



## Memorandum

To: Rhode Island Department of  
Transportation  
Two Capitol Hill  
Providence, RI 02903

Date: March 15, 2019

Project #: 72900.00

From: Peter Pavao

Re: Pell Bridge Project – Coastal Resources Technical Memorandum

---

### 1. Introduction

The Claiborne Pell Newport Bridge (Pell Bridge) carries State Route 138 between Jamestown and Newport and is the only road connection between Jamestown and Aquidneck Island. The Pell Bridge Interchange Project (Project) would provide a direct connection from the northern part of the City to the downtown area, reduce queued vehicle traffic onto the Pell Bridge, reduce traffic in downtown Newport, and provide a portion of the bicycle and pedestrian facilities envisioned in the Aquidneck Island Transportation Study. The Project would be built in the City of Newport and Town of Middletown, Rhode Island.

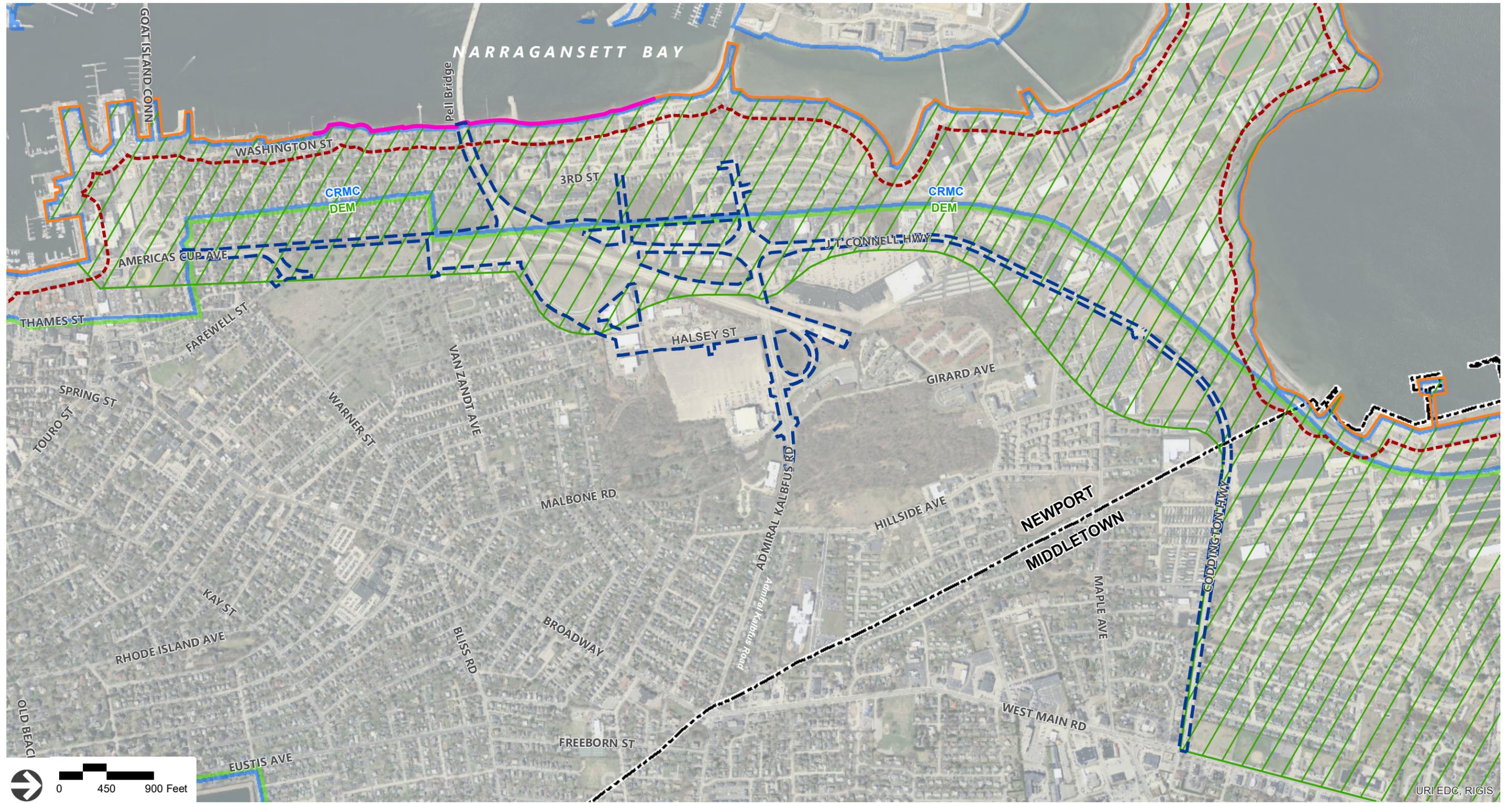
In accordance with the National Environmental Policy Act (NEPA), an Environmental Assessment (EA) is being developed to evaluate the impacts of construction and operation of the re-designed interchange on environmental resources. This technical memorandum describes coastal resources within the Study Area.

### 2. Study Area, Resource Definition, and Methodology

#### Study Area

The Study Area for evaluation of coastal resource effects is the limits of disturbance (LOD) for the Project on Aquidneck Island in Newport and Middletown, Rhode Island (see Figure 1). It extends from Bridge Street in Newport at the southern end north to Coddington Highway in Middletown. The western limits of the Study Area are where Pell Bridge reaches Aquidneck Island near Washington Street. The eastern limits are near the intersection of Admiral Kalbfus Road and Girard Avenue in Newport, and the intersection of Coddington Highway and West Main Road in Middletown. The Study Area includes portions of Route 138, Admiral Kalbfus Road, JT Connell Highway, and other connecting roads. Adjacent land currently owned by RIDOT and the City of Newport that will be divested and made available for future redevelopment by others is also considered in the analysis of indirect effects.

The Study Area, or portions thereof, are subject to regulations under the Coastal Zone Management Act of 1972 (CZMA), the Rhode Island Coastal Resource Management Council's (CRMC) Coastal Resources Management Plan (CRMP), and the Aquidneck Island Special Area Management Plan (SAMP) (see Figure 1).



Source: RIDOT, RIGIS, VHB 2017 & 2018 Field Investigation

**Wetland Resources Jurisdiction**

- ▬ Rhode Island Coastal Resources Management Council (CRMC)
- ▬ Rhode Island Department of Environmental Management (DEM)

- ▬ Study Area
- - - CRMC 200' Contiguous Area
- ▨ CRMC Aquidneck Island Special Area Management Plan Boundary
- ▬ Existing Coastal Feature (Digitized from Aerial)
- ▬ Existing Coastal Feature (RIGIS)



Figure 1  
Coastal Resources

**Reconstruction of the Pell Bridge Approaches  
Newport, Rhode Island**

## **Coastal Zone Regulatory Authorities and Resource Definitions**

Coastal zone resources are defined in accordance with applicable guidance including the Coastal Barrier Resources Act (CBRA); National Oceanic and Atmospheric Administration (NOAA) regulations (15 CFR Part 930, Subparts C, D and F); the CZMA (16 USC §§ 1451-1464); and the CRMP established pursuant to R.I.G.L. 46-23-1 et seq. The CZMA is administered through the Coastal Zone Management Program (CZMP) under the NOAA Office of Ocean and Coastal Resource Management. The Rhode Island CRMC is a state agency responsible for the management, protection, and restoration of Rhode Island coastal areas, as authorized in the CZMA and the Coastal Zone Act, Reauthorization Amendments.

### **Coastal Barrier Resources Act**

The CBRA provides for appropriate use and conservation of coastal barriers along the Atlantic, Gulf, and Great Lakes coastlines. The CBRA defines "undeveloped coastal barriers" as geological features including bay barriers, barrier islands, and other associated aquatic resources including wetlands, marshes, and estuaries that protect landward aquatic habitats from the detrimental effects of direct wind and wave action. Barriers have been found to provide essential habitats for wildlife and marine life, natural storm buffer zones, and areas of scientific, recreational, historic, and archaeological significance. Under the CBRA, the United States Fish and Wildlife Service (USFWS) was tasked with the preparation of maps depicting areas designated for protection. There are no coastal barriers in the Study Area, and this Act is therefore not applicable to the Project.

### **Rhode Island Coastal Zone Management Program**

Rhode Island's coastal zone encompasses the entire state; however, the inland extent of Rhode Island's coastal zone boundary is a tiered system which is dependent on the type and location of an activity. The CRMC serves as the state's regulatory authority within the coastal zone. The first tier of jurisdiction encompasses Rhode Island's tidal waters, coastal features forming the boundary between tidal waters and uplands, and the area extending 200 feet inland of a coastal feature (200-foot Contiguous Area) where the CRMC has authority over development and maintenance activities. In the Study Area, the coastal feature used to establish the 200-foot Contiguous Area at the Pell Bridge approach ramps is Manmade Shoreline (CRMP 1.2.2.F.). The Manmade Shoreline consists of vertical revetments along the shore and the top of the rip-rap slope placed to protect the Pell Bridge abutment.

The limits of the SAMP extend inland from the 200-foot Contiguous Area; however, provisions of the SAMP are applied only to those upland projects or upland portions of projects located within CRMC jurisdiction.

The second tier of the coastal zone boundary extends inland to include Rhode Island's 21 coastal communities. Within this second tier, all Federal (as well as state) activities must be consistent with the CRMP and therefore, undergo Federal Consistency Determination. Within these communities, CRMC exercises its Federal consistency requirement over direct Federal activities or Federally sponsored activities which are reasonably likely to affect any coastal use or resource within the CRMC's jurisdictional area. This Project will require Federal Coastal Consistency Review.

The third tier of CRMC jurisdiction encompasses the entire state for certain activities which have the potential to impact tidal waters of Rhode Island. This list of activities does not include roadways or transportation projects. However, the CRMC also has authority over freshwater wetlands in the vicinity of the coast as described in more detail in the Wetlands and Waterways Technical Memorandum.

## **Methodology**

### **Baseline Conditions**

Baseline conditions within the Study Area were identified by review of USFWS CBRS mapping, the CRMP, CRMC SAMPs, and maps of RI Coastal Zone Jurisdiction. Review of these information resources confirmed the regulatory context for coastal resources within the Study Area.

### **Effects Analysis**

The analysis methodology identifies and describes CRMC guidance that will be applied as part of the Project's Federal Coastal Zone Consistency Determination. Specific CRMC guidance includes applicable CRMP policies and performance standards, Aquidneck Island SAMP goals and objectives, and Aquidneck Island SAMP coastal development standards, identified below.

Project activities that are subject CRMP policies and standards include:

- › Part 1.3.1(B) (formerly §300.2) – Filling, Removing or Grading of Shoreline Features
- › Part 1.3.1(F) (formerly §300.2) – Treatment of Sewage and Stormwater
- › Part 1.3.1(M) (formerly §300.13) – Public Roadways, Bridges, Parking Lots, Railroad Lines and Airports
- › Part 1.3.2 (formerly §310) – Alterations to Freshwater Flows to Tidal Waters Bodies and Coastal Ponds
- › Part 1.3.3 (formerly §320) – Inland Activities and Alterations that are Subject to Council Permitting
- › Part 1.3.4 (formerly §325) – Activities Located within Critical Coastal Areas
- › Part 1.3.5 (formerly §330) – Guidelines for the Protection and Enhancement of the Scenic Value of the Coastal Region
- › Part 1.3.7 (formerly §400) – Federal Consistency

Applicable Aquidneck Island SAMP goals and objectives include:

- › §130.1 (b) – CRMC Jurisdiction, Federal Consistency Review
- › §130.5 – Conservation Development Techniques
- › §130.6 – Coastal and Freshwater Wetlands
- › §130.9 – Visual Elements

Applicable Aquidneck Island SAMP coastal development standards include:

- › §150.1 (a) – Standards Applicable to Entire Development, 25% Minimum Vegetation Requirement
- › §150.1 (b) – Standards Applicable to Entire Development, Stormwater Management

### **Cumulative Effects Analysis**

Cumulative effects include past, present, and reasonably foreseeable future actions, including Federal and non-Federal actions. The spatial boundaries for the cumulative effects analysis were the same as those applied to the effects analysis plus additional adjacent land currently owned by RIDOT and the City of Newport likely to be redeveloped as a result of the Project. The temporal limits of the effects analysis include present day through 2030. These dates were selected because development within the coastal zone from present day forward is potentially subject to a Federal Coastal Zone Consistency Determination, and because 2030 is the current planning horizon for the Rhode Island Office of Statewide planning. The analysis assumed that by 2030 redevelopment of Study Area land divested by RIDOT and the City of Newport because of project implementation would be completed.

## **3. Applicable Regulations and Criteria**

Activities proposed by RIDOT related to the Pell Bridge Project will require a CZM Consistency Determination from the CRMC due to the Project's location within the Coastal Zone as identified in the RICRMP and the Aquidneck Island SAMP (see Figure 1). The CZM Consistency Determination will evaluate the Proposed Action against applicable CRMP performance standards, Aquidneck Island SAMP goals and objectives, and Aquidneck Island SAMP coastal development standards. Many of the Aquidneck Island SAMP goals focus on setbacks to coastal resources, public shoreline access, and preserving and establishing coastal greenways along the shoreline, which are not applicable to the Project because it is not a shoreline development project. However, other goals of the SAMP are applicable to the Project, such as managing impervious surface coverage, use of Low Impact Development techniques to manage stormwater runoff, and open space.

CRMC input will be solicited throughout the NEPA process. RIDOT will forward a copy of the draft EA, including this technical report, to the CRMC office for review along with a written certification of consistency with Rhode Island's CZM policy. The CRMC Federal Consistency Coordinator will review the draft EA for consistency with the Rhode Island CZM Program and respond to RIDOT with a determination within 45 days of receipt of the consistency determination. The certification of consistency and CRMC's response will be included in an appendix of the final EA.

## Baseline Conditions

Coastal resources within the Study Area are protected under the CBRA (16 U.S.C. 3501-3510; Public Law 97-348) and the CZMA (16 U.S.C. 1451-1464; Public Law 92-583). These Orders and Statutes require that the FHWA follow procedures for ensuring that a proposed action is consistent with approved coastal zone management programs.

### Coastal Barrier Resources Act

The CBRA defines "undeveloped coastal barriers" as geological features including bay barriers, barrier islands, and other associated aquatic resources including wetlands, marshes, and estuaries that protect landward aquatic habitats from the detrimental effects of direct wind and wave action. Under the CBRA, the USFWS was tasked with the preparation of maps depicting areas designated for protection. The John H. Chafee Coastal Barrier Resource System (CBRS) includes all areas designated for protection under the CBRA. The Study Area does not contain any coastal barriers mapped in the John H. Chafee CBRS based on review of the USFWS CBRS mapping.

### Rhode Island Coastal Zone Management Council

Rhode Island's Coastal Zone includes the entire state. However, the inland extent of the regulatory authority of the state's CZMA agency is 200 feet inland from any coastal feature. Although the Study Area for coastal resources does not occur within 200 feet of a coastal feature (see Figure 1), the Rhode Island CRMC defines the Coastal Zone as "the area encompassed within the state's seaward jurisdiction (three miles) to the inland boundaries of the state's 21 coastal communities." Within these communities, CRMC exercises its Federal consistency requirement over direct Federal activities or Federally sponsored activities which are reasonably likely to affect any coastal use or resource within the CRMC's jurisdictional area. The Pell Bridge project will require a Federal Consistency Determination from the CRMC.

In some areas, CRMC coastal zone jurisdiction is expanded to include those areas within the watershed boundaries of certain coastal estuaries. These watershed areas are regulated under SAMPs. CRMC has prepared SAMPs for the Salt Pond Region, Metro Bay-Providence Harbor, Pawcatuck River, Narrow River, Aquidneck Island West Side, the ocean, shoreline change (beach) areas, and Greenwich Bay. The Project Area and Study Area are located within the Aquidneck Island West Side SAMP (see Figure 1), however, CRMC would not have regulatory authority beyond the 200-foot Contiguous Area, beyond that provided by the Federal Consistency Determination. Activities proposed by the Pell Bridge project will require a CZM Consistency Determination from the CRMC due to the Project's location within the Coastal Zone as identified in the CRMP. Project activities that are potentially subject CRMP policies and standards include: site work/ excavation; road, bridge, and parking lot work; and wetland and waterway impacts. The SAMP identifies setbacks to coastal resources, public shoreline access, and preserving and establishing coastal greenways along the shoreline as important goals. Other goals of the SAMP include managing impervious surface coverage, use of Low Impact Development techniques to manage stormwater runoff, and open space.

CRMC and RIDEM have established boundaries defining the limits of CRMC and RIDEM freshwater wetland jurisdictions. In the Study Area, the inland limit of CRMC jurisdiction over freshwater wetlands generally follows the

existing railbed near the western limit of the Project Area and Study Area (see Figure 1). Freshwater wetlands falling under the jurisdiction of the CRMC are present within the Project Area and Study Area, and are addressed in the Wetlands and Waterways Technical Memorandum. Because the Project Area includes areas falling under the jurisdiction of CRMC and RIDEM, the two agencies will confer to determine whether state regulatory review of all Project Area wetland impacts will be delegated to just one of the two agencies, or if each agency will review wetlands within their defined area of jurisdiction.

## Effects Analysis

The Project would result in construction and redevelopment activities within Rhode Island's designated coastal zone. These activities have the potential to affect coastal resources through stormwater runoff, impacts to wetlands, disturbance to vegetation and open space, and erosion and sedimentation. Pell Bridge project activities will be reviewed by the CRMC relative to performance criteria in CRMC guidance that will be applied as part of the Project's Federal Coastal Zone Consistency Determination.

Specific CRMC policies, goals, objectives, and standards relevant to the Project and that will be considered as part of the Project's Federal consistency review are summarized below and include applicable CRMP policies and performance standards, Aquidneck Island SAMP goals and objectives, and Aquidneck Island SAMP coastal development standards. The CRMC will evaluate the Project for conformance with these policies, goals and objectives to protect the coastal zone, and ensure consistency with Rhode Island's coastal zone management plan. Therefore, construction-phase and permanent effects to coastal resources are expected to be minor.

### Rhode Island Coastal Resources Management Plan

Project activities that are subject to RICRMP policies and standards include:

#### Part 1.3.1(B) (formerly §300.2) – Filling, Removing or Grading of Shoreline Features

The Project would not impact coastal features; the applicable requirements of this section are limited to those regarding upland earthwork. The primary focus of the upland earthwork requirements is the minimization of on-site erosion and sediment transport to off-site locations. The standard requires that all projects be designed in conformance with the *Rhode Island Soil Erosion and Sediment Control Handbook* (Rhode Island State Conservation Committee, 1980 revised 2014, updated 2016). The handbook provides guidance for the development of a site-specific soil erosion and sediment control plan including the selection and proper installation of appropriate erosion and sediment controls. These features are often described as Best Management Practices (BMPs), and typically include filter socks, diversion ditches, check dams, sediment traps, perimeter sediment controls, and temporary mulch. The handbook also provides guidance on appropriate inspection and maintenance protocols for construction sites, specifying inspection frequency and suitable BMP maintenance intervals. Pumped groundwater must be managed to filter and contain sediments prior to release of the dewatering discharges to surface waters or storm drains.

#### Part 1.3.1(F) (formerly §300.6) – Treatment of Sewage and Stormwater

The CRMP policy is to maintain and improve coastal wetlands and contiguous freshwater wetlands and ground water resources. Installation of new onsite wastewater systems is to be minimized under RICRMP. Use of Low Impact Development (LID) strategies are required as the primary method of stormwater management, and roadways, highways, and bridges are required to provide treatment and management of stormwater runoff for all new impervious surfaces. Stormwater management plans must consider potential stormwater impacts to the coastal environment including introduction of freshwater runoff to high marsh areas, salinity, thermal impacts, and the effects on dissolved oxygen. Stormwater open drainage and pipe conveyance systems must also be sized to provide passage for at least the 10-year, 24-hour Type III storm event, and stormwater pollutant loading analysis may be required for projects that pose a potential threat to sensitive coastal resource areas. The CRMP policy requires a management plan in accordance with *Rhode Island Stormwater Design and Installation Standards Manual* (2015) and applicable regulations, in order to meet the policies and requirements of the RICRMP and the Aquidneck Island SAMP.

*Part 1.3.1(M) (formerly §300.13) – Public Roadways, Bridges, Parking Lots, Railroad Lines and Airports*

This section establishes CRMC policy regarding all new roadways, highways, bridges, and parking lots associated with the proposed Project. The CRMP requires that infrastructure associated with the Project be planned, sited, and designed to protect areas that provide important water quality benefits or are particularly susceptible to erosion and sediment loss, limit land disturbances such as clearing and grading and cut and fill to reduce erosion and sediment loss, limit disturbances of natural drainage features and vegetation, and limit the increase of impervious surface areas, except where necessary. Permeable materials shall be utilized, where practicable, to surface roadways and parking lots on shoreline features adjacent to Type 1, 2, and 3 waters. Adherence to erosion and sediment control Part 1.3.1(B) and stormwater management in accordance with Part 1.3.1(F) are key elements to compliance with the CRMP policies regarding public roadways, bridges, and parking lots.

*Part 1.3.2 (formerly §310) – Alterations to Freshwater Flows to Tidal Waters Bodies and Coastal Ponds*

CRMC policy identifies the volume and timing of freshwater to estuarine waters as potentially affecting estuarine aquatic life, sedimentation, erosion, and flooding. The CRMC also seeks to maintain and enhance anadromous fish runs. CRMP standards applicable to the Project for meeting these policies include those related to Filling, Removing, or Grading of Shoreline Features (see preceding discussion of Part 1.3.1 (B)) and Sewage Treatment and Disposal (see preceding discussion of Part 1.3.1 (F)). As an additional prerequisite, the CRMP requires that the construction of dams, tidal gates, and other structures affecting flows of tributaries and the circulation of tidal water bodies shall require an Army Corps of Engineers permit. While the project scope does not include construction of in-water structures such as dams or tidal gates, the Project will require a permit from the Army Corps of Engineers for wetland alterations.

*Part 1.3.3 (formerly §320) – Inland Activities and Alterations that are Subject to Council Permitting*

This section of the CRMP identifies numerous inland activities under CRMC jurisdiction, including solid waste disposal, mineral extraction, power generation, sewage treatment, and the processing or storage of chemicals or petroleum. Other activities that have “a reasonable probability of conflicting with the Council’s goals and its management plans or

programs, and/or has the potential to damage the environment of the coastal region” would also be subject to CRMC review. Any such activities would have to satisfy both the CRMP requirements and SAMP requirements, thereby including the requirements of the Aquidneck Island SAMP as part of CRMC review.

*Part 1.3.4 (formerly §325) – Activities Located Within Critical Coastal Areas*

It is the goal of the CRMC to manage watersheds of poorly flushed estuaries and critical coastal areas as an ecosystem. To do so, the CRMC maintains Special Area Management Plans including ecosystem-based management strategies to address preservation and restoration of these areas. In CRMC defined SAMP areas, this includes review of cumulative and secondary impacts for certain activities inland of the 200-foot contiguous coastal area, to ensure conformance with applicable requirements of the CRMP and relevant SAMP. Stormwater management, erosion and sedimentation control, and sewage treatment are key considerations considered by the CRMC, to be met through conformance with standards associated with Part 1.3.1 (B) Filling, Removing, or Grading of Shoreline Features; Part 1.3.1(C) Residential, Commercial, Industrial, and Public Recreational Structures; and Part 1.3.1 (F) Sewage Treatment and Disposal of the CRMP.

*Part 1.3.5 (Formerly Guidelines for the protection and enhancement of the scenic value of the coastal region*

This guidance encourages designs that preserve, protect, and, where possible, restore the scenic value of the coastal region. It recognizes that the visual diversity and unique character of the coast is valued by residents and tourists how important it is to the state that this value is retained or even enhanced.

*Part 1.3.7 (formerly §400) – Federal Consistency*

Federal agencies conducting an activity which is reasonably likely to affect natural resources or land in the coastal zone must do so consistent with the enforceable policies of the state’s coastal management program developed and implemented under the Coastal Zone Management Act. The CRMC will review the Project for consistency with relevant policies and plans of Rhode Island’s coastal zone program, including the CRMP and the Aquidneck Island SAMP, and other applicable regulations and guidelines referenced in the CRMP and the SAMP such as:

- › Rhode Island Soil Erosion and Sediment Control Handbook (RIDEM, 1980 Revised 2014, Updated 2016);
- › Rhode Island Stormwater Design and Installation Standards Manual (2015); and,
- › Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast.

**Aquidneck Island Special Area Management Plan**

Applicable Aquidneck Island SAMP policies, goals, and objectives include:

*§130.1 (b) – CRMC Jurisdiction, Federal Consistency Review*

This policy specifies that all Federal activities are subject to Federal consistency review in accordance with Section 400 of the RICRMP.

#### §130.5 – Conservation Development Techniques

These provisions of the Aquidneck Island SAMP recommend conservation development techniques for projects on large parcels of land. These include natural resource inventories for identifying and minimizing impacts to important resources, and protective covenants for important natural resource areas. As a project occupying a large area of land this policy is applicable to the Project, although most of the Project Area has been previously developed.

#### §130.6 – Coastal and Freshwater Wetlands

This SAMP policy prescribes measures for the protection of coastal and freshwater wetlands through CRMP Section 210.3, CRMP Section 300.12, and through project review under CRMC's *Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast* or the *RIDEM Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (2014)*, as applicable depending on where wetlands are located relative to agency zones of jurisdiction. The SAMP's coastal and freshwater wetlands policy is to avoid, minimize, and when necessary mitigate impacts to wetlands. Coastal Wetlands are regulated directly under the CRMP, see definition 27 and Section 1.2.2.C. of the CRMP.

#### §130.9 – Visual Elements

Scenic and visual qualities of the West Side of Aquidneck Island are considered and protected as a resource of public priority under this SAMP policy. The policy stipulates that land development should protect views to and along coastal areas, minimize the alteration of natural land forms, be visually compatible with the surrounding area, and restore and enhance visual quality in degraded areas following RICRMP Section 330. The CRMC may require landscape plans and renderings to review the Project.

Applicable Aquidneck Island SAMP coastal development standards:

#### §150.1 (a) – Standards Applicable to Entire Development, 25% Minimum Vegetation Requirement

This development standard of the Aquidneck Island SAMP requires that projects include sustainably landscaped areas in their proposals to achieve vegetative coverage of at least 25 percent of the surface area over the entire development property. Planting plans used to meet this objective are to be prepared by a landscape architect.

#### §150.1 (b) – Standards Applicable to Entire Development, Stormwater Management

This SAMP development standard requires projects meet the stormwater requirements of CRMP Section 300.6 and the current version of the *Rhode Island Stormwater Design and Installation Standards Manual* in order to control peak flow rates and volumes, and improve water quality. Low Impact Development (LID) approaches are to be used as the primary method of stormwater management and treatment to the maximum extent practicable. Stormwater management plans need to be coordinated between the CRMC, the RIDEM, and the municipality.

## 4. Cumulative Impacts

As described in the discussion of project effects, impacts to the coastal zone resulting from the Project are anticipated to be minor, because the CRMC will evaluate the Project's conformance with RICRMP and SAMP criteria intended to protect and enhance the coastal zone to complete a coastal zone Consistency Determination. Construction of the Project will result in additional land adjacent to the Project's LOD that is currently owned by RIDOT and the City of Newport being divested and made available for future development by others. Future redevelopment on this land would also be completed in Rhode Island's designated coastal zone, and depending on the scope of any specific future project may require a coastal zone Consistency Determination. Projects requiring a coastal zone Consistency Determination would also need to meet applicable policies, goals, and standards of the CRMP and the Aquidneck Island SAMP to obtain a coastal zone Consistency Determination. Projects that do not trigger the need for a Consistency Determination are assumed to be small enough in scope that they would not have any significant effects to the coastal zone. Therefore, future cumulative effects to the coastal zone are also anticipated to be minor.

## 5. Mitigation

The Project does not propose any activity in coastal waters, coastal resources, shoreline feature, or within the 200-foot contiguous area. Indirect Project effects to the coastal zone may include stormwater runoff, impacts to freshwater wetlands, disturbance to vegetation and open space, and erosion and sedimentation. These effects will be mitigated through conformance with the RICRMP and the Aquidneck Island SAMP, as well as adhering to the following best management practice guidelines and wetland protection regulations:

- The Rhode Island Soil Erosion and Sediment Control Handbook (2016);
- The Rhode Island Stormwater Design and Installation Standards Manual (2015);
- CRMC's Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast; and,
- RIDEM's Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (2014)

## 6. Regulatory Coordination and Required Permits

The Project will require CZM Consistency Determination from the CRMC due to the Project's location within the Coastal Zone as identified in the CRMP and the Aquidneck Island SAMP (see Figure 1). The CZM Consistency Determination will evaluate the proposed project against applicable CRMP performance standards, Aquidneck Island SAMP goals and objectives, and Aquidneck Island SAMP coastal development standards.

## 7. Summary of Impacts

The Project is located on land subject to coastal zone regulations under the Coastal Zone Management Act of 1972 and Part 1.3.7 (formerly §400) Federal Consistency Determination of the Rhode Island Coastal Resources Management Plan and the Aquidneck Island Special Area Management Plan. Coastal zone project effects and cumulative effects are anticipated to be minor because the CRMC will confirm conformance with CRMP and SAMP policies, goals, objectives and standards by completing a Federal Consistency Determination. Minor indirect effects will be mitigated through implementation of construction phase BMP's, use of LID design approaches where feasible, post-construction stormwater management, and by minimizing and mitigating impacts to wetlands if they cannot be avoided. CBRA coastal barriers will not be affected by the Project.

## References

- 15 CFR Part 930 Subparts C, D, F. Federal Consistency with Approved Coastal Management Programs
- 16 USC §§ 3501-3510. Public Law 97-348. Congressional statement of findings and purpose - Coastal Barrier Resources Act
- 16 USC §§ 1451-1464. 16 U.S. Code Chapter 33 – Coastal Zone Management
- 16 USC §§ 1451-1464. Public Law 92-583. Congressional statement of findings and purpose – Coastal Zone
- Rhode Island Coastal Resources Management Council (RICRMC). 2018a. 650-RICR-20-00-1. Title 650 Coastal Resources Management Council. Chapter 20 Coastal Management Program. <http://www.crmc.ri.gov/regulations.html>. Accessed March 21, 2018.
- CRMC. 2009. Aquidneck Island Special Area Management Plan Coastal Development Regulations <http://www.crmc.ri.gov/regulations.html>. Accessed March 21, 2018.
- CRMC. 2018b. Federal Consistency Manual. <http://www.crmc.ri.gov/regulations.html>. Accessed March 21, 2018.
- CRMC. 2018c. Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast. <http://www.crmc.ri.gov/regulations.html>. Accessed March 21, 2018.
- U.S. Fish and Wildlife Service (USFWS). 2018. Coastal Barrier Resources System. <https://www.fws.gov/CBRA/>. Accessed March 21, 2018.