes will be connected to the headwall at the southern end of the culvert.

The culvert will replace the hydraulic functions of an existing culvert three feet east of the location of the proposed culvert. The headwall on the inlet side of the existing culvert is deteriorating; its collapse could pose a safety risk to the public walking on or near the headwall and could affect the performance of the culvert. A makeshift tide gate comprised of a metal plate covering the outlet of the existing culvert is not fully functional and does not permit optimal exchange of tidewater to the salt marsh at the southern end of the culvert. According to the ENF,

maintaining the capacity of the culvert at all times is necessary to minimize the risk of flooding of properties adjacent to the marsh upstream of the culvert. Upon installation of the new culvert, the existing culvert will be plugged with concrete or brick and mortar.

Project Site

The existing culvert is located under Ballard Street in southeastern Saugus. It provides a hydraulic connection between the Saugus River and the northern section of Rumney Marsh. The site is approximately one mile northwest of the confluence of the mouth of the Saugus River at Broad Sound. Fox Hill Yacht Club and Vitale Park are adjacent to the north end of the culvert in the Saugus River. The site is approximately 600 ft northeast of the terminus of Ballard Street at Route 107. Rumney Marsh is located south and west of the site. A parking lot owned by the Town of Saugus (Town) that provides access to a trail through the marsh is located approximately 200 ft northeast of the culvert.

The site is within the Rumney Marshes Area of Critical Environmental Concern (ACEC). The ACEC covers an area of approximately 2,800 acres in Saugus, Revere, Lynn, Winthrop and Boston, including the 1,000-acre marsh. As shown on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) (number 25009C0528G, effective date July 16, 2014), the project site is located within the 100-year floodplain (Zone AE) with a Base Flood Elevation (BFE) of 10 ft North American Vertical Datum of 1988 (NAVD 88). According to the Division of Marine Fisheries (DMF), the Saugus River includes habitat for rainbow smelt (*Osmerus mordax*), Atlantic tomcod (*Microgadus tomcod*), white perch (*Morone americana*), alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), American eel (*Anguilla rostrata*), winter flounder (*Pseudopleuronectes americanus*), soft shell clam (*Mya arenaria*) and blue mussel (*Mytilus edulis*).

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include alteration of 46 linear feet (lf) of Coastal Bank, 36 square feet (sf) of Land Under the Ocean (LUO), 35 sf of Coastal Beach, 88 sf of Salt Marsh, 2,461 sf of Land Subject to Coastal Storm Flowage (LSCSF) and 1,903 sf of Riverfront Area.

Measures to minimize impacts include replication of 88 sf of salt marsh, restoration of wetland resource areas disturbed during construction and the use of sedimentation and erosion controls, including sandbag cofferdams to minimize turbidity. The project includes the installation of a new adjustable tide gate that will facilitate tidal exchange between the river and salt marsh.

Permitting and Jurisdiction

This project is subject to MEPA review and preparation of an ENF pursuant to 301 CMR 11.03(11)(b), any project within a designated ACEC, unless the project consists solely of one single family dwelling. The project requires a Chapter 91 (c. 91) License and 401 Water Quality Certification (WQC) from the Massachusetts Department of Environmental Protection (MassDEP) and a Section 8(m) permit from the Massachusetts Water Resources Authority (MWRA).

The project requires an Order of Conditions from the Saugus Conservation Commission (or a Superseding Order of Conditions from MassDEP in the event the Order is appealed). The project requires the submittal of a Pre-Construction Notification pursuant to Army Corps of Engineers' (ACOE) General Permits for Massachusetts.

The project is receiving State Financial Assistance from the Massachusetts Department of Transportation (MassDOT). Therefore, MEPA jurisdiction is broad in scope and extends to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

Review of the ENF

The ENF included a description and plans of existing and proposed conditions and an alternatives analysis. It identified potential impacts of the project and described mitigation measures. The ENF included copies of the Notice of Intent, the WQC application and the ACOE General Permit application and an operations and maintenance plan.

Alternatives Analysis

The ENF included an evaluation of a No Build Alternative and two Culvert Reuse alternatives. The No Build Alternative is not feasible because it does not address the poor condition of the culvert headwalls and associated public safety concerns, nor does it improve the function of the tide gate.

Both of the Culvert Reuse alternatives would maintain the existing 48-inch diameter cast iron culvert, clean it, reconstruct the headwall at the inlet and replace the tide gate at the outlet. However, the two alternatives differ in the method used to maintain flow between the marsh and the Saugus River during the construction period. According to the ENF, maintaining flow at all times is necessary to minimize the risk of flooding in homes along the marsh upstream of the culvert and to allow flow of tidewater to sustain the salt marsh. One alternative would use a pump to convey water through a hose from the marsh side of the culvert to the Saugus River. This alternative is not feasible because a pump system may not have the capacity to convey large volumes of water under storm conditions; in addition, installation of the hose would have impacts to resource areas and the roadway in connection with its burial and removal. An alternative method for maintaining flow during construction would involve digging a trench across the roadway to install a temporary plastic pipe that would maintain flows in both directions. This alternative would have impacts to wetland resource areas that are similar in nature and scope as the Preferred Alternative, but impacts would occur during both the installation and removal of the temporary pipe. As noted below, these additional impacts may be avoidable if other existing outlets could be used to direct storm flows during the construction period. In such an event, reuse of the existing culvert without construction of a new culvert may become a feasible alternative.

The Preferred Alternative will provide a safe and reliable culvert with the capacity to convey flow out of the marsh to minimize upstream flooding during storm conditions. It will include a new tide gate at the outlet that can be adjusted to optimize the flow of salt water into the marsh while allowing its closure during high tide storms to minimize upstream flooding.

Constructing a new culvert will avoid the need for a temporary means of maintaining the hydraulic connection during the construction period.

According to CZM and EPA, it may not be necessary to maintain flow during the construction period because floodwaters can be conveyed through other outlets. The need to maintain flow through the culvert during the 50-day construction period to avoid potential flooding of upstream properties is the basis of the Town's selection of the Preferred Alternative. If the existing culvert could be temporarily blocked during the construction period, it could be cleaned, its headwalls reconstructed and a new tide gate installed without the impacts associated with construction of a new culvert. I encourage the Town and permitting agencies to evaluate the feasibility of this alternative if it can be determined that it would not increase the potential for upstream flooding.

Wetlands, Water Quality and ACEC

Rumney Marsh was designated as an ACEC in August 1988 in recognition of its vital role in the hydrology and ecology of the region, even with ongoing development at its margins. The marsh provides flood storage capacity that protects low-lying areas of adjacent communities from coastal storms. The tidal flats and salt marsh provide habitat for a diverse assemblage of migratory and resident bird populations and marine organisms, including spawning and nursery grounds for commercially important finfish. MEPA review of projects in ACECs helps to protect and enhance their unique natural resources.

The project will permanently impact 88 sf of Salt Marsh and temporarily alter 46 lf of Coastal Bank, 36 sf of LUO, 35 sf of Coastal Beach, 2,461 sf of LSCSF and 1,903 sf of Riverfront Area during the construction period. The Town will replicate 88 sf of salt marsh near the outlet of the culvert and monitor the replication area to ensure the new salt marsh becomes established. All other resource areas will be restored upon completion of the project by regrading the areas and planting them with a salt tolerant seed mix.

The ENF included a proposed Operation and Maintenance (O&M) Plan for the new tide gate. project will install a new adjustable tide gate that will be set to allow saltwater flow into the marsh under normal conditions and fully closed during storm conditions. Tidal data collected at the site in 2019 will be supplemented with additional observations to establish a base setting for the tide gate opening. In the event of a forecasted storm with high precipitation rates and/or storm surge, the Town will lower the tide gate to prevent river water from flowing into the marsh. This will maintain the flood storage capacity of the marsh and allow it to be drained when river levels fall. The O&M plan includes log sheets that will be used to record adjustments made to the tide gate and maintenance activities. As noted by MassDEP, the new tide gate has the capability to significantly enhance the flow of saltwater into the marsh and improve its ecological health, in addition to providing better control over the flow of water from the river into the marsh under storm conditions. Ongoing attention by the Town to the tide gate setting will be necessary for the project to balance its ecological and flood protection benefits.

Climate Change

Governor Baker's Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth (EO 569; the Order) was issued on September 16, 2016. The

Order recognizes the serious threat presented by climate change and directs Executive Branch agencies to develop and implement an integrated strategy that leverages state resources to combat climate change and prepare for its impacts. The Order seeks to ensure that Massachusetts will meet GHG emissions reduction limits established under the Global Warming Solution Act of 2008 (GWSA) and will work to prepare state government and cities and towns for the impacts of climate change. I note that the MEPA statute directs all State Agencies to consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise, when issuing permits, licenses and other administrative approvals and decisions. M.G.L. c. 30, § 61.

The region's climate is expected to experience higher temperatures and more frequent and intense storms. The Northeast Climate Science Center at the University of Massachusetts at Amherst has developed projections of changes in temperature, precipitation and sea level rise for each river basin in Massachusetts. This data is available through the Climate Change Clearinghouse for the Commonwealth at www.resilientMA.org. During the same time span, the average annual precipitation in the North Coastal Basin is expected to increase by 0.8 to 7.2 inches.

The project has not been designed to address projected climate change conditions. It is intended to repair the deteriorated components of the culvert and will essentially maintain existing hydraulic conditions. The proposed tide gate will have a beneficial effect on the salt marsh by allowing more control of the volume and frequency of inundation of the marsh by saltwater from the Saugus River, but will not significantly improve flooding conditions. The Department of Conservation and Recreation (DCR) proposed the Ballard Street Salt Marsh Restoration project (EEA# 15346), which completed MEPA review in 2015. DCR's project proposed a comprehensive set of measures to restore Rumney Marsh and address hydraulic conditions that contribute to flooding upstream of the marsh, such as removal of fill and creation of new tidal channels throughout the marsh, construction of an earthen dike and replacement or modification of culverts throughout the marsh, including the Ballard Street culvert. It was designed to accommodate 0.82 ft of sea level rise based on an intermediate level sea level rise scenario developed by the ACOE. According to the ENF, the project is not anticipated to move forward to construction due to a lack of funding and permitting concerns expressed by federal permitting agencies.

I encourage the Town, State Agencies and other stakeholders to continue to consider more resilient strategies for the Rumney Marsh. I note that the Town is a participant in the Commonwealth's Municipal Vulnerability Preparedness (MVP) program and is in the process of completing an initial planning effort to identify the major climate hazards affecting the town, what assets are strengths or vulnerabilities and develop a prioritized list of tasks or projects that will help increase resilience in the community. The MVP program is a community-driven process to define natural and climate-related hazards, identify existing and future vulnerabilities and strengths of infrastructure, environmental resources and vulnerable populations, and develop, prioritize and implement specific actions the Town can take to reduce risk and build resilience. I encourage the Town to use the technical and financial resources available through the MVP Program to continue to improve its resilience.

Construction Period

The Town will implement sedimentation and erosion control measures to minimize water quality impacts. Due to the proximity of the project site to residences and commercial uses, the project should include measures to prevent nuisance conditions such as dust, noise, and odors during construction and reduce emissions of air pollutants from construction equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11). I encourage the Proponent to require that its contractors use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). All construction activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the Town to reuse or recycle construction and demolition (C&D) debris to the maximum extent.

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on review of the ENF and comments received on it, and in consultation with State Agencies, I have determined that an EIR is not required. Outstanding issues may be addressed during permitting.

June 26, 2020

Date



Kathleen A. Theoharides

Comments received:

06/08/2020	Office of Coastal Zone Management (CZM)
06/08/2020	U.S. Environmental Protection Agency (EPA)
06/09/2020	Massachusetts Water Resources Authority (MWRA)
06/09/2020	Division of Marine Fisheries (DMF)
06/09/2020	Massachusetts Department of Environmental Protection (MassDEP)/Northeast Regional Office (NERO)
06/16/2020	Board of Underwater Archaeological Resources (BUAR)

KAT/AJS/ajs



The COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
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June 16, 2020

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
Attention: Alex Strycky, MEPA Unit
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Saugus Dept. of Public Works: 110 Ballard Street Culvert Reconstruction (EOEA #16206), Saugus, MA

Dear Secretary Theoharides,

The staff of the Massachusetts Board of Underwater Archaeological Resources has reviewed the above-referenced proposed project as detailed in the *Environmental Monitor* of 20 May 2020 and offers the following comments.

The Board has conducted a preliminary review of its files, the MHC's MACRIS archaeological site inventory geospatial database, historic maps, aerial imagery, and secondary literature sources to identify known and potential submerged cultural resources in the proposed project area. No record of any underwater archaeological resources was found. Based on the results of this review, the Board expects that this project is unlikely to impact submerged cultural resources.

However, in the event that heretofore-unknown submerged cultural resources are encountered during the course of the project, the Board expects that the project's sponsor will take steps to limit adverse effects and notify the Board and the Massachusetts Historical Commission, as well as other appropriate agencies, immediately, in accordance with the Board's *Policy Guidance for the Discovery of Unanticipated Archaeological Resources*.

The Board appreciates the opportunity to provide these comments as part of the MEPA review process. Should you have any questions regarding this letter, please do not hesitate to contact me at (617) 626-1014, or by email at david.s.robinson@mass.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "David S. Robinson", written over a circular blue stamp or seal.

David S. Robinson
Director

/dsr

Cc: Brona Simon, MHC
Robert Boeri and Kathryn Glenn, MCZM (via electronic attachment)



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 Causeway Street, Suite 800, Boston, MA 02114-2136
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MEMORANDUM

TO: Kathleen A. Theoharides, Secretary, EEA
ATTN: Alex Strycky, MEPA Office
FROM: Lisa Berry Engler, Director, CZM
DATE: June 8, 2020
RE: EEA-16206, Ballard Street Culvert Replacement, Saugus

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced Environmental Notification Form (ENF), noticed in the *Environmental Monitor* dated May 20, 2020, and offers the following comments.

Project Description

The proposed project includes the replacement of an existing culvert that extends below the Ballard Street right of way and connects the northern portion of Rumney Marsh and its tidal channel with the Saugus River. The project site is bounded to the northwest by Vitale Park, to the northeast by Fox Hill Yacht Club and to the south by the salt marsh and tidal flat. The existing structure consists of a four-foot diameter cast iron pipe with reinforced concrete headwalls that runs north to south under Ballard Street, carrying a tidal brook. The south end of the structure has a reinforced concrete headwall with vertical supporting walls that extend two feet from the end of the pipe.

The northern outlet of the culvert consists of a 48" cast iron pipe with no headwall. This outlet has two eye bolts above that are used to anchor chains that secure a large corroding steel plate in front of the mouth of the pipe. The large steel plate is in place to act as a tide gate that allows for some tidal "backflow" of salt water to the upstream marsh. The proposed replacement includes installation of a new 48" reinforced concrete pipe (RCP) 3 feet to the west of the existing pipe, which will have a fitted concrete headwall on the south side of the culvert similar to the existing headwall, and a new additional concrete wingwall on the north outlet of the culvert. The new headwall and location of the culvert on the south inlet will also require new connections for existing 12" and 18" drain connections. Once the pipe, headwall and wingwall have been installed, a new fabricated flap tide gate will be installed on the north wingwall and fitted with an additional slide gate on the face of the flap to allow for an adjustable opening to provide variable tidal backflow to the upstream salt marsh. During construction, tidal flow will continue through the existing culvert. Once the new culvert system is complete, the existing cast iron pipe will be plugged, the existing south wingwall will be removed, the topography along the south coastal bank will be restored and seeded with a coastal, salt-tolerant seed mix. The proposed work is located within the Rumney Marshes Area of Critical Environmental Concern (ACEC). According to the ENF, the project will result in permanent impacts to 36 square feet (SF) of land under ocean; 35 SF of coastal beach/tidal flat; 88 SF of salt marsh; 48 linear feet (LF) of coastal bank; and 522 SF of riverfront area. In addition, the project will result in 1,381 SF of temporary impact to riverfront area. All work is located within FEMA flood zone AE elevation 10 NAVD88, with a total impact of 2,461 SF to land subject to coastal storm flowage.



Project Comments

The ENF states that the preferred alternative was chosen primarily because this approach allows replacement of the structure without eliminating flow into or out of the marsh at any point during the expected 50-day construction period, preventing hydrologic impacts to the marsh and eliminating the potential for the project to exacerbate storm water flooding issues for neighborhoods surrounding the marsh. Avoiding additional flooding to these neighborhoods is a major goal for the town in evaluating alternatives. The design will also plug and leave the existing pipe in place, which may provide an option for reuse if a greater capacity is needed in the future, as the pipe itself is still in good condition.

An alternative not analyzed in the ENF is the reuse of the existing cast iron pipe in place and replacement or construction of new headwalls and erosion control measures to replace the existing, degraded structures. While this would significantly minimize direct impacts to the resource areas, the town of Saugus did not review this option as it would require the tidal ebb and flow to be stopped for the duration of construction. During the MEPA meeting on June 2, an EPA representative stated that there is unlikely to be impacts to the marsh as a result of interrupted flow caused by this project, as there are other avenues for the tidal exchange into and out of the marsh, and EPA data show that the Ballard Street culvert does not play a major role in salt marsh health or flood protection. CZM may support maintaining the existing pipe and reconstructing the headwalls, if the Town chooses to pursue this alternative, as long as sufficient data is provided showing that the lack of flow will not cause avoidable adverse effects to the marsh or exacerbate flooding issues.

The plans included in the ENF appear to indicate that the riprap associated with the north culvert does not extend to cover the area likely to be affected by scour from the outfall velocity, but the proponent's engineer clarified during the MEPA meeting that these did not accurately reflect the intention. Plans and narratives provided for permitting should demonstrate that the erosion control structures are designed and located to balance erosion control with minimization of direct resource impacts.

The ENF states that the existing headwall structures will be removed, the topography of the slopes will be stabilized, and the restored areas will be seeded with a salt-tolerant seed mix. Resource restoration and replication areas should be planted with appropriate salt-tolerant species plugs in addition to seeding. Recommendations regarding plantings are available in CZM's [StormSmart Properties Fact Sheet #3: Planting Vegetation to Reduce Erosion and Storm Damage](#). Where necessary, natural fiber erosion control blankets should be used to improve establishment of vegetation. A revegetation and restoration plan, as well as a monitoring and maintenance plan, should be provided during permitting. The maintenance plan should include contingencies for prevention of invasive species establishment in the restored areas.

Federal Consistency Review

The proposed project may be subject to CZM federal consistency review and if so must be found to be consistent with CZM's enforceable program policies. For further information on this process, please contact Robert Boeri, Project Review Coordinator, at 617-626-1050, or visit the CZM web site at www.mass.gov/czm.

LE/kg

cc: Kathryn Glenn, CZM
Rachel Freed, DEP NERO
Chrissy Hopps, DEP Waterways



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Department of Environmental Protection

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Secretary

Martin Suuberg
Commissioner

June 9, 2020

Kathleen A. Theoharides, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

RE: Saugus
110 Ballard Street
EEA # 16206

Attn: MEPA Unit

Dear Secretary Theoharides:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Environmental Notification Form (ENF) for the proposed 110 Ballard Street project in Saugus. MassDEP provides the following comments.

Wetlands

An Environmental Notification Form (ENF) has been filed with the Executive Office of Energy and Environmental Affairs by the Saugus Department of Public Works (DPW) to replace a culvert, tide gate and headwall under Ballard Street. The culvert conveys flow to the Saugus River. The new pipe will be installed 3 feet to the west of the existing pipe and will be constructed with a new headwall and wingwall, and new connections for 12-inch and 18-inch drains. The project will alter 36 sf of Land Under the Ocean, 35 sf of Coastal Beach, 46 lf of Coastal Bank, 88 sf of Salt Marsh, 2,461 sf of Land Subject to Coastal Storm Flowage and 1,903 sf of Riverfront Area. The site is located within the Rumney Marshes Area of Critical Environmental Concern (ACEC).

The project meets the threshold for filing an ENF at 301 CMR 11.03(11)(b), any project in a designated ACEC. It requires a 401 Water Quality Certificate and Chapter 91 License from the Massachusetts Department of Environmental Protection and will seek funding from the Massachusetts Department of Transportation.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

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The replacement of the Ballard Street culvert has been under consideration for many years as part of a larger mitigation effort in the Rumney Marsh ACEC. The latest previous effort was considered in 2015, as submitted by the Department of Conservation and Recreation (DCR) for proposed work to restore tidal flow in two degraded salt marsh areas, referred to as the Ballard Street Eastern Marsh (16.4 acres) and Western Marsh (15.4 acres), within a 54 acre area of the ACEC (EEA #15346). That larger project was bordered by Eastern Avenue on the west, Ballard Street on the north, Salem Turnpike (Route 107) on the east, and the abandoned Bristow Street right-of-way on the south. Previous to that, there have been MEPA reviews of other alternative marsh restoration projects involving the tide gate, (EEA #12889 and #13993). Permitting was granted previously for a Phase I project that included installation of two tide gates, one of which was self-regulating tide gate (SRT) in the tidal creek at Ballard Street. This work was initiated, but was ceased by the town due to contractor performance issues.

The current project is being appropriately considered as a stand-alone culvert replacement project under MEPA, separately from these previously proposed, more complex mitigation efforts. MassDEP understands that the town does not have the resources to pursue salt marsh restoration or other flood improvements at this time.

The Saugus DPW has filed a Notice of Intent (NOI) under the Wetlands Protection Act that has been assigned Wetlands File #67-1089 and a 401 Water Quality Certification Application that has been assigned transmittal #x285547.

Wetlands Impacts

The project proposes alteration 36 sf of Land Under the Ocean, 35 sf of Coastal Beach, 46 lf of Coastal Bank, 88 sf of Salt Marsh, 2,461 sf of Land Subject to Coastal Storm Flowage and 1,903 sf of Riverfront Area. The project originally applied as an Ecological Restoration Limited Project, but after deliberation with MassDEP, the Massachusetts Office of Coastal Zone Management (CZM) and the Division of Ecological Restoration (DER) of the Massachusetts Department of Fish and Game, the applicant has revised the filing as a limited project for a culvert replacement pursuant to 310 CMR 10.24 (7)(c): “The maintenance, repair and improvement (but not substantial enlargement except when necessary to reduce or eliminate a tidal restriction) of structures, including buildings, piers, towers, headwalls, bridges and culverts which existed on November 1, 1987.” MassDEP concurs that the existing culvert and headwall conditions are dilapidated and require replacement.

Under the Regulations for the 401 WQC Program, the project is permissible under 314 CMR 9.06 (3)(c): “Maintenance, repair, replacement or reconstruction but not substantial enlargement of existing and lawfully located structures or facilities including buildings, roads, railways, utilities, dams, and coastal engineering structures.”

Mitigation areas for impacts to 88 square feet of salt marsh will be mitigated by replication and monitoring of an area 1:1 in size. All other impact areas shall be restored in place and in kind.

Other proposed mitigation will include assurance that the tide gate is “set at a height that maintains fish passage and tidal flushing to at least the levels of the current structure.” The applicant states in the Operations and Maintenance Plan that, “The goal of the new tide gate... is to match the balance of flood protection and tidal flushing capacity met by the previous tide gate, but to meet this balance with new infrastructure. This will be completed by examining existing tidal data (largely 2019 data) at this location to determine the standard tidal elevations prior to the installation of the new gate.” This seems to be an understatement and underestimation of the capabilities of the new structure. By any measure, any new adjustable tide gate should be capable of exceeding the performance of the previous structure, which is not in fact a tide gate, but basically a “leaky” steel plate held on to the headwall by chains. The O and M plan should be revised to more accurately describe and implement the project goals. MassDEP concurs with EPA and the USACE that any new tide gate shall not reduce the amount of leakage and tidal inundation which we documented in EPA's 2019 water level study and understands that town plans to attempt to comply with this stipulation by adjusting the vertical sluice portion of the combined top hinged flap gate structure.

The O and M plan goes on to say tidal data will be used as a benchmark for initially setting the gate height, but only “*If there is available time prior to the beginning of construction.*” The applicant should more thoroughly examine data that already exists, for instance data collected for the project proposed under the 2015 EOE number referenced above, that can form the basis for setting the initial height of the gate, in addition to new data able to be gathered prior to construction. In addition to collection of data for a lunar cycle via transducer, which has been committed to by the applicant despite the caveat referenced above, standard tide boards will also be installed during construction to provide a more long term method for evaluating tidal elevations. The tide boards will be installed adjacent to the existing headwall at the inlet and along the river at the outlet and will facilitate future efforts to gauge and adjust the elevations of the tide by manipulation of the tide gate.

MassDEP concurs with the statement in the proposed O and M plan that risk management will not be an anticipated use for this tide gate. The proper balance of ecological benefit versus closure of the gate in the event of an anticipated major storm surge event should be a goal of the plan. Only in the event of a major predicted storm should the gate be lowered to completely close the culvert, prohibiting the tide from entering the upstream marsh but allowing for the discharge of water from it.

As stated in the O and M plan, MassDEP concurs that only in the event that the Town of Saugus Emergency Management requests that the tide gate be closed based on their assessment of predicted precipitation events and storm/tidal surges should the DPW adjust the gate to a closed position. Once any such event has passed, the DPW shall be responsible for promptly returning the gate to the normal setting.

MassDEP concurs with USEPA that if the town can secure funding and permits to construct a new culvert, both culverts should remain open in the final project configuration. Only one of the two culverts is needed to maintain leakage at present levels. The second culvert can potentially be fitted with a drainage only tide gate or preferably a second adjustable Combination Gate to allow for maximum drainage and future flexibility. Capping the existing

culvert by means of a plug of concrete eliminates any possibility that it may be used to improve drainage, reduce velocities at the current culvert, or be incorporated for drainage and potential future marsh restoration purposes.

MassDEP is of the opinion that details for the final implementation of the project can be resolved in the permitting process , in collaboration with USACE, without the need for further MEPA review.

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Rachel.Freed@mass.gov at (978) 694-3258 for further information on wetlands issues. If you have any general questions regarding these comments, please contact me at John.D.Viola@mass.gov or at (978) 694-3304.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Eric Worrall, Rachel Freed, Phil DiPietro, MassDEP-NERO



The Commonwealth of Massachusetts

Division of Marine Fisheries

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DANIEL J. MCKIERNAN
Director

June 9, 2020

Kathleen Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office, Alex Strycky
100 Cambridge Street, suite 900
Boston, Ma 02114

RE: EEA# 16206 Ballard Street Culvert Reconstruction

Dear Secretary Theoharides:

The Division of Marine Fisheries (MA DMF) has reviewed the Environmental Notification Form (ENF) submitted by the Saugus Department of Public Works, for the Ballard Street Culvert Reconstruction Project. The project is located at 110 Ballard Street. The culvert connects the northern portion of Rumney Marsh and its tidal channel, with the Saugus River. The project includes the construction of a 48" culvert pipe 3 feet to the west of the existing degraded four-foot diameter cast iron pipe and installation of a new concrete headwall on the south side and new wingwall on the north outlet. A pipe plug will be installed to close off the existing culvert.

Current Conditions

The existing culvert has a large corroding steel plate on the northern outlet that acts as a tide gate to allow for some tidal "backflow" of saltwater to the upstream marsh. This plate replaced a tide gate that failed. Over the years, Rumney Marsh has slowly degraded, in part due to tidal restrictions including the subject tidegate and culvert. As a result, a once viable salt marsh has become a degraded system and is dominated by freshwater/brackish marsh. The Department of Conservation and Recreation (DCR), the Town of Saugus, the Environmental Protection Agency and others, have been working towards restoring the salt marsh on the southerly side of Ballard Street for decades. However, this project has not been designed to enable restoration of the Rumney marsh saltmarshes, instead the objective is stormwater management and repair of a damaged structure that has become a public safety concern.

Marine Fisheries Resources

The proposed project is located within the Rumney Marsh and adjacent to the Saugus River. Finfish species present in the Saugus River include rainbow smelt (*Osmerus mordax*), Atlantic tomcod (*Microgadus tomcod*), white perch (*Morone Americana*), alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), American eel (*Anguilla rostrata*), and winter flounder (*Pseudopleuronectes americanus*). Mapped shellfish located near the project location include soft shell clam (*Mya arenaria*) and blue mussel (*Mytilus edulis*). The project site is located within the Rumney Marshes, an Area of Critical Environmental Concern (ACEC).

New Culvert and Tide Gate

The proponent wishes to install a new culvert 3 feet to the west of the existing culvert. This will include a new headwall at the south inlet of the pipe that would permanently impact approximately 85sf of salt marsh. Additionally, 35sf of tidal flat will be permanently impacted due to new rip rap at the north outlet. Construction of a new pipe, rather than repairs to the existing pipe, would allow for the continuation of flow in both directions during construction.

The new tide gate design is expected to allow for better tidal exchange while also maintaining stormwater and flood protection. The new opening also is expected to allow improved space for passage of small forage fish species into the marsh fish passage

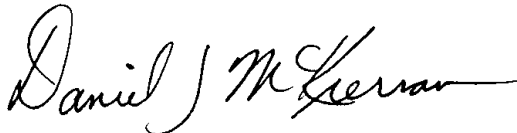
MA DMF Recommendations

According to the applicant, the goal of the project is to ensure the structure is safe and functional. The long-term need for salt marsh restoration in Rumney marsh is not within the scope of this project. A long-term solution would include work at the Bristow Street Culvert and a full watershed approach to stormwater management and marsh restoration, that is not proposed at this time, but is recommended by MA DMF as a long-term plan.

MA DMF recommends a time of year restriction for in-water silt-producing work of February 15 to June 30. Disturbed sediments should be stabilized, and turbidity contained with silt curtains or hay bales. Impacts to fisheries resource areas caused by the culvert construction may be subject to mitigation through federal and state permitting agencies. Finally, yearly monitoring and maintenance of the site and immediate notification of the failure of the tide gate. During this yearly monitoring it should be noted if any changes occur to the salt marsh.

Thank you for considering our comments. If you have questions about this review, please email Kate Frew at Kate.Frew@mass.gov.

Sincerely,



Daniel J. McKiernan
Director

cc.

B. Boeri, MA CZM

E. Reiner, EPA

B. Newman, ACOE

T. Evans, M. Rousseau, MA DMF

W. Keefner, Design Consultants, Inc.

From: [Reiner, Edward](#)
To: [Strysky, Alexander \(EEA\)](#)
Cc: [DiPietro, Philip \(DEP\)](#); [Glenn, Kathryn \(EEA\)](#); [Rowcroft, Jessica \(DCR\)](#); [Lowell, Robert \(DCR\)](#)
Subject: RE: EEA 16206 Ballard Street Culvert Reconstruction, Saugus
Date: Monday, June 8, 2020 1:58:54 PM
Attachments: [Chronology of the Ballard Street Salt Marsh Restoration Project.docx](#)

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

EPA offers the following comments on the proposed Town of Saugus Ballard Street Culvert Reconstruction project in Saugus, Massachusetts. We also submit the attached a Chronology of events related to the abandoned I-95 embankment and the Ballard Street Salt Marsh Restoration Project. We understand that the town does not have the resources to pursue salt marsh restoration, or more effective flood improvements at this time.

EPA's and the Corps advised the town that we would not want any new tide gate to reduce the amount of leakage and tidal inundation which we documented in our 2019 water level study. The town plans to attempt to comply with this stipulation by adjusting the vertical sluice portion of the combined top hinged flap gate structure.

The present proposal would install a new 48-inch culvert approximately three feet from the existing culvert. Seven utilities in the street would need to be carefully protected during this construction. An alternative of repairing just the inlet and outlet structures on the existing culvert was dismissed based on the "perceived" need to maintain tidal and drainage flows during construction without reliance on the existing two Bristow Street Culverts.

Concrete formwork to replace the spalling concrete of the outlet structure may be able to be erected during low tide conditions, and poured during low tide conditions without the need for giant sand bag cofferdam installation or the addition of new riprap.

If necessary, a short duration temporary closure of the existing culvert would be environmentally acceptable as the Bristow Street Culverts will continue to provide drainage and tidal flooding to the marsh. To assure community flood protection in the event of a severe rain event during construction, an emergency pump may be able to be set up in the Eastern Avenue Ditch and approved for discharge to the Bristow Street east culvert via storm drains on Bristow Street.

EPA believes the alternative of installing new headwalls on both ends of the existing 4-foot cast iron pipe is practicable and less damaging to the aquatic environment as compared to the proposed new culvert construction. Nevertheless, if the town can secure funding and permits to construct a new culvert, we request that the both culverts be incorporated in the repaired or new headwall and outlets. Only one the two culverts is needed to maintain leakage at present levels. The second culvert can potentially be fitted with a drainage only tide gate or preferably an second adjustable Combination Gate to allow for maximum drainage and future flexibility. Capping the existing culvert by means of a plug of concrete should not be allowed as the second culvert should be used to improve drainage, and reduce velocities at the current culvert. Having this second culvert available

for drainage and potentially future marsh restoration purposes will help reduce current velocities at the culvert which was a safety concern at this site.

EPA expects that we will be able to work out details for the project in the permit process with the Corps of Engineers without the need for further MEPA review.

Edward Reiner
Senior Wetland Scientist
USEPA
5 Post Office Square.
Suite 100 (06-2)
Boston, MA 02109-3912

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e. Reiner.Ed@epa.gov

From: Strysky, Alexander (ENV) <alexander.strysky@state.ma.us>

Sent: Wednesday, May 27, 2020 10:15 AM

To: patrick@mysticriver.org; turner@mvcommission.org; Alice Brown <abrown@bostonharbornow.org>; Alison Verkade (alison.verkade@noaa.gov) <alison.verkade@noaa.gov>; avorce@nantucket-ma.gov; Backman, Andy (DCR) <andy.backman@state.ma.us>; Barbara Newman <Barbara.H.Newman@usace.army.mil>; robert.boeri@state.ma.us; Briggs, Andrea (DEP) <andrea.briggs@state.ma.us>; Beverly Woods <bwoods@nmcog.org>; Jill Carr <jillian.carr@state.ma.us>; Central Massachusetts Regional Planning Commission <jpierce@cmrpc.org>; Kilmer, Charlie (OCPC) <ckilmer@ocpcrpa.org>; Cheeseman, Melany (FWE) <melany.cheeseman@state.ma.us>; christopher.Boelke@Noaa.gov; Czepiga, Page (EEA) <page.czepiga@state.ma.us>; Stewart Dalzell <SDalzell@massport.com>; doyle@mvcommission.org; Deanna Moran <dmoran@clf.org>; Doyle, Alice (DEP) <alice.doyle@state.ma.us>; Eric.Hutchins@noaa.gov; tay.evans <tay.evans@state.ma.us>; Ferguson, Jana (DPH) <jana.ferguson@state.ma.us>; Flaherty, Erin (ENV) <erin.flaherty@state.ma.us>; Fournier, Kathleen (DEP) <kathleen.fournier@state.ma.us>; Fragata, Carlos (DEP) <carlos.fragata@state.ma.us>; mike.galvin@state.ma.us; Gilmore, Daniel (DEP) <daniel.gilmore@state.ma.us>; Glenn, Kathryn (ENV) <kathryn.glenn@state.ma.us>; Greene, Andrew (DPU) <andrew.greene@state.ma.us>; Rebecca Haney <rebecca.haney@state.ma.us>; Hill, David (DEP) <david.hill@state.ma.us>; jonathan.hobill@state.ma.us; Hokenson, Erikk (ENV) <erikk.hokenson@state.ma.us>; Hopps, Christine (DEP) <christine.hopps@state.ma.us>; Hopson, Barbara (AGR) <barbara.hopson@state.ma.us>; Huckery, Pat (FWE) <pat.huckery@state.ma.us>; Janik, David (DEP) <david.janik@state.ma.us>; Jeffrey Walker (jwalker@srpedd.org) <jwalker@srpedd.org>; Jonathon Idman (jidman@capecodcommission.org) <jidman@capecodcommission.org>; Kasper-Dunne, JoAnne (DEP) <joanne.kasper-dunne@state.ma.us>; Frew, Katelyn (FWE) <kate.frew@state.ma.us>; Kim, Tori (ENV) <tori.kim@state.ma.us>; Kinahan, Erin (DOT) <erin.kinahan@state.ma.us>; Christine Kirby <Christine.Kirby@state.ma.us>; Laney, Kristen <kristen@thebeatnews.org>; LaRosa, Thomas (DCR) <thomas.larosa@state.ma.us>; Glorioso, Lauren (FWE) <lauren.glorioso@state.ma.us>; Lehan, Richard (FWE) <richard.lehan@state.ma.us>; Dunleavy, Linda (FRCOG) <lindad@frcog.org>; Engler,

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Cc: wkeefner@dc-ma.com; Michaela Heffernan <MHeffernan@dc-ma.com>; metcalfera@gmail.com; Georgeann Keer <Georgeann.keer@state.ma.us>; Rowcroft, Jessica (DCR) <jessica.rowcroft@state.ma.us>; Phil <Philip.Dipietro@state.ma.us>; Alan Anacheka-Nasemann <alan.r.anacheka-nasemann@usace.army.mil>; Reiner, Edward <reiner.ed@epa.gov>; Rousseau, Mark (FWE) <mark.rousseau@state.ma.us>; thughes@hughesenvr.com

Subject: Notice of MEPA Remote Site Visit- EEA 16206 Ballard Street Culvert Reconstruction, Saugus

NOTICE OF MEPA REMOTE SITE VISIT

EEA 16206 Ballard Street Culvert Reconstruction, Saugus

Project Description: An [Environmental Notification Form \(ENF\)](#) (please note: this is a link to only a small portion of the ENF; see below to obtain a full copy) has been filed with the Executive Office of Energy and Environmental Affairs by the Saugus Public Works Department to replace a culvert, tidegate and headwall under Ballard Street. The culvert conveys flow to the Saugus River. The new pipe will be installed 3 feet to the west of the existing pipe and will be constructed with a new headwall and wingwall and new connections for 12-inch and 18-inch drains. The project will alter 36 sf of Land Under the Ocean, 35 sf of Coastal Beach, 46 lf of Coastal Bank, 88 sf of

Salt Marsh, 2,461 sf of Land Subject to Coastal Storm Flowage and 1,903 sf of Riverfront Area. The site is located in the Rumney Marshes Area of Critical Environmental Concern

The project meets the threshold for filing an ENF at 301 CMR 11.03(11)(b), any project in a designated ACEC. It requires a 401 Water Quality Certificate and Chapter 91 License from the Massachusetts Department of Environmental Protection and will seek funding from the Massachusetts Department of Transportation.

A video conference/conference call will be held to discuss the project and its environmental impacts and mitigation measures. The public is welcome to participate.

Video conference scheduled for: Tuesday, June 2 at 1:30 PM. Please RSVP to alexander.stryisky@mass.gov by June 1 and you will be provided with information on how to join the video conference or call in to the meeting.

MEPA comments due on or before: June 9, 2020

Certificate due: June 19, 2020

Contact for Project Information, including a full copy of the ENF: Wayne Keefner, (617) 776-3350, wkeefner@dc-ma.com

MEPA Contact: Alex Stryisky, (617) 626-1025, alexander.stryisky@mass.gov **Email is the preferred method of contact**

Alex Stryisky
MEPA Office
100 Cambridge Street
Boston, MA 02114

(617)626-1025

Chronology of the Interstate I-95 embankment and the Ballard Street Salt Marsh Restoration Project

- **June 20, 1985:** EPA comments on the Revere Beach Erosion Control Project use of I-95 for borrow suggesting marsh restoration be included in the removal of 770,000 cubic yards of fill.
- **September 10, 1985:** Corps letter replying to comments from USFWS declines to assume federal responsibility for salt marsh restoration associated with their Revere Beach Erosion Control Project.
- **October 23, 1985:** MEPA issues Certificate of the Secretary of Environmental Affairs on the Environmental Notification Form for the Revere Beach Erosion Control Project. Matters relating to marsh restoration by embankment removal and flooding potential for surrounding communities were to be evaluated as part of the Environmental Impact Report for the project.
- **January 23, 1987:** Steven C. Davis, Assistant Secretary of Environmental Impact Review determines salt marsh restoration at the borrow site is beyond the area of direct MDC responsibility. Matters previously required to be evaluated in an EIR related to salt marsh restoration no longer needed to be addressed. MDC agreed to set aside 15 cents per cubic yard removed in order to support the ultimate restoration effort. That money was not used to support restoration. (EOEA No 5757).
- **June 10, 1987:** MEPA Certificate issued on the FEIR for Revere Beach Erosion Control Project by James S. Hoyte states:
"All areas excavated to virgin material should be to an elevation at which *Spartina alterniflora* may be established. A technical advisory committee chaired by MEPA will be established in the final specifications for salt marsh restoration.
- **August 22, 1988:** Rumney Marshes Area of Critical Concern (ACEC) designated. The Secretary of Environmental Affairs James S. Hoyte wrote in the designation: "In general, I am, and have been concerned with the ultimate fate of this fill. To restate my position, our ultimate goal is to remove the fill and restore the marsh. Any activity which does not further this goal will be deemed inconsistent with the designation."
- **July 11, 1989:** Care and Control Agreement between Town of Saugus and MDC for 60 Acres in Saugus.
- **July 1989:** Corps releases Feasibility report and DEIS/R for the Saugus River and Tributaries, Lynn, Malden, Revere, and Saugus Massachusetts Flood Damage Reduction Study.
- **February 1990:** Corps publishes Feasibility report and FEIS/R for Saugus River and Tributaries Flood Reduction Study requiring an estuary storage area which has been defined by the Corps as those areas between elevation 7.0 and 8.0 feet (NGVD).
- **1990:** Tide gate breaks off its hinge. Saugus DPW chains a plate of steel over the culvert.
- **October 11, 1990:** EOEA file number 8369 for land transfer. Certificate issued includes an additional 83 acres in Saugus, subject to Care and Control Agreement. In this certificate Secretary John DeVillars wrote: "I wish to reiterate item #6 of the Care and Control Agreement states that "The Town of Saugus, MDC and the citizen's Advisory committee will develop a definitive master plan to be approved by D.C.P.O. within two years of the transfer of the deed." Prior to the adoption of the master plan, the proponent (s) are advised that in accordance with 301 CMR 11.15, "Agency planning for activities within an ACEC requires an ENF." Therefore, the proposed master plan is subject to MEPA review. "The committee was never established, and the Master Plan never developed.

- **Dec. 13, 1990:** EPA meeting with Conservation Commission introducing Self-Regulating Tide gate alternatives.
- **1994:** Massachusetts Wetland Restoration and Banking Program established.
- **February 1995:** EPA concept plan shared at public meeting in Saugus with a host of agencies.
- **December 29, 1995:** Saugus River Estuary Tide Gate Condition Survey by Clyde Porter Jr. Consulting Engineers presents cost estimate for repairs.
- **February 21, 1996:** EPA comments provided to DEM on Tide Gate Condition Survey Report identified missing tide gates such as at Bristow Street in Saugus.
- **1996:** NRCS interdisciplinary Resources Technical Team organized as part of a Coastal America project to restore the marsh.
- **September 1996:** EPA Section 104(b)(3) Clean Water Act Grant issued to New England Interstate Water Pollution Control Commission NEIWPCC for Ballard Street project.
- **October 4, 1996:** Massachusetts ACEC program organizes a Rumney Marsh Working Group to help develop a Salt Marsh Restoration Plan for the Rumney Marshes ACEC.
- **December 17, 1997:** Grow Wetlands Agreement signed between EPA and Mass Wetlands Restoration and Banking Program (MA WRBP).
- **December 23, 1998:** Rumney Marsh Task Force proposed planning process published in Environmental Monitor.
- **1997:** NRCS Flood Damage Survey completed.
- **November 1997:** Northeast Massachusetts Mosquito Control and Wetlands Management District maintains more than 2100 linear feet of salt marsh creek for the Ballard Street Salt Marsh Restoration Project and documents the culvert at Bristow Street. A temporary wood barrier was erected sometime after this was cleaned out.
- **March 5, 1998:** Meeting at NRCS Westford office about Ballard Street with a host of agencies.
- **1998:** EPA Rumney Marsh Special Place effort starts.
- **1999:** NRCS Flood Study completed.
- **February 2000:** Corps requests Department of Defense support through the Innovative Readiness program (IRP). Needs permitted project to proceed.
- **June 2000:** Draft Rumney Marshes Salt Marsh Restoration Plan availability published in Environmental Monitor.
- **August 2000:** Soil Geotechnical Analysis funded by NEIWPCC EPA grant.
- **March 26, 2001:** ENSR providing Cooperate Partnership support to the MA Wetlands Restoration Program provides advice to project.
- **February 2002:** Draft Phase 2 grading plans developed by NRCS.
- **May 2002:** Final Rumney Marshes ACEC Salt Marsh Restoration Plan published.
- **December 10, 2002:** Saugus issues Order of Conditions for Phase 1 project DEP File No. 67-806
- **December 30, 2002:** MEPA issues Final Record of Decision for Ballard Street Restoration project EOA No. 12889 granting a Phase 1 Waiver.
- **December 23, 2003:** MA CZM Wetland Restoration Program Priority Project Nomination Form submitted by EPA for the Phase 1 project as approved by DEP and the Phase 2 project.
- **May 18, 2004:** Ballard St salt marsh meeting with a host of agencies held at Saugus Town Hall to review final NRCS plans and remaining Phase 1 permitting.
- **July 14, 2004:** Draft grading plan for Phase 2 provided from NRCS.

- **April 29, 2005:** Corps issues Permit NAE 2004-4377 to Town of Saugus for Twin 4X4 Box culverts, one with SRT, one with a top hinged flap gate for the Ballard Street Phase 1 project.
- **2008:** Construction initiated on Ballard Street Phase 1 project. Culverts delivered to site
- **March 9, 2009:** Engineering Alliance Inc, writes to Contractor Moriority and Sons Inc. concerning performance problems.
- **Later in 2009:** Saugus terminates construction due to contractor problems.
- **2011:** Massachusetts Division of Ecological Restoration develops plan with Woods Hole Group incorporating Division of Conservation and Recreation Saugus Embankment Extraction for the Winthrop Shores project.
- **2012:** MA DCR receives \$1 Million from USFWS National Coastal Wetland Conservation Grant Program for the Ballard Street marsh restoration and flood improvement project.
- **April 2013:** Otte and Dwyer Inc., survey prepared for DER and Woods Hole Group finds elevation error in NRCS plan. This results in less excavation needed.
- **April 25, 2013:** Saugus Conservation Commission issues order of conditions for I-95 embankment excavation #067-1001. 236,002 cubic yards of excavation is intended for use on Winthrop Beach.
- **August 20, 2013:** DEP issues superseding order of conditions for Saugus Extraction by DCR after appeal by citizens.
- **September 3, 2014:** DCR, DER and EPA meet to go over the modeling and plans for Ballard Street. DCR modified plans to divert the flow path from the Saugus River to the Pines River. EPA raised concerns and suggested coordination with NMFS and the Corps was also needed.
- **September 23, 2014:** Meeting held at DCR with agencies for EFH consultation.
- **October 9, 2014:** Pre-application meeting held at DCR.
- **October 30, 2014:** EPA comments and concerns about the DCR plans for the dike and one-foot culvert and use of rubber duck bill tide gates and other issues provided to DCR.
- **March 2015:** DCR files EOEEA # 15346 for the Ballard Street Salt Marsh Restoration Project.
- **April 29, 2015:** EPA comments to MEPA with significant concerns.
- **May 8, 2015:** DEP letter to MEPA mentions three concerns to resolve.
- **August 11, 2015:** Meeting at EPA offices with facilitators from DCR and EPA.
- **December 2015:** Town of Saugus replaces the Ballard Street temporary tide gate with a new plate of steel reducing fish access and tidal leakage.
- **January 2015:** The Town of Saugus adjusts the plate of steel tide gate to allow 6 inches of flow at the bottom of the culvert for fish access.
- **March 6, 2017:** DCR letter to town of Saugus placing the project on hold due to loss of federal funding from USFWS and higher predicted costs for project.



MASSACHUSETTS WATER RESOURCES AUTHORITY

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June 9, 2020

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge St, Suite 900
Attn: MEPA Office, Alex Strysky
Boston, MA 02114

Subject: EOEEA #16206 – Environmental Notification Form
Ballard Street Reconstruction, Saugus, MA

Dear Secretary Theoharides,

The Massachusetts Water Resources Authority (MWRA) appreciates the opportunity to comment on the Environmental Notification Form (ENF) submitted by Saugus Dept. of Public Works (the "Proponent") for Ballard Street Culvert Reconstruction (the "Project") in the Saugus, Massachusetts. The Project site is located underneath the roadway at 110 Ballard Street and extends below the right of way, connecting the northern portion of Rumney Marsh and its tidal channel, with the Saugus River. The existing culvert is a four-foot diameter cast iron pipe with reinforced concrete headwalls. The Project involves installing a new 3-foot diameter pipe to the west of the existing pipe, which would have a fitted concrete headwall on the south side and a new additional concrete wingwall on the north outlet. The purpose of the Project is to address the evident public safety concerns and the integrity of the culvert following year of degradation.

Section 8(m) of Chapter 372 of the Acts of 1984, MWRA's Enabling Legislation, allows the MWRA to issue permits to build, construct, excavate, or cross within or near an easement or other property interest held by the MWRA, with the goal of protecting Authority-owned infrastructure. Due to the proximity of MWRA water infrastructure in Ballard Street to the Project site, an 8(m) permit will be required. The Proponent should contact Ralph Francesconi, in the Water Permitting Group, at (617) 305-5827 for assistance related to this matter.

On behalf of the MWRA, thank you for the opportunity to provide comments on this Project. Please do not hesitate to contact me at (617) 788-4958 with any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Card", is written over a horizontal line.

Bethany Card
Director
Environmental and Regulatory Affairs

cc: John Viola, DEP