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CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Gibson Park Resiliency Project
PROJECT MUNICIPALITY : Revere
PROJECT WATERSHED : North Coastal
EEA NUMBER : 16711
PROJECT PROPONENT : City of Revere
DATE NOTICED IN MONITOR : November 8, 2023

Pursuant to the Massachusetts Environmental Protection Act (MEPA; M.G.L. c. 30, ss. 61-62L) and Section 11.08(8) of the MEPA regulations (301 CMR 11.00), I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project **does not adequately and properly comply** with MEPA and its implementing regulations, and therefore requires the filing of a Supplemental DEIR (SDEIR). The Certificate on the Expanded Environmental Notification Form (EENF) denied the Proponent's request to file a Single EIR, and issued a Scope for DEIR in light of strong agency concerns regarding the design of various project components. While I acknowledge the Proponent's efforts to address prior comments—most notably, with the removal of plans to “restore,” and thereby alter, Salt Marsh—the DEIR has introduced new project elements that were not previously presented to reviewing agencies, and which raise equally serious concerns about potential impacts to wetland resource areas and off-site flood impacts to surrounding neighborhoods. The analysis of project alternatives is a central element of the MEPA review process, and Agencies have explicitly requested consideration of additional alternatives and mitigation through an SDEIR. While I acknowledge the overall goal of the project to provide improved coastal resilience for the park and the adjacent neighborhood to climate change impacts, I find that an SDEIR is warranted to allow for further study of

alternatives and the project's consistency with applicable regulatory standards. The Proponent should prepare a SDEIR in accordance with the Scope below.

Project Description

As described in the DEIR, the project consists of redeveloping the existing Gibson Park into an up-to-date multi-program recreational facility, incorporating nature-based resiliency measures to protect the park and the adjacent Riverside neighborhood from both tidal and storm flooding events. Specific park improvements include a new multi-purpose natural-turf field, upgraded tennis courts, high mast lighting (to allow for more nighttime sports activities), and expanded walking paths with educational signage. The City of Revere (the Proponent) also recently acquired the former North Shore Boatworks Property (the Boatworks Property) and proposes to remediate and rehabilitate the site into a community boating facility focused on rowing and kayaking activities. Rehabilitation activities on the Boatworks Property will include relocation and reconstruction of the dilapidated revetment structure; elevating the first floor and mechanical systems of the existing building; and installing a new boardwalk, gangway, and floating dock system in the Pines River. In order to address flooding issues along Mills Avenue, the project proposes to construct a berm between the roadway and the Pines River. The berm would tie into the reconstructed revetment on the Boatworks Property, extending south along Mills Avenue, in order to provide a uniform line of flood protection along the ocean's edge. The berm will be vegetated with native, coastal flora and would require new granite curbing along the edge of Mills Avenue to protect the berm during snow removal operations. Additionally, a pair concrete wingwalls will be installed at the end of the berm, at the intersection of Mills Avenue and Thayer Avenue, to maintain current access waterfront but also allow the Proponent to use either flashboards or deployable barriers in advance of a flooding event. Additional features proposed by the project include creating offline subsurface stormwater storage underneath the multi-purpose athletic field; decentralizing the stormwater management with raingardens and bioswales; creating access to the park from North Shore Road; and providing additional parking at the Boatworks Property.

According to the DEIR, the primary goals of the project are to provide a more resilient, natural interface of the land and the river; provide off-line subsurface stormwater storage and to create decentralized stormwater management facilities; help alleviate flooding in the area while maintaining this parcel for optimal, multi-modal recreational uses; keep the rising sea levels out of the adjacent residential neighborhood; and allow the Boatworks Property to be safely redeveloped for highly sustainable public use.

Project Site

The project site encompasses approximately 9.15 acres and consists of the existing Gibson Park, the Boatworks Property, and Mills Avenue. Gibson Park is an actively used recreational facility, whose amenities include a baseball/softball field, two sets of double tennis courts, a half-court basketball court, a community garden, a playground, walking paths, memorial benches and parking. Gibson Park is bordered to the north by the Gibson Point development, to the east by North Shore Road, to the west by the Pines River, and to the south by the Boatworks Property. The Boatworks Property has been historically used as a boatyard, providing boat haul-out, storage and repair facilities for recreational and commercial vessels. The waterfront structures at the Boatworks Property consist of armor stone,

dilapidated timber bulkheads, and a stone revetment. The Project site also extends 2,400 linear feet(lf) down Mills Avenue along the interface of the roadway and the coastal edge of the Pines River.

State and local wetland resource areas located within the project area include Land under the Ocean (LUO), Coastal Beach, Coastal Dune, Barrier Beach, Land Containing Shellfish, Fish Runs, Salt Marsh, Isolated Vegetated Wetland (IVW), Riverfront Area (RA), and Land Subject to Coastal Storm Flowage (LSCSF). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Panel No. 25025C0028J and 25025C0036J, effective March 16, 2016), the majority of the project site is located within Coastal Zone AE with a Base Flood Elevation (BFE) of 10 ft NAVD88. The project site is also located within filled and flowed tidelands as well as the Rumney Marshes Area of Critical Environmental Concern (ACEC).

According to the Massachusetts Natural Heritage and Endangered Species Program (NHESP) Atlas (15th Edition), the site is not located within Estimated or Priority Habitats of Rare Species. The project site also does not contain any structures listed in the State Register of Historic Places or the Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth.

The project site is located within an EJ Population characterized as Minority and Income within the City of Revere. The site is located within one mile of three additional EJ Populations characterized as Minority (2) and Minority and Income (1) within the City of Revere, three EJ Populations characterized as Minority within the City of Saugus, and two EJ Populations characterized as Minority and Income (1) and Minority and English Isolation (1) within the City of Lynn. The site is also located within five miles of numerous additional EJ Populations.¹ As described below, the DEIR identified the "Designated Geographic Area" (DGA) for the project as one mile around EJ Populations, included a review of potential impacts and benefits to the EJ Populations within this DGA, and described public involvement efforts undertaken to date.

Changes Since the EENF

Since the filing of the Expanded Environmental Notification Form (EENF), the Proponent has been working to update the project's design in order to address comments and concerns raised by Agencies. The DEIR describes the changes to the proposed project since the filing of the EENF for the following project components:

- **Mills Avenue Berm** – The design of the berm has been revised from vegetated berm using coir mats and envelopes and is now proposed to consist of a "low permeable" berm core with a cobble base extending up to elevation 9 ft NAVD88, tying into existing grades on an average slope of three ft horizontal to one ft vertical. From elevation 9 ft NAVD88 to elevation 10.3 ft NAVD88 and on the landward side of the berm, the surface will include a vegetated treatment to reinforce the structure of the berm and provide stability. At three locations (near Gilbert Avenue, Frank Avenue, and 53 Mills Avenue) the vegetated berm will be replaced with a maintenance access point consisting of recuperated granite blocks in order to provide stable access for DPW staff to traverse the berm without causing damage. In addition, the updated design has reduced

¹ The EEA EJ Mapper is available at: <https://www.mass.gov/info-details/environmental-justice-populations-in-massachusetts>

the number of locations with concrete wingwalls and deployable flashboards from twelve to one, at the intersection of Mills Avenue and Thayer Avenue.

- **Elevated Walkway and Floats** – In an effort to prevent the proposed floats from bottoming out on the mudflats at low tide, potentially impacting shellfish habitat, project has been redesigned to include a fixed pile supported structure extending slightly further out over the Coastal Beach to allow the gangway and floats to extend into the Pines River into an area where the floats will not bottom out at low tide.
- **Boatworks Property Upgrades** – The project originally proposed to rebuild the shoreline infrastructure within the previously licensed footprint. The reconstructed revetment was to consist of a sloped concrete revetment with rip rap stone toe, with the top of wall elevated to provide additional storm surge protection. However, because the previously licensed structure was not maintained, it has fallen into disrepair which allowed for an area of Salt Marsh to develop upgradient of the existing shoreline wall. In an effort to avoid impacts to Salt Marsh, the updated designs include a revised shoreline alignment achieved through installation of a new sheet pile wall approximately 36 ft landward (to the east). The steel sheet pile wall would include a toe comprised of stone reclaimed from the dilapidated revetment.
- **Stormwater Management** – Although the project originally proposed the removal of the existing outfall pipe in the southeastern corner of Gibson Park, upon further review the Proponent determined that the outfall is not collapsed and does allow for discharge at the lower end of the tidal cycle. Therefore, the project now proposes to construct a new drain manhole in the upland area along the pipe outfall alignment. The manhole will be constructed around the existing pipe, with inverts for the new stormwater infrastructure and an inline tide valve along the outfall pipe. This structure will allow for easier DPW maintenance, prevent backflow of river water into the new stormwater system, and avoid direct construction impacts within wetland resource areas. As discussed below, the project proposes to substantially expand underground storage of stormwater, and the new manhole structure would allow for continued overflow discharges into the Rumney Marshes ACEC.
- **Expanded Parking** – The proposed parking area for the redeveloped Boatworks Property has been relocated further to the east, away from the shoreline, in order to allow for the addition of Americans with Disabilities Act (ADA) accessible ramps leading from the proposed parking area to the redeveloped and elevated community building.
- **Park Features** – In order to accommodate the future construction of a roundabout off of North Shore Road, two of the proposed tennis courts have been reoriented which has resulted in the relocation of the community garden area was relocated onto the Boatworks Property, to the east of the proposed tennis courts.

As noted in the DEIR, there were several project components proposed in the EENF that have been eliminated from the project. Specific components no longer being considered include:

- Construction of a pile supported walkway with an overlook and educational/information panels through the northern marsh area at Gibson Park;
- Construction of a living shoreline with a ribbed mussel sill and expanded salt marsh at the northern portion of Gibson Park;
- Invasive species (Phragmites) treatment and removal along the western edge of Gibson Park;
- Salt marsh restoration along the southern end of Gibson Park; and
- Construction of a pile supported walkway along the western edge of Gibson Park;

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include the direct alteration of 6.11 acres of land as well as temporary and permanent impacts to wetland resources areas present on the project site including 308,655 square feet (sf) of Coastal Dune (36,385 sf permanent, 308,655 sf temporary), 12 sf of Coastal Beach (6 sf permanent, 6 sf temporary), 213,095 sf of RA (17,800 sf permanent, 213,095 sf temporary), and 356,000 sf of temporary impacts to LSCSF.² The project will also generate 1,140 gallons per day (gpd) in water demand and wastewater generation, and create 26 parking spaces.³ Additionally, the entire project site is located within the Rumney Marshes ACEC.

Measures to avoid, minimize, and mitigate environmental impacts include improvements to site resiliency through construction of a flood protection berm; construction of a stormwater management system; use of erosion and sedimentation controls during construction; and remediation of contaminated soil. Additional measures should be described in the SDEIR in response to comments, as discussed below.

Jurisdiction and Permitting

This project is subject to MEPA review because it requires Agency Action and meets/exceeds the MEPA review thresholds at 301 CMR 11.03(3)(b)(1)(a) for the alteration of a coastal dune, barrier beach or coastal bank; 301 CMR 11.03(11)(b) for any project of ½ or more acres within a designated ACEC, unless the project consists solely of one single family dwelling; and 301 CMR 11.03(3)(b)(1)(f) for the alteration of ½ or more acres of any other wetlands. The project is required to prepare an EIR pursuant to 301 CMR 11.06(7)(b) because it is located within a DGA of one or more EJ Populations.

The project will require a M.G.L. Chapter 91 (c. 91) License from the Massachusetts Department of Environmental Protection (MassDEP).⁴ The project will also require an Order of Conditions (OOC) from the Revere Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP) and Site Plan Review from the Revere Site Plan Review Committee. Additionally, the project will require a Public Benefit Determination (PBD) from the Secretary of the Executive Office of Energy and Environmental Affairs (EEA).

The project will require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit, for the disturbance of greater than one acres of land, from the U.S. Environmental Protection Agency (EPA). The project will also require the submittal of a Pre-Construction Notification (PCN) to the U.S. Army Corps of Engineers (ACOE) seeking authorization under the General Permits for Massachusetts in accordance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Additionally, the project may require Federal Consistency Review by the Massachusetts Office of Coastal Zone Management (CZM).

² This represents a decrease of 21,270 sf of impacts to Coastal Dune, 116 sf of impacts to Coastal Beach, 25,040 sf of impacts to RA, and 2,660 sf of impacts to LSCSF from the EENF, due to the changes to project design described above.

³ This represents an increase of four parking spaces from the EENF.

⁴ The DEIR states that based on consultation with MassDEP, it has been determined that the proposed project will not require a Water Quality Certification pursuant to the 401 Water Quality Certification Regulations (314 CMR 9.00) as was previously stated in the EENF.

The project has received a Municipal Vulnerability Grant from EEA for design and permitting, and is seeking other forms of Financial Assistance. Therefore, MEPA jurisdiction is broad in scope and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in MEPA regulations.

Review of the DEIR

The DEIR included a project description, existing and proposed conditions plans, revised estimates of project-related impacts, an updated alternatives analysis, an updated Stormwater Report, and an identification of measures to avoid, minimize and mitigate environmental impacts. The DEIR provided a response to comments on the EENF and draft Section 61 Findings. It also contained a partial assessment of the public health impacts of the project and information related to impacts on EJ populations as required by 301 CMR 11.07(6)(n)1.

The Proponent provided a revised version of the DEIR on December 1, 2023 which restructured the information presented in the DEIR and provided additional appendices. For purposes of clarity, all supplemental information provided by the Proponent are included in references to the “DEIR,” unless otherwise indicated.

Alternatives Analysis

In response to the Scope, the DEIR included an expanded alternatives analysis that considers how the project can provide resiliency to Gibson Park and the adjacent shoreline, in particular, with respect to the expanded parking area and shoreline protection features. As noted above, the number of access points has been reduced from 12 to one, which will reduce maintenance costs for the Revere Department of Public Works (DPW) and the potential scour and erosion around the wingwalls.

The following summarizes the new alternatives considered in the DEIR for various project components:

Mills Avenue Berm

The EENF Certificate summarized the alternatives previously considered, which included the installation of interlocking, concrete Jersey Barriers, a vegetated berm using geotubes (fabricated geotextile bags that use a woven, plastic geotextile to contain materials), and a vegetated berm using Envirolok geobags (fabricated geotextile bags that are designed to be planted).

Alternative 4 was previously the Preferred Alternative in the EENF, and would involve the creation of a vegetated berm using coir mats and envelopes, which are natural fiber woven fabrics, typically made from coconut husk fibers, that are planted with deep rooted native plants and used to stabilize the ground surface while plants become established. This approach was chosen since the coir mats and envelopes, while they do not provide the same long-term strength and resistance to wave action as the other alternatives, are made of natural fiber materials and would result in less wave deflection impacts when compared against the mostly vertical concrete structures. Although Agency comments were generally favorable of a vegetated berm alternative, over other alternatives analyzed, comments recommended a shift of the shoreline treatment further landward and create a more natural

berm that can blend into the existing shoreline and the incorporation of a properly sized cobble berm located at the seaward toe of a natural berm could provide more stability.

In response to agency comments, Alternative 5 was newly presented in the DEIR as an additional alternative for the berm, and would involve the construction of a cobble berm, also known as a dynamic revetment, consisting of gravel and cobbles that can be readily moved by water rather than a static structure like what would be done with concrete or rip rap. Although this alternative would have low initial construction costs, it would require significant maintenance due to the dynamic nature of the cobbles need to be replaced in spots periodically. Therefore, this alternative was dismissed.

In addition, a new Preferred Alternative was presented in the DEIR, and would involve a hybrid approach utilizing a vegetated sediment berm with a low permeable core and cobble stone toe on the lower portion of the berm slope. The use of vegetated sediment for the berm is intended to provide stability to the slope while incorporating native coastal flora and creating a visually aesthetic resiliency solution. The addition of a cobble stone toe is also intended to provide greater stability at the interface of the berm with the Coastal Beach. While the new Preferred Alternative attempted to incorporate Agency feedback, Agency comments state that the inclusion of an impervious core within the berm is like to exacerbate erosion of the overlying sediment and vegetation and reflect storm wave energy toward the beach, rather than dissipating it.

Boatworks Property Upgrades

The EENF Certificate summarized prior alternatives, which included constructing a small, short-term revetment without any upgrades to the dilapidated on-site revetment; a complete reconstruction of the dilapidated revetment; and a partial reconstruction of the dilapidated revetment.

Alternative 4 was previously the Preferred Alternative, and would involve a complete reconstruction of the dilapidated revetment at the Boatworks Property to provide rowing access direct from the community rowing facility and new vessel launching infrastructure. As noted above, this alternative would require the filling of Salt Marsh resulting in 315 sf of impacts to Salt Marsh and 3000 sf of impacts to Coastal Dune, LSCSF, and RA. In response to prior Agency feedback, this alternative was subsequently dismissed.

Instead, the DEIR now presents a new Preferred Alternative, which was not previously presented to Agencies, and would involve the installation of a steel sheet-pile wall landward of the dilapidated revetment at the Boatworks Property to provide rowing access direct from the community rowing facility and new vessel launching infrastructure. The Preferred Alternative would better tie into existing grades, where it will gently terminate at the northern end and terminate with an H-pile at the southern end to connect into the Mills Street berm. In addition, the Preferred Alternative would not result in any impacts to Salt Marsh and 800 sf of impacts to Coastal Dune, LSCSF, and RA. As discussed below, Agencies continue to raise serious concerns about the design of flood resiliency features at the Boatworks Property and request consideration of additional alternatives to minimize resource impacts through erosion and scour, and to reduce the potential for off-site flood impacts to surrounding neighborhoods. The SDEIR should continue to consider the alternatives suggested by Agencies.

Expanded Parking Area

The EENF Certificate noted that the project proposed to an expanded parking area on the Boatworks Property; however, a consideration of different surface materials was not included as part of the alternatives analysis. The Scope noted that the Proponent should evaluate alternatives to using asphalt, such as the use of gravel, pea stone, or shell, to allow the landform to slow down flood waters, except for the two spaces intended for parking for visitors with disabilities. The following describes new alternatives considered in the DEIR to address the Scope.

Alternative 1 would involve utilizing permeable pavement for the expanded parking areas. This alternative would incur the highest construction costs as it would require specialized equipment, and multiple layers of different materials. In addition, this alternative would have the most intensive maintenance requirements, requiring the use of a specialized vacuum truck to maintain the permeability.

Alternative 2 would involve utilizing crushed stone for the expanded parking areas. Although the use of crushed stone would be preferable on a Coastal Dune, it would have higher construction costs than the Preferred Alternative as they are slower to put in and require multiple passes to achieve proper grade and compaction. In addition, this alternative would require greater maintenance than the Preferred Alternative due to displacement from use and coastal storm events.

Alternative 3 would involve utilizing oyster shells for the expanded parking areas. Although the use of oyster shells would be similarly preferable on a Coastal Dune, it would have higher construction costs than the Preferred Alternative as they are slower to put in and require multiple passes to achieve proper grade and compaction. In addition, this alternative would have more of a noise impact to residents and require greater maintenance than the Preferred Alternative due to displacement from use and coastal storm events.

The Preferred Alternative (as described herein) would involve utilizing asphalt for the expanded parking areas. Although asphalt would be the least resilient, as it is the least adaptable to rising water levels, it has the lowest construction costs and least intensive maintenance requirements. In addition, asphalt is the desired material for the community as it provides a consistently smooth, stable surface.

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As detailed below, comments from Agencies suggest additional alternatives for how the project can provide resiliency to Gibson Park and the adjacent shoreline. In particular, the SDEIR should continue to consider alternatives that minimize impacts to floodplain function, and meet the performance standards for Coastal Dunes.

Environmental Justice (EJ) / Public Health

As noted above, the project site is located within an EJ Population characterized as Minority and Income within the City of Revere. The site is located within one mile of three additional EJ Populations characterized as Minority (2) and Minority and Income (1) within the City of Revere, three EJ Populations characterized as Minority within the City of Saugus, and two EJ Populations characterized as Minority and Income (1) and Minority and English Isolation (1) within the City of Lynn. The site is

also located within five miles of numerous additional EJ Populations. Spanish, Portuguese, Mon-Khmer/Cambodian, and Arabic were identified as languages being spoken by 5% or more of Limited English Proficiency (“LEP”) residents within one mile of the project site.

The DEIR describes the public involvement plan that the project has undertaken to engage with EJ Populations. In accordance with the Scope, the Proponent obtained an updated “EJ Reference List” from the MEPA office, which included a list of Community Based Organizations (CBOs) and tribes/indigenous organizations, for purposes of circulating the DEIR prior to filing. The Proponent held a hybrid, public informational session for the project on October 18, 2023 at the Point of Pines Yacht Club with a remote participation option. In advance of the meeting, the Proponent published a notice (in English and Spanish) which included information on the date, time, and location of the meeting. Spanish language interpretation was provided for both on-site, in-person and remote participants. The Proponent also maintains a project website that provides project documents and consistent updates for residents on the project.⁵ The DEIR indicates that the Proponent remains committed to a comprehensive community outreach process and will continue to engage the community as the project progresses. The Proponent has also committed to hold an additional public meeting prior to the commencement of construction.

The DEIR included a figure, consisting of a screenshot, detailing sources of potential pollution near the project site, based on the mapping layers available in the DPH EJ Tool; however, it did not provide a tabular description of the estimated number and type of mapped facilities/infrastructure within the area. This information should be supplemented in accordance with the Scope.

In response to the Scope, the DEIR states that construction access will be provided to the site via Mills Avenue and Route 1A, with the materials being staged at the Boatworks Property following soil remediation activities. Daily truck traffic will vary throughout the different phases of the project but could be up to 12 truck trips per day. The main sources of construction period impacts are noise and emissions from construction equipment, and motor vehicles and fugitive dust emissions from disturbed soil surface areas. In order to minimize the impacts of the noise on the residents of the Riverside neighborhood, all equipment must be outfitted with mufflers, there will be an operations time-of-day restriction, as well as a maximum equipment idle time. The project will include fugitive dust monitoring and mitigation requirements, as well as the use of low-sulfur fuels. The DEIR also states that the project is expected to have beneficial impacts on public health and safety, as the project includes physical improvements to the built environment that will increase opportunities for passive and active recreational opportunities, as well as nature-based solutions to address flooding issues. However, newly incorporated design features may have the potential to alter the floodplain functions on the site and in the adjacent neighborhood. This should be addressed in accordance with the Scope.

Land Alteration, Impervious Surfaces, and Stormwater

In accordance with the Scope, the DEIR includes an updated Stormwater Report which includes additional details about the function of the stormwater system. As described in the DEIR, the stormwater management system includes several specific measures and BMPs to address both coastal/riverine and precipitation-related flood events, including:

⁵ Available at: <https://www.revere.org/ongoing-initiatives>.

- The installation of in-line check valves to keep high-tide flood waters from inundating the system and causing flooding;
- The removal of total suspended solids (TSS) and other contaminants typically associated with first-flush surface waters;
- The use of temporary sub-grade vaults (below park features such as the sports field and tennis courts) to control the first flush of a precipitation event, particularly at high tides;
- An active pumping system to convey flood waters from the public roadways to the subgrade retention system; and
- The use of bioswales and rain gardens to further treat and retain rainwater, as well as provide high-quality, low maintenance habitat.

The stormwater management system has been divided into seven new subcatchments, plus the existing drainage subcatchment that serves the northern section of the Riverside neighborhood. The DEIR states that one of the key elements of the stormwater management system is to be able to handle stormwater during the higher ends of the tidal cycle when the outfalls are prevented from discharging. This is because the system is designed with multiple subsurface recharge chamber systems, which will slow the flow through storage and promote infiltration. In instances where one or more of the chambers has reached its maximum capacity, the system is equipped with overflows to the pump chamber. The pumps will be controlled by mechanical floats set at specific heights to meet the design flow and head requirements. Overflows within a single chamber will be dispersed through headers and pipes throughout the system. The overall system is also designed with an overflow in the southwestern portion of the chamber field, which will connect into the new drain manhole being constructed around the existing outfall pipe. The manhole will continue to allow stormwater overflow discharges into the Rumney Marshes ACEC.

As described above, the existing outfall, which is surrounded by lain granite blocks, is not collapsed and does allow for discharge when the tide is out; however, at a reduced capacity due to siltation within the pipe itself. The project proposes to leave the existing outfall in place and construct a new drain manhole along the pipe outfall alignment. The manhole will be constructed around the existing pipe, with new inverts for the new stormwater infrastructure and an inline tide valve along the outfall pipe. This structure will allow for easier DPW maintenance, prevent backflow of river water into the system and avoid construction impacts within the resource area. In addition, the DEIR states that groundwater levels do not appear to be tidally influenced by the adjacent Pines River and generally are between 5.5 to 6.5 ft below surface levels; therefore, all infiltration best management practices (BMPs) have the required minimum 2 ft of separation from seasonal high groundwater. However, in accordance with the Scope, the Proponent performed a groundwater modeling analysis which determined that groundwater mounding below the infiltration chambers appears to be a maximum of 1.8 ft.

According to the updated Stormwater Report, the Proponent evaluated current precipitation depth and peak intensities, utilizing Technical Paper 40 (TP-40) precipitation data (2yr – 3.2”; 10yr – 4.6”; 25yr – 5.5”; and 100yr – 6.6”) for a 24-hour storm event in designing the stormwater management system. The Proponent also evaluated future (2065) precipitation depth and peak intensities, utilizing the 2015 “*Assessment of Climate Change Impacts on Stormwater BMPs and Recommended BMP Design Considerations in Coastal Communities*” precipitation data (2yr – 3.5”; 10yr – 6.0”; 25yr – 7.55”; and 100yr – 10.4”) for a 24-hour storm event. The stormwater management system has been designed to convey and provide groundwater recharge for stormwater runoff up to the current 10-year storm event

(4.6”) for both the project site and parts of the adjacent neighborhood. The Stormwater Report also indicates that the stormwater management system will provide a reduction in peak rates of runoff for all storms analyzed, including up to the future (2065) 100-yr, 24-hour storm event (10.4”). This is due to the substantial increase in underground stormwater storage proposed by the project, though infiltration (and groundwater recharge) capacity is likely limited due to soil quality. Additionally, as noted above, the site is located within the Rumney Marshes ACEC, which would be considered a critical area under the Massachusetts Stormwater Management Standards (SMS) and require the use of the specific source control and pollution prevention measures.

The DEIR states that project proposes the use of multiple low impact development practices to manage and treat stormwater at the source, including bioswales, raingardens, and deep-sump catch basins, with the subsurface chamber systems proposed as the last line in the treatment train. Based on TSS calculations performed, the project anticipates a greater than 80% TSS removal rate for all treatment trains. Furthermore, all runoff is routed to a series of subsurface infiltration chambers and the only discharge to the ACEC will overflow from the larger storm events. In addition, as this project will disturb more than one acre of land, the project will require coverage under the EPA NDPES Construction General Permit, with the preparation of a Stormwater Pollution Prevention Plan (SWPPP). The DEIR also includes a breakdown of the construction sequencing with a primary focus on maintaining the integrity of the water quality during construction and to prevent illicit discharges from entering wetland resource areas surrounding the project site.

Comments provided by MassDEP state that as currently designed, the project includes significant stormwater infrastructure to address stormwater flooding needs on the park site, as well as for portions of the adjacent neighborhood that will discharge into the ACEC which is considered an Outstanding Resource Water (ORW) under the SMS. Comments further note discussion of SMS Standard 6 in the Stormwater Report, which indicates that “the project proposes a treatment train of structural practices to reduce runoff impact to wetland resource areas. Furthermore, all runoff is routed to a series of subsurface infiltration chambers and the only discharge to the critical areas will be overflow from the larger storm events.” However, comments note that sufficient information is not provided in the DEIR in order to determine the accuracy of these conclusions. Additional information should be provided in accordance with the Scope.

Comments provided by the Massachusetts Division of Marine Fisheries (DMF) state that based on the information provided in the DEIR, DMF does not anticipate that the proposed stormwater management will negatively impact shellfish resources adjacent to the project site. Further, comments support the proposed use of bioswales and raingardens to improve stormwater management at the site.

Wetlands and Fisheries

In response to the Scope, the Proponent filed an Abbreviated Notice of Resource Area Delineation (ANRAD) with the Revere Conservation Commission in August 2023 to confirm the presence and extent of wetland resource areas on the project site. The Proponent received an Order of Resource Area Delineation (ORAD) (DEP File No. 061-0808) on October 9, 2023 (which was not appealed). According to the DEIR, the project will result in the permanent alteration of 36,385 sf Coastal Dune, 6 sf of Coastal Beach, and 17,800 sf of RA. The project will also result in the temporary alteration of 308,655 sf Coastal Dune, 6 sf of Coastal Beach, 213,095 sf of RA, and 356,000 sf of

LSCSF. The Revere Conservation Commission (or MassDEP in the case of an appeal) will review the project for its consistency with the WPA, the Wetland Regulations (310 CMR 10.00) and associated performance standards, the SMS, and local bylaws.

Flood Protection at Boatworks Property

As stated above, the project no longer proposes to rebuild an existing revetment on the Boatworks Property, and instead, proposes a new steel sheet pile wall adjacent to the existing structure approximately 36 ft landward (to the east). Existing stone that currently comprises the revetment wall will be repurposed to be placed along the bottom face of the sheeting to create a small slope to break up any wave energy and minimize erosion along the toe of the sheeting. In addition, plans provided with the DEIR show that the project will bring in up to five feet of fill in order to create an earthen berm landward of the new sheet pile wall.

Comments provided by MassDEP state that, as determined in the ORAD, the entirety of the site is Barrier Beach and therefore either Coastal Beach or Coastal Dune by definition (310 CMR 10.29(2)), but significant portions of the shoreline, including the proposed berm location along Mills Avenue, are not identified as Coastal Dune in the DEIR. Comments provided by CZM state that while the DEIR describes most of the impacts to coastal resource areas on the site as temporary, in many cases the changes proposed are permanent. For instance, the DEIR asserts that the new sheet pile wall proposed for the full extent of the Boatworks Property shoreline will have no temporary or permanent impacts on coastal resource areas. However, comments note that the wall is proposed to be located directly within the Coastal Dune (which would be a challenge to permit) and the DEIR narrative states that the existing stone that currently comprises the revetment wall will be repurposed to be placed along the bottom face of the sheeting to create a small slope to break up any wave energy and minimize erosion along the toe of the sheeting. The SDEIR should clarify how temporary and permanent impacts are defined and how the location of a new steel sheet pile wall directly in Coastal Dune would meet performance standards. The SDEIR should also include revised resource area impact plans specific to coastal wetland resource areas.

The DEIR indicates that the proposed sheet pile wall is intended to replace the previously existing structure that was licensed to provide access to the Pines River. Comments provided by CZM and MassDEP state that from the information provided, it does not appear that the wall is a necessary component for the new coastal access structure, but is instead intended as a new flood wall structure. Comments state that the wall is likely to cause scour on adjacent areas and make it harder to stabilize them. In addition, the proposed boat storage building on the Boatworks Property is located on a Coastal Dune in the Coastal A Zone. Comments state that the building should be elevated on open pilings at least two feet above the existing grade and two feet above the FEMA base flood elevation, with the area under the building open/free of obstruction to allow the Coastal Dune to provide the beneficial functions of storm damage prevention and flood control.

Mill Street Berm

As noted above, the design of the berm has been revised and is now proposed to consist of a low permeable berm core with a cobble base extending up to elevation 9 ft NAVD88. From elevation 9 ft NAVD88 to elevation 10.3 ft NAVD88 and on the landward side of the berm, the surface will consist of

sediment planted with vegetation to reinforce the structure of the berm and provide stability. At three locations (near Gilbert Avenue, Frank Avenue, and 53 Mills Avenue) the vegetated berm will be replaced with a maintenance access point consisting of recuperated granite blocks, at the same elevation, in order to provide stable access for DPW staff to traverse the berm without causing damage. In addition, the updated design has reduced the number of locations with concrete wingwalls and deployable flashboards from twelve to one, at the intersection of Mills Avenue and Thayer Avenue.

The DEIR states that there are no geomorphic expressions of Coastal Dune deposits along Mills Avenue and the entire length of the berm area along the existing guard rail is dominated by roadway paving. However, comments provided by CZM, with concurrence by MassDEP, state that recent observations of the project site indicate that there are vegetated Coastal Dunes along a majority of the roadway, along, beneath, and seaward of the existing guard rail. The DEIR also states that the proposed berm will not affect any Coastal Beach or Salt Marsh, but the cross-sections provided are not shown relative to the actual existing Coastal Beach, Coastal Dune, and Salt Marshes. Per the WPA Regulations at 310 CMR 10.32(3), a project “shall not destroy any portion of the salt marsh and shall not have an adverse effect on the productivity of the salt marsh.” Further, filling of Salt Marsh in an ACEC or ORW is not allowed under the WPA Regulations pursuant to 310 CMR 10.24(5)(a). Cross-sections relative to the actual existing conditions and resource areas are needed to demonstrate that there will not be any direct or indirect impacts on these resource areas resulting from the berm and to demonstrate compliance with the applicable regulatory standards. In addition, comments state that the impervious core material is likely to exacerbate erosion of the overlying sediment and vegetation and reflect storm wave energy toward the beach, rather than dissipating it as a more natural dune/berm configuration would function. In locations where there is a Salt Marsh near the dune, the proposed impervious core and cobble slope may also exacerbate or create wave reflection impacts on the nearby salt marsh. The SDEIR should provide additional information in order to fully evaluate potential impacts to the wetland resource areas and reevaluate the level of resiliency provided by the proposed berm design in accordance with the Scope. The SDEIR should continue to study alternatives for the berm design, which could include moving the structure further inland (with associated reduction in the adjacent roadway width) and raising the berm elevation to improve overall resiliency and flood protection function.

Site Grading

According to the DEIR, proposed improvements within Gibson Park specifically include grading up to elevation 10.3 ft NAVD88, which will raise the elevation of the land several feet compared to existing conditions. As noted above, most of the project site is located within a coastal AE Zone (elevation 10 NAVD88) as mapped by FEMA. Comments provided by CZM and MassDEP state that Coastal A Zones are predicted to have 1.5-to-3-foot breaking waves in a 1% chance coastal storm; therefore, the site is likely to be exposed to moving coastal flood water and waves during a coastal storm event. Comments further state that since significant fill and grade changes are proposed to the site as part of the project, additional information is needed to understand possible changes to coastal flooding patterns on the site and the adjacent neighborhood. In addition, the proposed fill sediment should be shown to be compatible with the Coastal Beach and Coastal Dune system. The SDEIR should provide a flow path analysis to address Agency comments related to potential off-site impacts on surrounding properties resulting from site grading changes.

Waterways / Public Benefit Determination (PBD)

According to the DEIR, the Proponent conducted a review of the existing and past c.91 authorizations for the project site. Based on this review, the DEIR identified the following c.91 Licenses:

- Department of Public Works License # 163 – Dated 9/23/1921
- Waterways License # 2053 – Dated 10/11/1989

As noted above, the project will require a new c.91 License for work proposed below the mean high-water line and within historically filled tidelands. According to the DEIR, the work proposed within private tidelands is associated with construction of the elevated walkway and public access structure that will support the gangway down to the floats. Work proposed within Commonwealth tidelands is limited to the anchors for the floats. In accordance with the Scope, the DEIR identifies the applicable licensing requirements and regulatory standards, and describe how the Proponent intends to meet said licensing requirements and regulatory standards. In particular, the DEIR states that all of the work being proposed is located above mean high water, in areas of previously filled tidelands, or within the footprint of an area that has been previously licensed. In addition, dredging activities have been eliminated from the project.

Comments proposed by the MassDEP Waterways Regulation Program (WRP) affirm that based on the information provided, work is proposed seaward of the Historic High-Water Line and Mean High Water Line, meaning that work is within c.91 jurisdiction and requires licensing. Comments also state that MassDEP WRP did not identify any substantive concerns regarding the proposed project; however, the project is required to comply with the standards at 310 CMR 9.32(1)(e) and 310 CMR 9.40, in addition to all other applicable standards at 310 CMR 9.00 in order for the project to be eligible for licensing.

Consistent with the provisions of *An Act Relative to Licensing Requirements for Certain Tidelands* (2007 Mass. Acts, c. 168, § 8) (the Act), as codified in M.G.L. c. 91, § 18B, I must conduct a Public Benefit Review for projects in tidelands that are required to file an EIR. The procedures for seeking a Public Benefit Determination (PBD) are set forth in 301 CMR 13.00. The Act states the following:

“In making said public benefit determination, the secretary shall consider the purpose and effect of the development; the impact on abutters and the surrounding community; enhancement to the property; benefits to the public trust rights in tidelands or other associated rights, including, but not limited to, benefits provided through previously obtained municipal permits; community activities on the development site; environmental protection and preservation; public health and safety; and the general welfare; provided further, that the secretary shall also consider the differences between tidelands, landlocked tidelands and great pond lands when assessing the public benefit and shall consider the practical impact of the public benefit on the development.”

The DEIR states that the project provides a public benefit by expanding active and passive recreational opportunities; providing safe, controlled access to the water sheet through the construction of an elevated deck/pier and gangway structure; remediating and redeveloping the Boatworks Property to

provide a community boating facility; and incorporating stormwater management measures to promote improved water quality and recharge. Under the PBD regulations (310 CMR 13.00), water-dependent use projects are presumed to have a public benefit. However, the DEIR does not directly address each of the considerations identified in the legislation. The SDEIR should include an updated discussion of public benefits, addressing the PBD criteria.

Area of Critical Environmental Concern (ACEC)

As noted above, the entire project site is located within the Rumney Marshes ACEC. The Rumney Marshes ACEC was designated due to the significance of its coastal wetland resource areas for the protection of public and private water supplies; the prevention of pollution; flood control; the prevention of storm damage; and the protection of land containing shellfish and fisheries.⁶ However, the designation does contain an exclusion along the Pines River stating, “The Pines River is predominantly a recreational boating area and taken within the context of the Saugus/Pines system, it is the more appropriate location to allow the development of new or expanded recreational boating facilities.” According to the DEIR, while the project no longer includes shoreline grading and expansion of salt marsh areas, it does provide direct benefits of improved water quality through the implementation of stormwater management measures and from the reduction of impervious area within the ACEC. The Boatworks Property is also being redeveloped as a public waterfront access facility, providing a safer controlled access point to the Pines River for recreational kayakers and canoers, and will provide public accommodations to the community. In addition, the DEIR states that while the project does include the placement of fill within the ACEC relative to developed portions of Gibson Park, the Boatworks property, and the portions of the cobble berm along Mills Avenue, the fill specifications have been chosen to match both the soil and cobble gradations that exist within the barrier beach landform currently.

In 2002, a Final Salt Marsh Restoration Plan (SMRP) was issued to assist in the identification and prioritization of Salt Marsh restoration sites within the Rumney Marshes ACEC for both proactive and compensatory mitigation. The SMRP notes that the ACEC suffers from a host of problems which diminishes values and impairs vital ecological functions, including loss of habitats; increase in invasive plant species and loss of native salt marsh plants; impaired water quality; flooding; increase in mosquitoes; increased risk of fire; and loss of recreational and educational opportunities, open space, and scenic quality. According to the DEIR, the project responds positively and proactively to most of these threats and does not negatively affect any of them. In particular, the DEIR states that the proposed project:

- Addresses impaired water quality, by providing water quality treatment for all impervious runoff and promoting recharge to groundwater via a series of stormwater treatment best management practices (BMPs) including bioswales, raingardens, and infiltration chambers;
- Addresses flooding by reducing impervious coverage, providing stormwater storage for the higher ends of the tidal cycles, and implementing resiliency infrastructure along the shoreline to mitigate the effects of flooding; and
- Addressing the loss of recreational and educational opportunities, open space, and scenic quality by redeveloping the park with several recreational (multiple sports) and educational

⁶ The Designation Report is available at: <https://www.mass.gov/service-details/rumney-marshes-acc>.

opportunities such as interpretive signs, and an elevated boardwalk through the marsh and looking out across the Pines River.

Water and Wastewater

As noted above, the project will generate approximately 1,140 gpd in new water demand and wastewater flow. As noted in comments provided by the Massachusetts Water Resources Authority (MWRA) the DEIR acknowledges the requirements to offset the project's wastewater flows with infiltration and inflow ("I/I") removal and committing that there will be no connection of the proposed stormwater management system with the separate sewer system located on-site. In addition, the DEIR acknowledges that the Proponent will coordinate closely with the MWRA to ensure the success of both this project and MWRA's Section 56 Water Pipeline Replacement Project. The Proponent should formalize these commitments as part of the project's mitigation in the SDEIR.

Climate Change

Adaptation and Resiliency

In accordance with the Scope, the DEIR included a revised output report from the Climate Resilience Design Standards Tool prepared by the Resilient Massachusetts Action Team (RMAT) (the "MA Resilience Design Tool") which included the Boatworks Property building, Gibson Park, the Mills Avenue berm, the Boatworks Property shoreline access, and the Gibson Park stormwater management system as separate assets. According to the revised output report, the project has a "High" exposure rating based on the project's location for the following climate parameters: sea level rise/storm surge, extreme precipitation (urban flooding) and extreme heat. The project also has a "Moderate" exposure rating for the extreme precipitation (riverine flooding) parameter. Additionally, the project location scores "High" in ecosystem benefits. As detailed below, each of the assets were assigned different useful lives and levels of criticality based on user inputs. Specific recommendations from the MA Resilience Design Tool for the Boatworks Property building, Mills Avenue berm, and stormwater management system are highlighted below:

- Based on the 50-year useful life and the self-assessed criticality identified for the Boatworks Property building, the MA Resilience Design Tool recommends a planning horizon of 2070, a return period associated with a 50-year (2% annual chance) storm event for sea level rise/storm surge, and a return period associated with a 10-year (10% annual chance) design storm as of 2070 for extreme precipitation.
- Based on the 30-year useful life and the self-assessed criticality identified for the Mills Avenue berm, the MA Resilience Design Tool recommends a planning horizon of 2050, a return period associated with a 50-year (2% annual chance) storm event for sea level rise/storm surge, and a return period associated with a 25-year (4% annual chance) design storm as of 2050 for extreme precipitation.
- Based on the 50-year useful life and the self-assessed criticality identified for the stormwater management system, the MA Resilience Design Tool recommends a planning horizon of 2070, a return period associated with a 100-year (1% annual chance) storm event for sea level rise/storm surge, and a return period associated with a 50-year (2% annual chance) design storm as of 2070 for extreme precipitation.

The above recommendations appear to be based on a “Low” criticality assessment for the berm and Boatworks Property building and a “High” criticality assessment for the stormwater system. While the community boating facility is a recreational resource with less critical usage, it would appear that the berm should be assessed at a higher criticality due to its flood protection function. For “Moderate” to “High” critical assets, the MA Resilience Design Tool recommends a 100-year to 200-year design storm for sea level rise/storm surge over the selected planning horizon (2050 or 2070) and a 25-year to 50-year design storm for extreme precipitation.⁷

The MA Resilience Design Tool output indicates that the project site has a history of coastal flooding, is exposed to the 1% annual coastal flood event as early as 2030, and is located within the predicted mean high-water shoreline by 2030. These factors are indicated in the Tool as contributing to the “High” exposure for the sea level rise/storm surge climate parameter. According to the DEIR, the project design is based on a 10-year storm event as of 2030 with a water surface elevation of 10.3 ft NAVD88. Based on the selected design storm and projected flood elevation, the Mills Avenue berm has been designed with a continuous crest elevation of 10.3 ft NAVD88 and the Boatworks Property building has been designed with a first-floor elevation of 14.2 ft NAVD88, more than six feet above the existing grade on helical piles. Although the Boatworks Property building would be resilient to the projected wave action water elevation⁸ for the 50-year storm in 2050 provided by the Tool (12.5 ft NAVD88 area weighted average), it would not meet this value for 2070 (14.5 ft NAVD88 area weighted average). In addition, the Mills Avenue berm would not be resilient under any of the future projected climate conditions based on the recommendations from the output report, and certainly would not meet design standards for more intense design storms (100-year or 200-year storm). The DEIR states that the while the berm would ideally be designed to a higher elevation, to do so would require significant coordination with state and local agencies as that level of flood protection would encompass a significantly larger area.

The MA Resilience Design Tool output indicates that the project site has a history of flooding, and the maximum annual daily rainfall exceeds 10” within the overall project's useful life. These factors are indicated in the Tool as contributing to the “High” exposure for the extreme precipitation (urban flooding) climate parameter. According to the MA Resilience Design Tool output, the projected 24-hour precipitation depth associated with a 2070 50-year storm event is 9.6 inches. Therefore, it appears that the stormwater management system, which is designed to convey and provide groundwater recharge for stormwater runoff up to the current 10-year storm event (4.6”) would not be resilient to the future (2070) 50-year storm event as recommended by the Tool. However, the DEIR states that post-development peak discharge rates are less than pre-development rates for all storm events analyzed, including up to the future (2065) 100-year storm event (10.4”). The SDEIR should confirm that accuracy of the peak rate attenuation calculations and discuss whether the stormwater system could be upgraded to meet future climate conditions, and if not, describe the constraints that make such upgrades infeasible and whether the project will be designed to allow for future upgrades over time.

⁷ See https://eea-nescaum-dataservices-assets-prd.s3.amazonaws.com/cms/GUIDELINES/V1.2_SECTION_4.pdf, at page 12 (SLR) and page 23 (precipitation).

⁸ Wave action water elevation represents the flood elevation consisting of the projected water surface elevation in conjunction with wave heights. See https://eea-nescaum-dataservices-assets-prd.s3.amazonaws.com/cms/GUIDELINES/V1.2_SECTION_4.pdf.

Construction Period

According to the DEIR, construction activity may have temporary adverse effects on ambient air quality, but will be mitigated to the extent feasible through the implementation of BMPs, including fugitive dust control, the use of ultra-low sulfur diesel equipment, and restricting idling to less than five minutes. There are also likely to be temporary noise impacts resulting from the construction activities which will similarly be mitigated through the use of exhaust mufflers and restricting the hours of construction. In addition, some hazardous materials, lead paint and asbestos containing materials, have been identified within the building at the Boatworks Property which will be abated in accordance with the applicable state regulations (105 CMR 460 and 310 CMR 7.15), prior to another demolition or work being conducted.

According to the DEIR, the project consists of both independent and interdependent components that will impact the phasing of the project; however, all work is anticipated to be completed over approximately 18 months. Remediation of the Boatworks soils will likely be the first activity to occur as once the contaminated soils have been excavated, characterized, and removed, the site can be used for project staging. Following soil remediation, renovation and construction activities of the Boatworks Property building will commence, likely including hazardous materials abatement, prior to the demolition of the northern portion of the existing building and raising portions of the remaining structure. Subsequently, work on the elevated walkway and shoreline infrastructure at the Boatworks Property will commence. Independent of installing the shoreline infrastructure, the Gibson Park improvements will commence with the excavation of the field and construction of the subsurface stormwater management system. Excavation spoils from the multi-purpose field will be stockpiled at the Boatworks Property until needed for final grading.⁹ Once final grades have been achieved, the remainder of the park development activities (relocated tennis courts, stormwater infrastructure, community gardens, lighting, parking, etc.) can be implemented in the desired locations. Berm construction itself can be implemented as a semi-independent activity.

Comments provided by CZM state that while the DEIR discusses the different components of the project that may occur in different phases, it does not include details of how the planned components of the project are coordinated or can be completed independently of the others without impacts. For example, excavation of the field at Gibson Park and construction of the stormwater subsurface storage should occur during the same phase of development so that no excavated area is left open for any extended length of time. The SDEIR should clarify how the project will coordinate each component to avoid impacts from phasing.

Comments provided by DMF state that work in intertidal habitat, including staging of construction material and equipment as well as equipment transit to and from the construction site, should be avoided to the greatest extent practicable. Comments also state that as much work as possible should be conducted from the upland portion of the project site to minimize impacts and avoid compaction of sediment in mapped shellfish habitat. In addition, any work in the intertidal zone should be limited to low tide such that work is conducted in the “dry.”

⁹ According to the DEIR, the excavated material is no longer anticipated to be used for the construction of the Mills Avenue berm.

SCOPE

General

The SDEIR should follow Section 11.07 of the MEPA regulations for outline and content, and include the information and analyses identified in this Scope. It should clearly demonstrate that the Proponent has sought to avoid, minimize and mitigate Damage to the Environment to the maximum extent feasible.

The SDEIR should address, in a detailed and comprehensive manner, issues raised in comment letters submitted by MassDEP and CZM, which are incorporated by reference herein. In general, information and analyses provided in response to these comment letters should be incorporated into the main body of the SDEIR rather than provided solely in the Response to Comments section. The SDEIR should provide a response to the Certificate on the DEIR, and each comment received on the DEIR pursuant to 301 CMR 11.07(6)(l) of the MEPA Regulations.

Project Description and Permitting

The SDEIR should include a complete project description of the preferred alternative for each of the proposed elements of the project, with accompanying plans depicting the preferred alternative at a reasonable scale. The SDEIR should describe any changes to the project since the filing of the DEIR. The SDEIR should identify, describe, and assess the environmental impacts of any changes to the project that have occurred between the preparation of the EENF and DEIR. The SDEIR should also include an updated list of required Permits, Financial Assistance, and other state, local and federal approvals and provide an update on the status of each of these pending actions. The SDEIR should include a description and analysis of applicable statutory and regulatory standards and requirements, and a discussion of the project's consistency with those standards.

The SDEIR should include detailed site plans for existing and post-development conditions at a legible scale. Plans should clearly identify buildings, impervious areas, wetland resource areas, coastal engineering structures, and stormwater and utility infrastructure. Plans should include tidal datums relative to the location of each of the proposed project components, and the narrative should describe the total permanent and temporary impacts on resource areas resulting from the proposed project.

The information and analyses identified in this Scope should be addressed within the main body of the SDEIR and not in appendices. In general, appendices should be used only to provide raw data, such as wetland delineations, drainage calculations, TSS removal rates, that is otherwise adequately summarized with text, tables and figures within the main body of the SDEIR. Information provided in appendices should be indexed with page numbers and separated by tabs, or, if provided in electronic format, include links to individual sections. Any references in the SDEIR to materials provided in an appendix should include specific page numbers to facilitate review.

It is my expectation that the Proponent coordinate with Agencies, including CZM and MassDEP to consult on the required analyses and to consider appropriate project alternatives prior to submitting

the SDEIR. The SDEIR should provide an update on any such coordination and identify any changes made to the project design in response to this consultation.

Alternatives Analysis

The SDEIR should provide a supplemental alternatives analysis that describes alternatives for how the project can provide resiliency to Gibson Park and the adjacent shoreline. In particular, the SDEIR should consider alternatives that minimize new impervious surfaces (such as the expanded parking area), maximize the beneficial characteristics of the existing floodplain function, and meet the performance standards for Coastal Dune. In addition, the SDEIR should reevaluate the new sheet pile wall and propose non-structural alternatives that would avoid placing new structure in a Coastal Dune while providing flood control functions. The SDEIR should consider an alternative that would place buildings on pilings as recommended by Agencies. The alternatives analysis should support the selection of the Preferred Alternative for each project component that includes all feasible measures to avoid Damage to the Environment, or to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable.

The SDEIR should investigate additional alternatives for the vegetated berm along Mills Avenue that will minimize impacts to surrounding resource areas including potential impacts to Salt Marsh, including reducing the road width to the maximum degree practicable to enable a shift of the shoreline treatment further landward and create a more natural berm that can blend into the existing shoreline. The SDEIR should also evaluate the potential of the low permeable core to exacerbate erosion of the overlying sediment and vegetation and reflect storm wave energy toward the beach, rather than dissipating it. The Proponent should coordinate with CZM and MassDEP to develop the revised alternatives analysis to ensure a sustainable project design that protects and enhances environmental resources.

Environmental Justice (EJ) / Public Health

The SDEIR should include a separate section on “Environmental Justice,” and contain a description of measures the Proponent intends to undertake to promote public involvement by EJ Populations during the remainder of the MEPA review process, including a discussion of any of the best practices listed in the MEPA EJ Public Involvement Protocol that the project intends to employ or has employed by the time of the SDEIR filing. The SDEIR, or a summary thereof with translations or offers of translation, should be distributed to the EJ Reference List, and an updated list should be obtained from the MEPA Office prior to filing the SDEIR so as to ensure that organizational contacts are up to date.

The SDEIR should supplement the EJ analysis presented in the DEIR. Specifically, it should include a qualitative and quantitative description of the potential sources of pollution within the DGA, based on mapping layers available through the DPH EJ Tool. Specifically, the SDEIR should provide a tabular description of the estimated number and type of mapped facilities/infrastructure within the boundaries of the EJ Populations located in the DGA. For example, it should quantify the number of MassDEP major air and waste facilities and provide a description of each facility.

As discussed above, the SDEIR should evaluate alternative resiliency design features to avoid potential scour, erosion, or loss of the adjacent, off-site coastal resources. The SDEIR should also evaluate the potential for off-site flooding impacts, including the redirection or channelization of floodwaters, resulting from the placement of fill and grade changes on the project site. The SDEIR should propose appropriate mitigation for any off-site impacts resulting from the project, and should address comments regarding the effectiveness of the Mill Street berm in providing flood protection for the surrounding communities. The Proponent should consult with CZM in preparing the flow path analysis.

Land Alteration, Impervious Surfaces, and Stormwater

The SDEIR should include cross-sectional plans showing all the proposed outfall locations and details of each in cross-section relative to the resource areas and design plans of a reasonable scale to indicate how far the proposed underground structure below the playing field is from the Coastal Beach/Coastal Dune interface along the shoreline. The SDEIR should demonstrate that outfalls are removed from or set back from the ACEC receiving water resource and that the highest and best method of treatment is proposed.

Wetlands and Fisheries

The SDEIR should clarify how temporary and permanent impacts are defined and how each applies to the impacts proposed on the site. The shoreline on this site is comprised of Coastal Dune, Coastal Beach, and Salt Marsh. These resource areas should be accurately depicted in the SDEIR on plans of a reasonable scale, to depict the extent of each and the impacts of proposed activities within each resource area. The scale of the plan used for the DEIR is not adequate to see the resource areas relative to the proposed activities. The DEIR also includes an area identified as “below spring tide line,” which is not a defined resource area under the WPA. The SDEIR should identify what portions of the “below spring tide line” area are Coastal Dunes, Coastal Beaches, or Salt Marsh, and adjust the areas of impact for these accordingly. The SDEIR should include all areas landward of the coastal beach in the impact calculations for Coastal Dune, and describe how each of the proposed components of the project meets the performance standards for Coastal Dunes.

The SDEIR should clarify the discrepancy in the DEIR that there will be no temporary or permanent impacts on coastal resource areas resulting from the construction of a new sheet pile wall at the Boatworks Property, although significant work is proposed. The SDEIR should identify the extent of the impacts on Coastal Dunes and Coastal Beaches resulting from the work, and describe how these activities meet performance standards for the resource areas impacted. The SDEIR should also provide additional detail about the earthen berm proposed landward of the new sheet pile wall, including the materials to be used for this feature. The SDEIR should include the source and composition of the fill material for all areas. Cross-sections of this area in the SDEIR should include the proposed bulkhead replacement with specific attention to the proposed permanent and temporary impacts to existing resource areas including Coastal Beach, Coastal Dune, Salt Marsh, and LSCSF. The cross-sections should be shown relative to the locations of these resource areas so that potential impacts can be depicted. The SDEIR should clarify the primary goal of this project component, describe how it meets the performance standards for Coastal Dune on a Barrier Beach, and provide non-structural alternatives for flood protection. The SDEIR should describe how the proposed design of the Boatworks Property

building meets the Massachusetts Building Code (the Code) standards for construction in a Coastal A Zone in a Coastal Dune.

To understand possible changes to coastal flooding patterns on the site and the adjacent neighborhood as a result of the proposed project, the SDEIR should include a flow path analysis that details the existing and proposed grades, with representative cross-sections through the project site that also show existing and proposed grades. The SDEIR should also include a flow path analysis to compare the existing and proposed grades to assess impacts on floodplain functions on the site and in the adjacent neighborhood. I refer the Proponent to the *Floodplain Function* section of CZM's comment letter which specifically details the information that should be provided.

The SDEIR should include plans of reasonable scale to provide a better understanding of the intersections of the proposed Mills Avenue berm with the Coastal Beach, Salt Marsh, Mills Avenue, and proposed access areas with cross-sections indicating how it will blend with the street on one side and the Coastal Dune or Coastal Beach on the other. These should be provided along the entire length of Mills Avenue as shoreline conditions vary considerably along its length. In the areas where there is Salt Marsh, cross-sections should be included that show the location of the seaward toe of the berm relative to the location of the existing Salt Marsh. Cross-sections should include scales to demonstrate these considerations as well as the width and height of the proposed berm in each location. As noted above, placement of any structures within Salt Marsh in an ACEC or ORW is prohibited. To the extent cross-sections show this impact, the SDEIR should propose alternative designs. The SDEIR should include further evaluation of the proposed berm design for its ability to exacerbate erosion of the overlying sediment and vegetation and reflect storm wave energy toward the beach. The SDEIR should also include a description of how potential impacts to areas of fronting the Salt Marsh from the proposed berm design will be avoided and consider more natural alternatives with less cobble to meet the performance standards for Salt Marsh and Coastal Dune.

Waterways / Public Benefit Determination (PBD)

The SDEIR should include a discussion of how the project complies with the PBD (301 CMR 13.00) criteria. The SDEIR should also include information regarding the public benefits associated with the project.

Climate Change

The SDEIR should confirm that accuracy of the peak rate attenuation calculations and discuss whether the stormwater system could be upgraded to meet future climate conditions, and if not, describe the constraints that make such upgrades infeasible and whether the project will be designed to allow for future upgrades over time. The SDEIR should evaluate whether the Mills Avenue berm could be further elevated to improve resiliency to future climate conditions, and should consider this as part of the study of additional design alternatives for this project component.

Construction Period

The SDEIR should clarify how the project will coordinate each component to avoid impacts from phasing. The DEIR should also identify the interim conditions of the project site between phases

and describe specific measures to ensure the portions of the site remaining in an unfinalized condition are sufficiently stabilized.

The SDEIR should describe all construction activity proposed within intertidal habitat, including staging of construction material and equipment as well as equipment transit to and from the construction site, and all measures to be taken to conduct work from the upland. All construction-period mitigation measures should be listed in the draft Section 61 Findings.

Mitigation and Draft Section 61 Findings

The SDEIR should include a separate chapter summarizing all proposed mitigation measures including construction-period measures. This chapter should also include a comprehensive list of all commitments made by the Proponent to avoid, minimize and mitigate the environmental and related public health impacts of the project, and should include a separate section outlining mitigation commitments relative to EJ populations. The filing should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation. The list of commitments should be provided in a tabular format organized by subject matter (traffic, water/wastewater, GHG, environmental justice, etc.) and identify the Agency Action or Permit associated with each category of impact. Draft Section 61 Findings should be separately included for each Agency Action to be taken on the project. The filing should clearly indicate which mitigation measures will be constructed or implemented based upon project phasing to ensure that adequate measures are in place to mitigate impacts associated with each development phase.

Responses to Comments

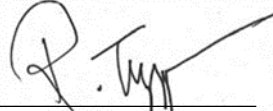
The SDEIR should contain a copy of this Certificate and a copy of each comment letter received. To ensure that the issues raised by commenters are addressed, the SDEIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended, and shall not be construed, to enlarge the scope of the SDEIR beyond what has been expressly identified in this certificate.

Circulation

In accordance with section 11.16(3), the Proponent should circulate the SDEIR to those parties who commented on the DEIR, each Agency from which the project will seek Permits, Land Transfers or Financial Assistance, and to any other Agency or Person identified in the Scope. Per 301 CMR 11.16(5), the Proponent may circulate copies of the SDEIR to commenters in CD-ROM format, by directing commenters to a project website address, or electronically. However, the Proponent must make a reasonable number of hard copies available to accommodate those without convenient access to a computer and distribute these upon request on a first-come, first-served basis. A copy of the SDEIR should be made available for review in the Revere Public Library.

January 16, 2024

Date



Rebecca L. Tepper

Comments received:

- 11/20/2023 Massachusetts Department of Environmental Protection (MassDEP) Waterways Regulation Program (WRP)
- 1/4/2024 Massachusetts Water Resources Authority (MWRA)
- 1/5/2024 Massachusetts Office of Coastal Zone Management (CZM)
- 1/8/2024 Massachusetts Division of Marine Fisheries (DMF)
- 1/8/2024 Massachusetts Department of Environmental Protection (MassDEP)

RLT/NJM/njm



Department of Environmental Protection

100 Cambridge Street 9th Floor Boston, MA 02114 • 617-292-5500

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

Memorandum

To: Nicholas Moreno, Executive Office of Energy and Environmental Affairs

From: Christine Walsh, Waterways Regulation Program, MassDEP

Cc: Daniel J. Padien, Program Chief, Waterways Regulation Program, MassDEP

Re: Comments from the Chapter 91 Waterways Regulation Program
EEA #16711 – Draft Environmental Impact Report
Gibson Park Resiliency Project

Date: November 20, 2023

The Department of Environmental Protection Waterways Regulation Program (the “Department”) has reviewed the above-referenced Draft Environmental Impact Report (DEIR) #16711 submitted by McAllister Marine Engineering, LLC on behalf of the City of Revere (the “Proponent”) for the Gibson Park Resiliency Project at North Shore Road, Hayes Avenue, and Mills Avenue in Revere, within the Rumney Marshes Area of Critical Environmental Concern (ACEC). The Proponent proposes to improve flood protection and expand and improve public recreational areas.

Chapter 91 Jurisdiction

As identified in the DEIR, work is proposed seaward of the Historic High Water Line and Mean High Water Line, which collectively establish the landward boundary of Chapter 91 Jurisdiction. Therefore, a Chapter 91 license is required for the project.

Regulatory Review

The Department did not identify any substantive concerns regarding the proposed project. However, the Proponent is reminded that in order to be eligible for licensing, the project is required to comply with the standards at 310 CMR 9.32(1)(e) and 310 CMR 9.40, in addition to all other applicable standards at 310 CMR 9.00.

If there are any questions regarding the Department’s comments, please contact Christine Walsh at Christine.Walsh@mass.gov.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

January 4, 2024

Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge St, Suite 900
Attn: MEPA Office, Nicholas Moreno
Boston, MA 02114

Subject: EOEPA #16711 – Draft Environmental Impact Report
Gibson Park Resiliency Project, Revere, MA

Dear Secretary Tepper,

The Massachusetts Water Resources Authority (MWRA) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) submitted by McAllister Marine Engineering, LLC (the “Proponent”) for the Gibson Park Resiliency Project (the “Project”) in Revere, Massachusetts. The Project site includes the existing 6.22-acre Gibson Park and the former North Shore Boatworks Property at 29 Thayer Avenue, which was recently acquired by Revere. The Project aims to provide nature-based interventions to the area, which has historically faced tidal and storm flooding events.

MWRA previously commented on the Project Expanded Environmental Notification Form (EENF) on July 19, 2023. MWRA’s comments on this DEIR continue to relate to wastewater issues and the need for Infiltration/Inflow (I/I) Removal, Toxic Reduction and Control (TRAC) discharge permitting, and close coordination between the City of Revere and MWRA regarding MWRA’s Section 56 Water Pipeline Replacement Project.

Wastewater

The DEIR reports that the Project will generate approximately 1,140 gallons per day of new wastewater flow. The site is served by a sanitary sewer system owned and operated by Revere that conveys flows to MWRA’s Revere Extension Sewer, which in turn conveys flows from Revere, Chelsea and other communities to MWRA’s Chelsea Branch Sewer and Chelsea Creek Headworks. During large storms, sanitary flows and infiltration and inflow (I/I) from Revere and other community wastewater collection systems, together with sanitary flows and stormwater from Chelsea’s combined sewer system, can overwhelm the capacity of MWRA’s Chelsea Branch Sewer. This contributes to combined sewer overflow (CSO) discharges to Chelsea Creek. To ensure that the Project’s new wastewater flow does not increase surcharging and overflows in large storms, the Proponent should offset the Project’s wastewater flows with

infiltration and inflow (“I/I”) removal in accordance with Revere’s policies and regulations. The DEIR acknowledges this requirement.

TRAC Discharge Permitting

MWRA prohibits the discharge of groundwater and stormwater into the sanitary sewer system, pursuant to 360 C.M.R. 10.023(1) except in a combined sewer area when permitted by the Authority and the local community. The Project site has access to separate sewer and storm drain systems. Therefore, the discharge of groundwater or stormwater to the sanitary sewer system associated with this Project is prohibited. The DEIR acknowledges this requirement and notes that the proposed stormwater management system will have no connection with the separate sewer system.

MWRA is in the design and permitting phase of its Section 56 Water Pipeline Replacement Project, which involves installation of new water pipeline under the mouth water of the Saugus River, from the Point of Pines neighborhood in Revere to Lynn. The purpose of this Project is to ensure water system redundancy and resiliency by replacing a portion of MWRA’s existing Section 56 water pipeline, generally located in Route 1A/The Lynnway, which was removed from the General Edwards Bridge. MWRA suggests close coordination with Revere to ensure the success of both this Gibson Park Resiliency Project and MWRA’s Section 56 Water Pipeline Replacement Project. The DEIR acknowledges this statement and notes that the appropriate City entity will closely coordinate with MWRA.

On behalf of the MWRA, thank you for the opportunity to provide comments on this Project. Please do not hesitate to contact Hillary Monahan of my staff at (617) 788-4314 with any questions or concerns.

Sincerely,



Colleen Rizzi
Director
Environmental and Regulatory Affairs

cc: John Viola, MassDEP



MEMORANDUM

TO: Rebecca L. Tepper, Secretary, EEA
ATTN: Nicholas Moreno, MEPA Office
FROM: Lisa Berry Engler, Director, CZM
DATE: January 5, 2024
RE: EEA-16711; Gibson Park Resiliency Project; Revere

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced Draft Environmental Impact Report (DEIR), noticed in the Environmental Monitor dated November 8, 2023, and the revised DEIR submitted on December 4, and recommends that the following information needs and issues are addressed in a supplemental EIR (SEIR) before a Final Environmental Impact Report is filed for the project.

Project Description

The proposed project includes redesigning and developing coastal resiliency improvements to a public park, redevelopment of an existing boatyard, and adaptation of approximately 2,400 feet of coastal dune along the western alignment of Mills Avenue for flood risk reduction adjacent to the Pines River in Revere. Proposed project components include the creation of several offline subsurface stormwater storage/infiltration chambers underneath a proposed new athletic field and redeveloped boatyard, installation of a dual stormwater pump system to move stormwater upgradient from the adjacent neighborhood to the proposed stormwater storage under the field, creation of rain gardens and bioswales, expanded parking, park improvements including a new multi-purpose field, pickleball courts, relocated and new tennis courts, and additional walking paths. Expansion of park facilities including the former North Shore Boatworks property includes removal of a dilapidated revetment and seawall and installation of a new sheet pile wall further landward, a new gangway and float system, upgraded drainage infrastructure on Mills and Thayer Avenues, a new standby generator, upgraded lighting, and a proposed 1,200-foot-long storm surge protection berm along the Mills Avenue shoreline. The project proposes to add fill to raise the site to approximately 10 feet (NAVD88) to accommodate a 2030 10-year flood elevation. Most of the site is within the Limit of Moderate Wave Action (LiMWA) associated with a FEMA coastal AE Zone (elevation 10 NAVD88). According to the DEIR, the Gibson Park Redevelopment component of the project will have temporary impacts to 177,975 square feet (sf) of Coastal Dune, 216,340 sf of Land Subject to Coastal Storm Flowage (LSCSF), and 220,335 sf of Riverfront Area. The boat works redevelopment portion of the project will have temporary impacts on 57,100 sf of Coastal Dune, 62,160 sf of LSCSF, 45,225 sf of Riverfront Area, 25,200 sf of buffer zone, 11,525 sf of area “below spring tide line,” and 10,242 sf of impact within Chapter 91 jurisdiction. Permanent impacts for this component of the project include 6 sf of coastal beach and 4,850 sf below the spring tide line. The DEIR indicates that temporary impacts from the Mills Avenue vegetated berm component of the project include 73,580 sf of Coastal Dune, 77,500 sf of LSCSF, 75,920 sf of Riverfront Area, 1,088 sf of area below spring high tide, and 15,240 sf of impact within Chapter 91 jurisdiction. Permanent impacts for this component include 36,385 sf of coastal dune, 17,800 sf of Riverfront Area, 1,088 sf of area below spring high tide, and 15,240 sf of impact within Chapter 91 jurisdiction. The entire site is within the Rumney Marshes Area of Critical Environmental Concern (ACEC).



Project Comments

Resource Areas and Impacts

The DEIR describes most of the impacts to coastal resource areas on the site as temporary, though in many cases the changes proposed are permanent. The SEIR should clarify how temporary and permanent impacts are defined and how each applies to the impacts proposed on the site. The shoreline on this site is comprised of coastal dune, coastal beach, and salt marsh. These should be accurately depicted in the SEIR on plans of a reasonable scale, to depict the extent of each and the impacts of proposed activities. The scale of the plan used for the DEIR is not adequate to see the resource areas relative to the proposed activities. The DEIR includes an area identified as “below spring tide line,” which is not a defined resource area under the Wetlands Protection Act. The SEIR should identify what portions of this area are coastal dunes, coastal beaches, or salt marsh, and adjust the areas of impact for these accordingly.

The DEIR includes resource area impact plans specific to certain coastal resource areas. Sheet 5 of 8, titled *Proposed Conditions Resource Impacts Coastal Dune* identifies only a portion of the coastal dune on the site, which was determined in the Order of Resource Area Delineation to include all areas landward of the coastal beach on the site because the site is on a barrier beach. Extensive areas of the shoreline, including the proposed berm location along Mills Avenue, are not identified as coastal dunes on this plan. The SEIR should include these areas in the impact calculations, and describe how each of the proposed components meets the performance standards for coastal dunes.

The DEIR indicates that the new sheet pile wall proposed for the full extent of the Boatworks shoreline will have no temporary or permanent impacts on coastal resource areas. The wall is proposed within the coastal dune and the DEIR narrative states that the existing stone that currently comprises the revetment wall will be repurposed to be placed along the bottom face of the sheeting to create a small slope to break up any wave energy and minimize erosion along the toe of the sheeting. The plans for this area show fill to create a berm on the seaward side of the sheet pile wall and significant fill on the landward side. The SEIR should clarify this design discrepancy, identify the extent of these impacts on coastal dunes and coastal beaches, and describe how these activities meet performance standards for each.

Floodplain Function

Most of the project site is on the river side of the LiMWA associated with a FEMA coastal AE Zone (elevation 10 NAVD88) as mapped by FEMA on the Flood Insurance Rate Maps. Coastal A Zones are predicted to have 1.5-to-3-foot breaking waves in a 1% chance coastal storm, so the site is likely to be exposed to moving coastal flood water and waves in a coastal storm event. A primary goal of the project is to improve the resiliency of the public park site and the adjacent neighborhood. Significant fill and grade changes are proposed to the site as part of the project. To understand possible changes to coastal flooding patterns on the site and the adjacent neighborhood as a result of the proposed project changes, the SEIR should include a separate grading plan showing the existing and proposed grades, with representative cross-sections through the project site that also show existing and proposed grades. The SEIR should also include an analysis to compare the existing and proposed floodplain functions on the site and in the adjacent neighborhood to ensure that the project does not exacerbate flooding impacts and preserves or improves floodplain function for the design life of the project. The information provided should include:

- Plans depicting how coastal floodwaters will flow onto and off the site and adjacent neighborhood referenced to current topography and the proposed grading plan. No additional

survey is required for this as LIDAR is available to provide the topography needed for adjacent neighborhood areas.

- Associated narrative analysis of floodplain functions under existing and proposed conditions.
- Identification of potential increases or changes in velocity, reflection, or channelization of floodwaters within the site or onto adjacent parcels.
- Description of how the proposed design of the site avoids, minimizes, and mitigates these impacts for current conditions based on FEMA flood zones and predicted conditions based on the Climate Design Standards Tool outputs for the design life of the project.
- Specifications for the type and amount of fill proposed.
- Demonstration that the proposed fill sediment is compatible with the beach and dune system.

Stormwater Management

The project includes significant stormwater infrastructure to address stormwater flooding needs on the park site as well as for portions of the adjacent neighborhood that will discharge into the ACEC. The SEIR should include cross-sectional plans showing all the proposed outfall locations and details of each in cross-section relative to the resource areas and design plans of a reasonable scale to indicate how far the proposed underground structure below the playing field is from the beach/dune interface along the shoreline. The SEIR should demonstrate that outfalls are removed from or set back from the ACEC receiving water resource and that the highest and best method of treatment is proposed for each.

Resilience

A primary goal of the project is to provide improved coastal resilience for the park and the adjacent neighborhood to climate change impacts such as increased intensity and frequency of coastal storms and flooding events. The proposed changes to the park area include additional recreational components which may exacerbate rather than improve the resiliency characteristics of the park. The SEIR should consider alternatives that minimize new components that add new impervious surfaces, maximize the beneficial characteristics of the existing floodplain function, and meet the performance standards for coastal dunes.

Previous comments on the EENF recommended that, where appropriate, a properly sized cobble berm located at the seaward toe of a natural berm could provide more stability at the interface with the coastal beach. The DEIR states that there are no geomorphic expressions of dune deposits along Mills Avenue and the entire length of the project area along the existing guard rail is dominated by roadway paving. Recent observations on site demonstrate that there are vegetated coastal dunes along a majority of the roadway, along, beneath, and seaward of the existing guard rail. The SEIR should investigate additional alternatives that will enable a shift of the shoreline treatment further landward and create a more natural berm that can blend into the existing shoreline, including reducing the road width to the maximum degree practicable.

The DEIR proposes an impervious core material for the berm topped with sediment and vegetation, with an extensive cobble slope along the entire seaward extent of the proposed berm. This type of impervious core material is likely to exacerbate erosion of the overlying sediment and vegetation and reflect storm wave energy toward the beach, rather than dissipating it as a more natural dune/berm configuration would function. In locations where there is a salt marsh near the dune, the proposed impervious core and cobble slope may exacerbate or create wave reflection impacts on the nearby salt marsh. The SEIR narrative should include a description of how potential impacts to areas

of fronting the salt marsh from the proposed design will be avoided and consider more natural alternatives with less cobble to meet the performance standards for salt marsh and coastal dune.

The DEIR states that the proposed berm will not affect any coastal beach or salt marsh, but the cross-sections provided are not shown relative to the actual existing beach, dune, and salt marshes. Cross-sections relative to the actual existing conditions and resource areas are needed to demonstrate that there will not be any direct or indirect impacts on these resource areas resulting from the berm. The SEIR should include plans of reasonable scale to provide a better understanding of the intersections of the berm with the coastal beach, salt marsh, Mills Avenue, and proposed access areas with cross-sections indicating how it will blend with the street on one side and the coastal dune or beach on the other. These should be provided along the entire length of Mills Avenue as shoreline conditions vary considerably along its length. In the areas where there is a salt marsh, cross-sections should be included that show the location of the seaward toe of the berm relative to the location of the existing salt marsh. Cross-sections should include scales to demonstrate these considerations as well as the width and height of the proposed berm in each location.

Boatyard

The SEIR should provide additional detail about the “earthen berm” proposed landward of the new sheet pile wall, including the materials to be used for this feature. Plans show that the project will bring in up to five feet of fill. The SEIR should include the source and composition of the fill material for all areas. Cross-sections of this area in the SEIR should include the proposed bulkhead replacement with specific attention to the proposed permanent and temporary impacts to existing resource areas including beach, dune, salt marsh, and LSCSF. The cross-sections should be shown relative to the locations of these resource areas so that potential impacts can be depicted.

The DEIR indicates that the proposed sheet pile wall is intended to replace the previously existing structure that was licensed to provide access to the Pines River. From the information provided, it does not appear that the wall is a necessary component for the new coastal access structure, but is instead intended as a new flood wall structure. The wall is likely to cause scour on adjacent areas and make it harder to stabilize them. The SEIR should clarify the primary goal of this project component, describe how it meets the performance standards for coastal dune on a barrier beach, and provide non-structural alternatives for flood protection.

The boat storage building proposed in a dune in the Coastal A Zone should be elevated on open pilings at least two feet above the existing grade and two feet above the FEMA base flood elevation, with the area under the building open/free of obstruction to allow the coastal dune to provide the beneficial functions of storm damage prevention and flood control. The SEIR should describe how the proposed design meets code standards for construction in a Coastal A Zone in a coastal dune.

Phasing

The original EENF stated that the project will likely be constructed in three phases, as funding becomes available. The DEIR discusses the different components of the project that may occur in different phases but does not include details of how the planned components of the project are coordinated or can be completed independently of the others without impacts. For example, excavation of the field at Gibson Park and construction of the stormwater subsurface storage should occur during the same phase of development so that no excavated area is left open for any extended

length of time. The SEIR should clarify how the project will coordinate each component to avoid impacts from phasing.

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 Sean Duffey, Project Review Coordinator, at sean.duffey@mass.gov, or visit the CZM website at www.mass.gov/czm.

LE/kg/rh

cc: Jill Provencal, MassDEP
Phil DiPietro, MassDEP
Daniel Padien, MassDEP
Christine Hopps, MassDEP
Elle Baker, City of Revere
Frank Stringi, City of Revere
Kathryn Glenn, CZM
Rebecca Haney, CZM
Sean Duffey, CZM



The Commonwealth of Massachusetts

Division of Marine Fisheries

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MAURA T. HEALEY
Governor

KIMBERLEY DRISCOLL
Lt. Governor

REBECCA L. TEPPER
Secretary

THOMAS K. O'SHEA
Commissioner

DANIEL J. MCKIERNAN
Director

January 8, 2024

Rebecca L. Tepper, Secretary
Executive Office of Energy and Environmental Affairs
ATTN: MEPA Office, Nicholas Moreno
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: EEA#16711 Draft Environmental Impact Form

Dear Secretary Tepper:

Massachusetts Division of Marine Fisheries (MA DMF) staff have reviewed the Draft Environmental Impact Form (DEIR) submitted by the City of Revere for the proposed Gibson Park Resiliency Project. The project consists of the installation of stormwater control features at Gibson Park including subsurface storage/infiltration chambers, a stormwater pump system, raingardens, and bioswales and upgrades to stormwater infrastructure and the installation of a vegetated storm surge protection berm along Mills Avenue and Thayer Avenue; creation of an additional 26 parking spaces for the park; relocation and improvement of park features; repair of the revetment along the former Boatworks property; and redevelopment of the former Boatworks building as a community boating facility including a 2974 sf dock and pier down on the 9.15 acre site.

The project site is situated along the Pines River in the Rumney Marshes Area of Critical Environmental Concern. The Rumney Marshes ACEC is one of the most biologically significant estuaries in MA north of Boston. Salt marshes are significant to the protection of marine fisheries because they support the base of coastal food webs and provide spawning, nursery, and forage habitat. The Pines River provides essential habitat for the spawning and early development of winter flounder (*Pseudopleuronectes americanus*) [1]. The tidal flats at the project site have been mapped by MA DMF as habitat for soft shell clam (*Mya arenaria*) within shellfish growing area N26.1, classified as Conditionally Restricted for shellfish harvest. In addition, tidal flats provide one of the most productive marine habitats for numerous marine species and are designated "special aquatic sites" under the Federal Clean Water Act.

MA DMF provides the following comments for your consideration.

- **Storm water discharge impacts to Shellfish:**
 - The delayed discharge of storm water from the proposed subsurface recharge chambers following storm events may impact the safety of shellfish harvest in the Pines River. MA DMF is satisfied with the level of detail provided in the DEIR regarding storm water management associated with the subsurface recharge chambers. At this time, MA DMF does not anticipate the proposed storm water

management will negatively impact shellfish resources adjacent to the project site. Further, MA DMF supports the proposed use of bioswales and raingardens to improve storm water management at the site.

- **Construction impacts to Shellfish, Salt Marsh, and Coastal Beach:**
 - Work in intertidal habitat, including staging of construction material and equipment as well as equipment transit to and from the construction site, should be avoided to the greatest extent practicable. As much work as possible should be conducted from the upland portion of the project site to minimize impacts and avoid compaction of sediment in mapped shellfish habitat. Any work in the intertidal zone should be limited to low tide such that work is conducted in the “dry”.

Thank you for considering our comments. Questions about this review may be directed to Forest Schenck in our Gloucester office at Forest.Schenck@Mass.gov.

Sincerely,



Daniel J. McKiernan
Director

DM/fs/sd

Cc.

R. Joyce, MA DMF
E. Reiner, EPA
K. Glenn, CZM
R. Haney, CZM
P. Maniccia, ACOE
J. McAllister, McAllister Marine Engineering

References:

[1] Evans, NT, KH Ford, BC Chase and JJ Sheppard (2011). Recommended Time of Year Restrictions (TOYs) for Coastal Alteration Projects to Protect Marine Fisheries Resources in Massachusetts. Technical Report DMF TR-47.



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

January 8, 2024

Rebecca L. Tepper, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

RE: Revere
Gibson Park Resiliency Project
EEA# 16711

Attn: MEPA Unit

Dear Secretary Tepper:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Draft Environmental Impact Report (DEIR) for the proposed Gibson Park Resiliency Project in Revere. MassDEP provides the following comments.

Wetlands

MassDEP has completed its review of the above referenced Draft Environmental Impact Report (DEIR), published in the Environmental Monitor dated November 8 and revised November 30, 2023. MassDEP recommends development of information presented in the DEIR be presented in a supplemental Environmental Impact Report (SEIR) before a Final Environmental Impact Report is accepted for the project.

The project is located within one mile of an Environmental Justice (EJ) Population, therefore an Environmental Impact Report (EIR) is required.

The project also meets or exceeds the following review thresholds: alteration of coastal dune, barrier beach or coastal bank pursuant to 301 CMR 11.03(3)b(1)a, and any project within a designated Area of Critical Environmental Concern (ACEC) pursuant to 301 CMR 11.03(11)(b). The project site encompasses the 9.15-acre Gibson Park parcel located at 0 and 1 Hayes Avenue in the City of Revere. The 1.187-acre North Shore Boatworks Property, which was acquired by Revere, is located adjacent to and south of the Gibson Park Property at 29 Thayer Ave, and

This information is available in alternate format. Please contact Melixza Esenyie at 617-626-1282.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

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an approximately 2,400-foot-long portion of the west side alignment of Mills Avenue. Gibson Park is bordered to the west by the Pines River, and to the south by the former Boatworks Site. The project consists of the redevelopment of Gibson Park into a recreational facility and includes work along Mills Avenue to install a flood berm, reconstruction of the municipal stormwater system, and use of a pump station/sub-grade holding tank. The project will result in the new alteration of 6.11 acres of land.

The proposed project includes implementing coastal resiliency elements to a public park, redevelopment and reconstruction of an existing boatyard and boathouse, and the construction of a flood control barrier that is approximately 2,400 feet in length along the western alignment of Mills Avenue. The berm is proposed to reduce the risk of flooding adjacent to the Pines River. Proposed stormwater-related components include the construction of offline subsurface stormwater storage/infiltration chambers underneath a proposed new athletic field and the redeveloped boatyard, as well as installation of a dual stormwater pump system to move stormwater from the adjacent upgradient neighborhood to the proposed stormwater storage under the field. The construction of bioswales and rain gardens is also proposed as part of the stormwater treatment system. New fields and tennis courts are proposed along with walking paths and an expanded parking area.

Modification to the existing park includes proposed removal of an existing dilapidated revetment and seawall, and installation of a new sheet pile wall farther landward, a new gangway and float system, a new standby generator, and new lighting. The drainage infrastructure on Mills and Thayer Avenue will also be upgraded, and as noted above, a new 2,400-foot-long storm surge protection berm is proposed along the Mills Avenue shoreline.

The parcel on which the project is proposed is mapped as a Barrier Beach as defined in and regulated by 310 CMR 10.29. By definition at 310 CMR 10.29(2), barrier beach is made up of “coastal beaches and coastal dunes extending roughly parallel to the trend of the coast.” In this case there is coastal beach on the site with all remaining portions of the site classified as coastal dune. This Barrier Beach is significant to storm damage prevention and flood control, so the project must comply with the Performance Standards for work on dunes specified at 310 CMR 10.28(3) through (5). The project is also required to comply with the standards in the building code for work in dunes, which includes elevating structures on open pilings.

Almost the entire site is located within the Limit of Moderate Wave Action (LiMWA) associated with a FEMA coastal AE Zone, which is at elevation 10 NAVD88. The project proposes to add fill to raise the site to approximately 10 feet NAVD88, which coincides with the predicted 2030 10-year flood elevation. The DEIR has revised the impact numbers as presented in the ENF. The Gibson Park Redevelopment component of the project will have temporary impacts to 177,975 square feet (sf) of Coastal Dune, 216,340 sf of Land Subject to Coastal Storm Flowage (LSCSF), and 220,335 sf of Riverfront Area. The boat works redevelopment portion of the project will have temporary impacts on 57,100 sf of Coastal Dune, 62,160 sf of LSCSF, and 45,225 sf of Riverfront Area. The DEIR also calls out both temporary and permanent impacts of 11,525 sf of area “below spring tide line,” and 10,242 sf of impact within Chapter 91 jurisdiction, with permanent impacts to 6 sf of coastal beach and 4,850 sf “below the spring tide line.” The impacts from the Mills Avenue vegetated berm component of the project include 73,580 sf of Coastal Dune, 77,500 sf of LSCSF, 75,920 sf of Riverfront Area, 1,088 sf of area below spring high tide, and 15,240 sf of

impact within Chapter 91 jurisdiction. Permanent impacts for this component include 36,385 sf of coastal dune, 17,800 sf of Riverfront Area, 1,088 sf of area below spring high tide, and 15,240 sf of impact within Chapter 91 jurisdiction. The entire site is located within the Rumney Marshes ACEC.

Approximately 600 cubic yards of soils at the site contain PCBs and must be remediated in accordance with EPA and MassDEP Regulations.

The borings and the soils report indicate that the sediments at the site consist of marine deposits made up of sand, gravel, and peat. Such a soil profile is typical of dune sediments on developed barrier beaches. Dunes on previously developed sites sometimes lose their ability to exchange sand and sediment by wind and wave action, but maintain their function to dissipate storm energy and provide storm damage prevention and flood control. The proposed development of this site should protect the functions of storm damage prevention and flood control on the site to the maximum extent possible.

The DEIR as written is unclear regarding whether proposed impacts to resource areas are permanent or temporary, which should be further detailed and defined in the SEIR. While the ORAD plan depicts the shoreline on the site as consisting of coastal dune, coastal beach, and salt marsh, the plan showing proposed construction activities do not capture or depict the extent of project impacts on those resource areas. The SEIR should clearly delineate the extent of coastal dunes, coastal beaches, and salt marsh, and adjust the areas of impact for these accordingly.

The entirety of the site is barrier beach and therefore either Coastal Beach or Dune by definition, but significant portions of the shoreline, including the proposed berm location along Mills Avenue, are not identified as coastal dunes in this plan. The SEIR should include these areas in the impact calculations and describe how each of the proposed components meets the performance standards for coastal dunes.

The DEIR's description for the level of impact of the new sheet pile wall proposed for the full extent of the Boatworks shoreline is problematic. The DEIR states that it will have no temporary or permanent impacts on coastal resource areas, yet the wall itself is proposed on what is defined as a coastal dune, which is providing the important functions of storm damage prevention and flood control. The DEIR also states that the existing stone that comprises the existing revetment wall will be placed along the bottom face of the sheeting to create a small slope to ameliorate wave energy and erosion along the toe of the sheeting. Fill is proposed to create a berm on the seaward side of the sheet pile wall and significant fill is also proposed on the landward side. The SEIR should clarify the full extent via cross section and calculation, of the proposed wall design, showing the full extent of impacts to dunes and beaches from the profile of the wall and berm, and proposed fill. A discussion should be included of how this combination of wall and fill will meet performance standards for dunes and beach. The permitting pathway for the placement of any fill in the ACEC/Outstanding Resource Waters (ORW) for this facet of the project under the 401 WQC regulations should be discussed in detail. The 401 WQC Regulations prohibit the placement of fill in ORW, but does enumerate certain classes of projects that do not need a variance for the placement of fill in ACEC/ORW. This project does not appear to fall into any of those categories.

The majority of the project site is on the river side of the LiMWA associated with a FEMA coastal AE Zone, which are calculated to have 1.5-to-3-foot breaking waves in a 1% chance coastal storm. While the project is a resilience project for the park and neighborhood, the significant fill and grade changes need to be more detailed to show that the project will not exacerbate existing flooding conditions. The SEIR should compare the existing and proposed floodplain functions on the site and in the adjacent neighborhood to ensure that the project does not exacerbate flooding, and preserves or improves floodplain function for the design life of the project. The information provided should include flow diagrams depicting how coastal floodwaters will flow onto and off the site, with the adjacent neighborhood referenced to current topography and the proposed grading plan. The proposed fill sediment should be shown to be compatible with the beach and dune system.

Stormwater

The project includes significant stormwater infrastructure to address stormwater flooding needs on the park site, as well as for portions of the adjacent neighborhood that will discharge into the ACEC/ORW. The SEIR should include cross-sectional plans showing the proposed outfall locations and details of each in cross-section relative to the resource areas. The SEIR should demonstrate that outfalls are removed from or set back from the ACEC receiving water resource, and that the highest and best method of treatment is proposed for each.

Regarding discharges to the ACEC, the discussion of compliance with Standard 6 in their Stormwater Report indicates that “the project proposes a treatment train of structural practices to reduce runoff impact to wetland resource areas. Furthermore, all runoff is routed to a series of subsurface infiltration chambers and the only discharge to the critical areas will be overflow from the larger storm events.”

Flood Control Berm

Coastal Zone Management (CZM) commented on the EENF, and MassDEP concurred, that a properly sized cobble berm located at the seaward toe of a natural berm could provide more stability at the interface with the coastal beach. The DEIR states that the entire length of the project area along the existing guard rail is dominated by roadway paving. However, CZM staff assert that site conditions demonstrate that there are vegetated coastal dunes along a majority of the roadway at and seaward of the existing guard rail. Therefore, MassDEP concurs that the SEIR should investigate additional alternatives that will enable a shift of the shoreline treatment further landward, including reducing the road width to the maximum degree practicable.

The DEIR proposes an impervious core material for the berm topped with sediment and vegetation, with a cobble slope along the entire seaward extent of the berm. This impervious core material is likely to exacerbate erosion of the overlying sediment and vegetation and reflect storm wave energy toward the beach, rather than dissipating it as a more natural dune/berm configuration would. This is especially significant in areas where salt marsh is near the dune where reflection can impact. The SEIR narrative should include a description of how potential impacts to areas of the proposed berm fronting existing salt marsh will be avoided. More natural alternatives with less cobble should be explored in order to avoid impacts to salt marsh and meet performance standards

for protection of coastal dune functions. While the DEIR states that the proposed berm will not affect coastal beach or salt marsh, the cross-sections provided are not shown relative to the actual existing beach, dune, and salt marshes. Such cross-sections should be provided to demonstrate that there will not be any direct or indirect impacts on these resource areas resulting from the berm.

Boatyard/Boathouse

As discussed above, the SEIR should provide more detail about the “earthen berm” proposed landward of the new sheet pile wall, including the materials to be used for this feature. Again, cross-sections of this area should be developed including the proposed bulkhead replacement with specific attention to the proposed permanent and temporary impacts to existing resource areas including beach, dune, salt marsh, and LSCSF. It should be noted that previous comments noted that potential impacts to the existing salt marsh in this area must be avoided.

The proposed sheet pile wall appears that it will function as a new flood wall structure, and though landward of the existing bulkhead, it is still likely to cause scour on adjacent areas. As discussed above it is located in an area defined as dune. The SEIR should clarify whether the purpose of the sheet pile wall is for flood control, and clearly describe how it meets the performance standards for coastal dune on a barrier beach. Any non-structural alternatives to it should also be detailed.

The boat storage building is proposed in a dune and the area is subject to wave action, therefore it should be elevated on open pilings at least two feet above the existing grade and also two feet above the FEMA base flood elevation. The area under the building should be open to allow the coastal dune to provide the beneficial functions of storm damage prevention and flood control.

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Kristin.Divris@mass.gov at (508) 887-0021 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 (857) 276-3161.

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, Kristin Divris, Jill Provencal, Phil DiPietro, MassDEP-NERO