CRMC File Number:

RI CRMC COASTAL HAZARD APPLICATION WORKSHEET

APPLICANT NAME: Quonset Development Corporation

PROJECT SITE ADDRESS: AP 192 Lots 1, 2, 5, 7, 8, & 10 - North Kingstown, RI

STEP 1. PROJECT DESIGN LIFE

☐ A. For properties in a FEMA-designated **A,** or **X** Zone, provide the first floor elevation (FFE) of the proposed structure referenced to NAVD88, **OR**
For properties in a FEMA-designated **V** or **Coastal A** Zone, please provide the elevation of the lowest horizontal structural member (LHSM) referenced to NAVD88.

FFE 25.3 ft

OR

LHSM elevation ft

☐ B. How long do you want your project to last? Identify the expected design life for the project (CRMC recommends a **minimum of 30 years**)

Design Life: 30 yrs

☐ C. Add the number of years you identified in 1B to the current year.

Design Life Year: 2052

☐ D. **CHECK** beneath the sea level rise (SLR) projection that matches or comes closest to project design life year.

Year	2030	2040	2050	2060	2070	2080	2090	2100	
SLR	1.47	2.13	3.05	4.00	5.15	6.49	7.94	9.41	
	○	○	◉	○	○	○	○	○	○

Source: Sea Level Rise (SLR) Projections (Feb. 2017). NOAA High Curve, 83% Confidence Interval. Newport, RI Tide Gauge. All values are expressed in feet relative to NAVD88. http://www.corpsclimate.us/ccaceslcurves.cfm

NOTE: The STORMTOOLS sea level rise scenarios depict how high the water will be above the average height of the daily high tide over the 19-year period between 1983 and 2001. There have been between 4 and 5 inches of sea level rise in Rhode Island since then. The higher modeled water level accounts for the uncertainties in ice sheet and ocean dynamics.

STEP 2. SITE ASSESSMENT

☐ A. Open *RICRMC Coastal Hazard Mapping Tool*. Following the tutorial along the left side of the screen, enter the project site address and turn on the sea level layer closest to the number you circled in 1D.

☐ B. **ENTER** the STORMTOOLS SLR map layer closest to the SLR value you checked in Step 1D above. If the value falls between the available STORMTOOLS SLR map layers, round to the closest of these sea level rise (SLR) numbers: 1ft, 2ft, 3ft, 5ft, 7ft, 10ft, or 12ft

3 ft

☐ C. Does the STORMTOOLS SLR map layer you circled above expose your project site to future tidal inundation? **CHECK YES or NO**

○ YES
◉ NO

☐ D. List any **roads or access routes** that are potentially inundated from SLR. To do this, ZOOM OUT from your project location, change BASEMAP on the viewer to "street view" – see Step 2A.

Land directly adjacent to Broadway

Please be advised that CRMC staff may also review the implications of sea level rise in combination with nuisance storm flooding and discuss these potential project concerns with the applicant. Nuisance flooding impacts may be viewed in STORMTOOLS here.

STEP 3. STORMTOOLS DESIGN ELEVATION (SDE)

☐ A. Select your SLR Scenario using the tabs along the top of the online map (*NOTE: RECOMMENDED scenario is 100-year storm plus 3-feet of sea level rise*). Follow the tutorial included along the left panels of the viewer to enter the address of your project site. Select the tab across the top that corresponds to the sea level rise projection you identified in STEP 1. Enter your address on the map, and then click on the project site to identify **STORMTOOLS Design Elevation (SDE)** from the pop-up box. **Enter the SDE value:**

1.0 ft

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RI CRMC COASTAL HAZARD APPLICATION WORKSHEET

STEP 4. SHORELINE CHANGE

A. Using the *CRMC Shoreline Change maps*, indicate the transect number closest to your site, and erosion rate listed for that transect. **NOTE: Transects are not available for every site. If this is the case, please enter N/A.**

Transect Number: 1702

Erosion Rate: 0.2 **ft/year**

B. **CHECK** below the Projected Erosion Rate that corresponds to the design life you identified above.

Year	2050	2060	2070	2080	2090	2100
Projected Future Erosion Multiplier	1.34	1.45	1.57	1.70	1.84	2.00
	◉	○	○	○	○	○

Source: Projected Shoreline Change Rate multipliers. (Oakley et al., 2016)

C. **COMPLETE EROSION SETBACK CALCULATION:**

Historic shoreline change rate, STEP 4A		Design Life, STEP 1B		Projected Future Erosion Multiplier, STEP 4B		Erosion Setback (ft) 4A x 1B x 4B
0.2	X	30	X	1.34	=	8.04

***NOTE:** Setbacks are required per the CRMC Red Book, Section 1.1.9. **A minimum setback of 50-feet is required**, but a greater setback may be necessary and/or desirable based on this analysis.*

STEP 5. CERI & OTHER SITE CONSIDERATIONS

A. If you live in a community where a Coastal Environmental Risk Index (CERI) has been completed (Barrington, Bristol, Charlestown, Narragansett, South Kingstown, Warren, Warwick, Westerly), CHECK the level of projected damage to your location, as indicated on the map that corresponds to the design life identified in STEP 1.

CERI Level:	Moderate	High	Severe	Extreme	Inundated by 2100	Not applicable
	○	○	○	○	○	◉

B. Consider and discuss with your design consultant other forces or factors that might impact the development, such as coastal habitats, shoreline features, public access, wastewater, storm water, depth to water table/groundwater dynamics, saltwater intrusion, or other issues not listed above. In addition, pressure from rising sea levels will result in rising subsurface groundwater levels ultimately effecting wells and septic systems.

STEP 6. LARGE PROJECTS

This step is for Large Projects and Subdivisions only, six (6) or more units, as defined by the CRMC Red Book Section 1.1.6.I(1)(f). This step may be skipped for other projects.

A. Use the Sea Level Affecting Marshes Model (SLAMM) Maps to assess potential impacts to large projects and subdivisions from salt marsh migration resulting from projected sea level rise. CRMC SLAMM maps can be accessed here. The CRMC recommends using the 5-foot SLR projection within SLAMM to assess future potential project impacts on migrating marshes. Does the SLAMM map that corresponds to the design life you identified in STEP 1 expose your project site to future salt marsh migration? **CHECK YES or NO**

○ **YES** ◉ **NO**

STEP 7: DESIGN EVALUATION

A. Using Chapter 7 of the RI Shoreline Change SAMP as a guide, investigate mitigation options for the exposure identified above and include that in the final application.

This fully completed Coastal Hazard Application Guidance worksheet must accompany the application. If you are a design or engineering professional, please print and sign here that you have discussed the findings of this worksheet with the Owner.

DESIGN/ENGINEER SIGNATURE: _____ **DATE:** 2/22/22

OWNER'S SIGNATURE: _____ **DATE:** 3/15/22

QUONSET
DEVELOPMENT CORPORATION

March 16, 2022

Mr. Jeffrey Willis
Executive Director
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

Re: File Number: B2021-03-090
Site Address: Thompson Road, North Kingstown; Plat; 192 Lots: 1,2,8
Owner: RI Commerce Corporation
Proj. Desc: ***Commercial Development – Resubmission of Material for Revised Layout***

Dear Mr. Willis,

Enclosed please find our revised *Assent Application* for Port Laydown Area, now called the Quonset Multi-Modal Offshore Wind Transport and Training Center (QMTC) off Thompson Road in the area of the Quonset Business Park known as "Davisville Waterfront".

After receipt of the letter from your office dated July 23, 2021, which cited concerns regarding rare and threatened species near the site, the creation of berms, and the amount of impervious surface, QDC began reassessing the potential layout and use of this site. Simultaneously, the State of Rhode Island began discussions regarding submitting a grant application to the U.S. Economic Development Administration to bolster the State's "blue economy," including support of the offshore wind industry. QDC realized that this site's location, directly between and adjacent to the Port of Davisville and the Quonset State Airport, presents a unique opportunity to create a first-of-its-kind transportation hub for the offshore wind industry, which would combine marine and aviation transportation at a single site. This revised application seeks an assent for the full QMTC facility and site improvements, as previously discussed with CRMC staff.

This revised application addresses the concerns cited in CRMC's letter in the following ways:

- **Rare and threatened species:** The rare and threatened species are located to the northeast of our site, which is outside both the original and the proposed limits of disturbance. However, to fully address any remaining concerns, this submission has relocated the roadway and the public access way to an improved location. The roadway (Broadway) is proposed to move to the west on Maritime Way. The current road surface and roadbed will be removed and the area regraded so that the two previously separated coastal wetlands, which provide habitat for the threatened species, can merge to create a larger habitat area. The public access will be relocated and expanded further to the south,

farther from the sensitive habitat areas, and will include a path leading the public to the beach but away from the rare and threatened species. Signs and boulders are proposed to discourage the public from entering the area.

- **Berms:** The two berms proposed in the previous submission have been removed, reducing the work within the CRMC buffer and eliminating habitats for natural predators of the threatened species.
- **Impervious Surface:** The amount of impervious area has been reduced by approximately 2.7 acres in this resubmission. The site has been redesigned to include defined parking areas with grassed islands, and includes a large portion of grass area adjacent to the proposed building.

QDC's has calculated a required fee of approximately $125,250.00 based on CRMC's fee schedule and the total estimated project cost of $30,000,000. Pursuant to past practice, QDC requests that this fee be waived.

Your cooperation in this matter is greatly appreciated.

Sincerely,
Quonset Development Corporation

Steven J. King, P.E.
Managing Director

xc: File

Quonset Development Corporation
North Kingstown RI

Executive Summary

The site is located within the Quonset Business Park (QBP) in North Kingstown Rhode Island. The site is currently an industrial use and is proposed as an industrial use. The site is owned by the Quonset Development Corporation (QDC).

The Quonset Business Park is a 3,160-acre property at the site of the former Naval Air Station Quonset Point. QBP is one of the largest business parks in the State of Rhode Island and has been focused on redevelopment since the property was put under the authority of the QDC. QBP is unique in that it has the ability to offer prospective buyers a location that is serviced by an existing roadway and utility infrastructure system, railroad connection to the northeast corridor, highway access directly into the Park, deepwater access, and airport access.

Previously, the site was occupied by the former Navy Air Station at Quonset Point and the Davisville Naval Construction Battalion Center. The base was created in 1941 and served as the major northeastern naval base during World War II. The Navy Air Station was decommissioned in June 1974. The Naval Construction Battalion Center was decommissioned in 1994.

The site has been designed using the 2015 Rhode Island Stormwater Design and Installation Manual (RISDSIM) and has been designed to maximize the water quality treatment. The proposed development of this and other parcels within the QBP, using the new regulations, will significantly increase water quality treatment throughout the Quonset Business Park. Some runoff from this development will be directed towards freshwater wetlands after treatment is provided through the use of sediment forebays and infiltration ponds. The majority of runoff from proposed impervious areas will be captured in a closed pipe network and directed towards an underground infiltration system after pre-treatment is provided by a proprietary separator.

As part of the proposed development, access to the site will include a new roadway that will cross the existing wetland area to the north of the site. A 12' x 5' arch culvert is proposed to span an existing stream that has been delineated by DiPrete Engineering. The existing roadway, Broadway, will be removed and regraded during construction. There are currently two culverts underneath Broadway that hydraulically connect the wetland area to Narragansett Bay that will be removed in the decommissioning of the road to allow open channel flow between the shrub swamp wetland and the tidal wetland. Disturbed areas within the wetlands shall be replanted with native wetland cultivars.

In conclusion, there will be impacts to nearby wetlands from the proposed project and there is direct alteration to the shrub swamp wetland proposed. The proposed project will improve water quality and remove hydraulic restrictions within the wetland area.

Quonset Development Corporation
North Kingstown RI

RI CRMC Rule 2.9(B)(d): Avoidance and Minimization Requirements

Avoidance

1. **(AA) Whether the primary proposed activity is water-dependent, or if it requires access to freshwater wetlands as a central element of its primary purpose:**

   The project requires access to the wetland area, as a new access road is proposed that will have a wetland crossing. A 12' x 5' arch culvert is proposed over a stream within the wetland area as part of the construction of this access road. An existing road (Broadway) is proposed to be removed as part of the site improvements. This road will have its top layer and base course removed, and sections of its current footprint will be regraded to allow for an improved hydraulic connection between the shrub swamp wetland and the tidal wetland on either side of the roadway. To further facilitate the improvement of this hydraulic connection, two existing culverts underneath Broadway are proposed to be removed to allow for open channel flow between the two wetland areas to create one continuous wetland area. Disturbed areas within the wetland are proposed to be replanted with native wetland cultivars.

2. **(BB) Whether there are any areas within the same property or other properties owned or controlled by the applicant could be used to achieve the same project purpose without altering the natural character of any freshwater wetlands:**

   Broadway provides access to the site from Maritime Way. Although Broadway is already an existing road to the site, it is within the CRMC buffer and is currently unsuitable for the proposed site use. The proposed access roadway will be designed to handle traffic from larger vehicles and has been designed to allow for unrestricted hydraulic flow to continue within the shrub swamp wetland.

3. **(CC) Whether any other properties reasonably available to, but not currently owned or controlled by the applicant could be used to achieve the project purpose while avoiding wetland alterations. A property is reasonably available if, in whole or in part, it can be acquired without excessive cost, taking individual circumstances into account, or, in the case of property owned or controlled by the same family, entity, group of affiliated entities, or local, state or federal government, may be obtained without excessive hardship:**

The project proposes a helipad area with direct access to Quonset State Airport. There are no other properties reasonably available, but not currently owned or controlled by the applicant, that could be used to achieve the project purpose.

4. **(DD) Whether alternative designs, layouts, or technologies could be used to avoid freshwater wetlands or impacts on wetland functions and values on the subject property or reasonably available properties which would achieve the same project purpose, and whether these design alternatives are feasible:**

   There are no alternative designs, layouts, or technologies that could be used to avoid freshwater wetlands or impacts on wetland functions and values on the subject property or reasonably available properties which would achieve the same project purpose. The project is designed to meet all best management practices to minimize the alteration of the freshwater wetlands. Best management practices address the requirements and recommendations of the Rhode Island Stormwater Design and Installation Manual and the Rhode Island Soil Erosion and Sediment Control Handbook. Work is proposed within the fifty foot perimeter wetlands and all disturbed areas are to be replanted with native wetland cultivars.

5. **(EE) Whether the applicant has made any attempts (and if so what they were) to avoid alterations to freshwater wetlands by overcoming or removing constraints imposed by zoning, infrastructure, parcel size or the like:**

   There are no zoning, infrastructure, parcel size or other contracts that could be overcome or removed.

6. **(FF) Whether the feasible alternatives that would not alter the natural character of any freshwater wetlands on the subject property or on the property that is reasonably available, if incorporated in the proposed project would adversely affect public health, safety or the environment:**

   There are not feasible alternatives that would not alter the natural character of any freshwater wetlands on the subject property or on a property that is reasonably available.

Minimization

1. **(AA) Whether the proposed project is necessary at the proposed scale or whether the scale of the wetland alteration could be reduced and still achieve the project purpose:**

   The proposed project is necessary at the proposed scale. The scale of the alteration could not be reduced and still achieve the same primary project purpose. The proposed design includes two sediment forebays and two water quality infiltration basins to treat stormwater runoff prior to discharge to the freshwater wetlands. The majority of runoff from proposed impervious areas will be directed to an underground infiltration system with a proposed overflow to Narragansett Bay. The infiltration ponds have been designed to infiltrate as much runoff as possible to minimize runoff to the freshwater wetland.

2. **(BB) Whether the proposed project is necessary at the proposed location or whether another location within the site could achieve the project purpose while resulting in less impact to the wetland:**

   The project proposes a helipad area with direct access to Quonset State Airport. Therefore, the project is necessary at the proposed location and there are no other locations on site that could achieve the project purpose. The existing site is within an industrial business park and is consistent with surrounding uses.

3. **(CC) Whether there are feasible alternative designs, layouts, densities, or technologies, that would result in less impact to the wetland while still achieving the project purpose:**

   The existing road, Broadway, is not suitable to use as an access road for the project. There are no alternative designs, layouts, or technologies that could be used to avoid freshwater wetlands or impacts on wetland functions and values on the subject property or reasonably available properties which would achieve the same project purpose and which are feasible.

4. **(DD) Whether reduction in the scale or relocation of the proposed project to minimize impact to the wetland would result in adverse consequences to public health, safety or the environment:**

   The scale of the project has been reduced to the maximum extent possible. A reduction in project scale is not necessary because there are no impacts to public health and safety and/or the environment.