State of Rhode Island
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

FILE COPY

APPLICATION FOR STATE ASSENT

To perform work regulated by the provisions of Chapter 279 of the Public Laws of 1971 Amended.

PTSID # 2602V Project Location Pond Bridge Rd. (No. Street) Tiverton (City/Town)	File No. (CRMC USE ONLY) 2023-10-090
Owner's Name Alisa Diaz Richardson	Plat: N/A - ROW Lot(s):
Mailing Address 360 Lincoln Avenue City/Town Warwick State RI Zip Code 02888	Contact No.: 401-479-1327 Email Address: alisa.richardson@dot.ri.gov
Contractor RI Reg. # TBD Address	Email address: Tel. No.
Designer Pare Corporation Address 8 Blackstone Valley Place, Lincoln, RI 02865	Tel. No. 401-334-4100
Name of Waterway Almy Creek, Nonquit Pond	Estimated Project Cost (EPC): N/A Application Fee: waiver requested

Describe accurately the work proposed. (Use additional sheets of paper if necessary and attach this form.)
Bridge #292 will be removed and replaced by a new bridge comprised of a NEXT D prestressed concrete beam superstructure with bituminous wearing surface, concrete abutments, and steelmicropiles drilled into bedrock. The proposed bridge will be widened by 8.5 feet (out to out) to address current safety hazards for pedestrians and emergency vehicles. Proposed abutments will be located behind the existing abutments, which will be cut down and the lower portion to remain as scour protection. In-water work is limited to control of water and dewatering around the substructure during demolition and repairs. A small area of unvegetated salt marsh (approx. 10 square feet) will be temporarily impacted during dewatering, however saltmarsh plantings are proposed within the area to mitigate for temporary impacts. Additional description of the proposed work is included in the Project Narrative (Section 3).

Have you or any previous owner filed an application for and/or received an assent for any activity on this property?
(If so please provide the file and/or assent numbers): No

Is this site within a designated historic district? ☐ YES ■ NO

Is this application being submitted in response to a coastal violation? ☐ YES ■ NO

If YES, you must indicate NOV or C&D Number: _____

Name/mailing addresses of adjacent property owners whose property adjoins the project site. Accurate mailing addresses will insure proper notification. _____Applicant must initial to certify accuracy of adjacent property owners and accuracy of mailing addresses.
See Attachment A

STORMTOOLS (Http://www.beachsamp.org/resources/stormtools/) is a planning tool to help applicants evaluate the impacts of sea level rise and storm surge on their projects. The Council encourages applicants to use STORMTOOLS to help them understand the risk that may be present at their site and make appropriate adjustments to the project design.

NOTE: The applicant acknowledges by evidence of their signature that they have reviewed the Rhode Island Coastal Resources Management Program, and have, where possible, adhered to the policies and standards of the program. Where variances or special exceptions are requested by the applicant, the applicant will be prepared to meet and present testimony on the criteria and burdens of proof for each of these relief provisions. The applicant also acknowledges by evidence of their signature that to the best of their knowledge the information contained in the application is true and valid. If the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then the permit granted under this application may be found to be null and void. Applicant requires that as a condition to the granting of this assent, members of the CRMC or its staff shall have access to the applicant's property to make on-site inspections to insure compliance with the assent. This application is made under oath and subject to the penalties of perjury. 08/04

OCT 19 2023

Alisa Diaz Richardson Digitally signed by Alisa Diaz Richardson Date: 2023.10.12 10:30:50 -04'00'

Owner's Signature (sign and print)

PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

/ajt/lat

11/2019

STATEMENT OF DISCLOSURE AND APPLICANT AGREEMENT AS TO FEES

The fees which must be submitted to the Coastal Resources Management Council are based upon representations made to the Coastal Resources Management Council by the applicant. If after submission of this fee the Coastal Resources Management Council determines that an error has been made either in the applicant's submission or in determining the fee to be paid, the applicant understands that additional fees may be assessed by the Coastal Resources Management Council. These fees must be paid prior to the issuance of any assent by the Coastal Resources Management Council.

The applicant understands the above conditions and agrees to comply with them.

Alisa Diaz Richardson

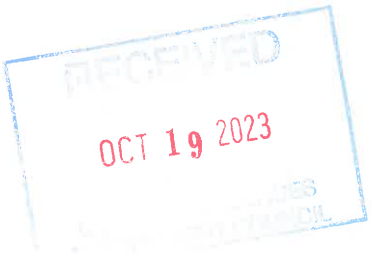
Digitally signed by Alisa Diaz Richardson
Date: 2023.10.12 10:31:03 -04'00'

Signature

Date

Alisa Diaz Richardson, P.E. RIDOT, 360 Lincoln Avenue, Warwick, RI 02888

Print Name and Mailing Address



/ajt 11/2019

Rhode Island Coastal Resources Management Council

APPLICATION FOR STATE ASSENT

Pare Project No. 20085.01

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292
Tiverton, RI

Prepared for:

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

OCTOBER 2023

PARE CORPORATION
ENGINEERS SCIENTISTS PLANNERS

PARE CORPORATION

October 19, 2023

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

Re: **Application for State Assent**
Rhode Island Department of Transportation
Replacement of Nonquit Pond Bridge No. 292
Tiverton, RI
(Pare Project No. 20085.01)

Dear Mr. Willis:

Attached is a CRMC Application for State Assent submitted on behalf of the Rhode Island Department of Transportation (RIDOT) for the proposed replacement of Nonquit Pond Bridge No. 292 in Tiverton, Rhode Island. The project includes work within coastal resource areas under the jurisdiction of the Rhode Island Coastal Resources Management Council (CRMC) Coastal Resources Management Program (CRMP) and Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (the FWWIVC regulations). Coastal resource areas include Shoreline Features, the 200-foot Contiguous Area to Shoreline Features, Coastal Wetlands, and Tidal Waters. Resource areas governed by the FWWIVC regulations include Pond, Forested Wetlands, Areas Subject to Storm Flowage, and 100-year Floodplain. Enclosed for your review are four (4) bound copies of application materials consisting of the following:

- A completed CRMC Application for State Assent form and other administrative documentation; Figures; a Project Narrative Description; Annotated photographs of the project area; Wetland Delineation Documentation; Draft Categorical Exclusion Checklist; RIDOT Stormwater Management Plan Checklist; RIDOT Small Site Stormwater Pollution Prevention Plan; and
- Full-size sets of project plans, entitled "Replacement of Nonquit Pond Bridge No. 292" prepared by Pare Corporation, dated September 2023 (bound separately).

RIDOT, as the applicant, is proposing to replace the existing Nonquit Pond Bridge superstructure over Almy Creek (Bridge No. 292) and partially remove the upper portions of the abutments and wingwalls. The bridge will be widened by 8.5 feet to improve bicycle and pedestrian safety.

The applicant is a state entity and the project will result in a significant public benefit, and therefore a waiver of the customary filing fee is requested in accordance with CRMC Management Procedures Section 1.4.2(D).

Although no new permanent impacts within coastal features other than manmade shoreline (bridge components) are proposed, the work area falls within the 200-foot Contiguous Area to Shoreline Features,

Buffer Zone and Jurisdictional Area to FWWIVC, and the 100-year Floodplain. No changes in grades are proposed that would result in a loss of floodplain, and disturbed native vegetation will be restored. Therefore, RIDOT is requesting that CRMC grant an Assent for the work to proceed as proposed.

The project is anticipated to qualify for coverage under the US Army Corps of Engineers General Permits for Rhode Island as a Pre-Construction Notification activity, and the Statewide Programmatic Water Quality Certification.

Thank you very much for your consideration. Please direct all future correspondence regarding this submittal to Jon Fontana, RIDOT Project Manager (jon.fontana@dot.ri.gov 401-563-4211).

Sincerely,

Erika Klinkhammer
Senior Environmental Scientist

EK/

Enclosures

cc: Army Corps of Engineers, New England District Office (via electronic copy)
RIDOT c/o Jon Fontana, Project Manager (via electronic copy)

Z:\JOBS\20 Jobs\20085.01 RIDOT Nonquit Pond Bridge No. 292\Permitting\CRMC\Cover Letter Updated.docx

TABLE OF CONTENTS

Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 1

ADMINISTRATIVE DOCUMENTATION

Attachment A - List of Abutters

Application for State Assent

Nonquit Pond Bridge No. 292

Map/Lot	Address	Owner	Owner Mailing Address
808/102	145 Pond Bridge Rd Tiverton, RI 02878	City of Newport Dept of Water	70 Halsey St Newport, RI 02840
807/148	4461 Main Rd Tiverton, RI 02878	Richard David Hart	4461 Main Rd Tiverton, RI 02878
807/151	0 Fogland Rd Tiverton, RI 02878	Ferolbink Farms Inc. C/O Jason Peckham	993 Puncateest Neck Rd Tiverton, RI 02878

Tax Assessor's Office
Ownership Verification Request

DATE: January 5, 2021

To Whom It May Concern:

According to our current Tax Assessment Records, the following ownership information is being provided per your request:

City of Newport - Dept. of Water, of 70 Halsey Street, Newport, RI 02840 own(s) the following real estate in Tiverton, Rhode Island:

Address**: 145 Pond Bridge Road**

Parcel Identification Number: Plat: **808** Lot: **102**
You may contact us at the number below should you have any further questions.

David Robert, RICA
Tiverton Tax Assessor

By: Judy V. Rogers
Judy V. Rogers, Senior Clerk

E-mail: assessor@tiverton.ri.gov

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Tax Assessor's Office

Ownership Verification Request

DATE: January 5, 2021

To Whom It May Concern:

According to our current Tax Assessment Records, the following ownership information is being provided per your request:

Richard David Hart, of 4461 Main Road, Tiverton, RI 02878 own(s) the following real estate in Tiverton, Rhode Island:

Address: **4461 Main Road**

Parcel Identification Number: Plat: **807** Lot: **148**
You may contact us at the number below should you have any further questions.

David Robert, RICA
Tiverton Tax Assessor

By: Judy V. Rogers
Judy V. Rogers, Senior Clerk

E-mail: assessor@tiverton.ri.gov

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Tax Assessor's Office
Ownership Verification Request

DATE: January 5, 2021

To Whom It May Concern:

According to our current Tax Assessment Records, the following ownership information is being provided per your request:

Ferolbink Farms Inc. C/O Jason Peckham, of 993 Puncateest Neck Road, Tiverton, RI 02878 own(s) the following real estate in Tiverton, Rhode Island:

Address**: 0 Fogland Road**

Parcel Identification Number: Plat: **807** Lot: **151**
You may contact us at the number below should you have any further questions.

David Robert, RICA
Tiverton Tax Assessor

By: Judy V. Rogers
Judy V. Rogers, Senior Clerk

E-mail: assessor@tiverton.ri.gov

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CRMC File Number:

RI CRMC COASTAL HAZARD APPLICATION WORKSHEET

APPLICANT NAME: Rhode Island Department of Transportation

PROJECT SITE ADDRESS: Pond Bridge Road

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 _____ ft

OR

LHSM elevation 4.48 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: 100 yrs

☐ C. Add the number of years you identified in 1B to the current year. (For example, if you are completing this form in the year 2020, and you want your project to last 30 years, your design life year will be 2050.)

Design Life Year: 2121

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

Year	2020	2030	2040	2050	2060	2070	2080	2090	2100
SLR	1.05	1.67	2.33	3.25	4.20	5.35	6.69	8.14	9.61
	○	○	○	○	○	○	○	○	◉

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 up to the closest of these sea level rise (SLR) numbers: 1ft, 2ft, 3ft, 5ft, 7ft, 10ft, or 12ft

10 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.

Pond Bridge Road (east and west of bridge), Main Rd. (Rt. 77) at Pachet Brook crossing

***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.*

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STEP 3. STORMTOOLS DESIGN ELEVATION (SDE)

☐ A. Based on the project location, CHECK the SDE Viewer for your site, and open the corresponding tab in Mapping Tool:

○ **South Coast SDE Viewer: Napatree to Pt. Judith** ◉ **Narragansett Bay SDE Viewer: North and East of Pt. Judith**

☐ B. 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

☐ C. Click on the map at project site to identify **STORMTOOLS Design Elevation (SDE)** from the pop up box. **Enter the SDE value:** 25.4- 28.4 ft

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.

Transect Number: 3994
Erosion Rate: 0.07 **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 1C	Projected Future Erosion Multiplier, STEP 4B	Erosion Setback (ft) 4A x 1C x 4B
0.07	X 100	X 2.00	= 14

*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**

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COASTAL RESOURCES MANAGEMENT COUNCIL

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: [signature] **DATE:** 9/12/2023

OWNER'S SIGNATURE: [signature] **DATE:** 10/17/2023

Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 2

FIGURES

RIGIS

OCT 19 2023

SITE LOCATION M

SCALE:1"=2,000'

N
W E
S

8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

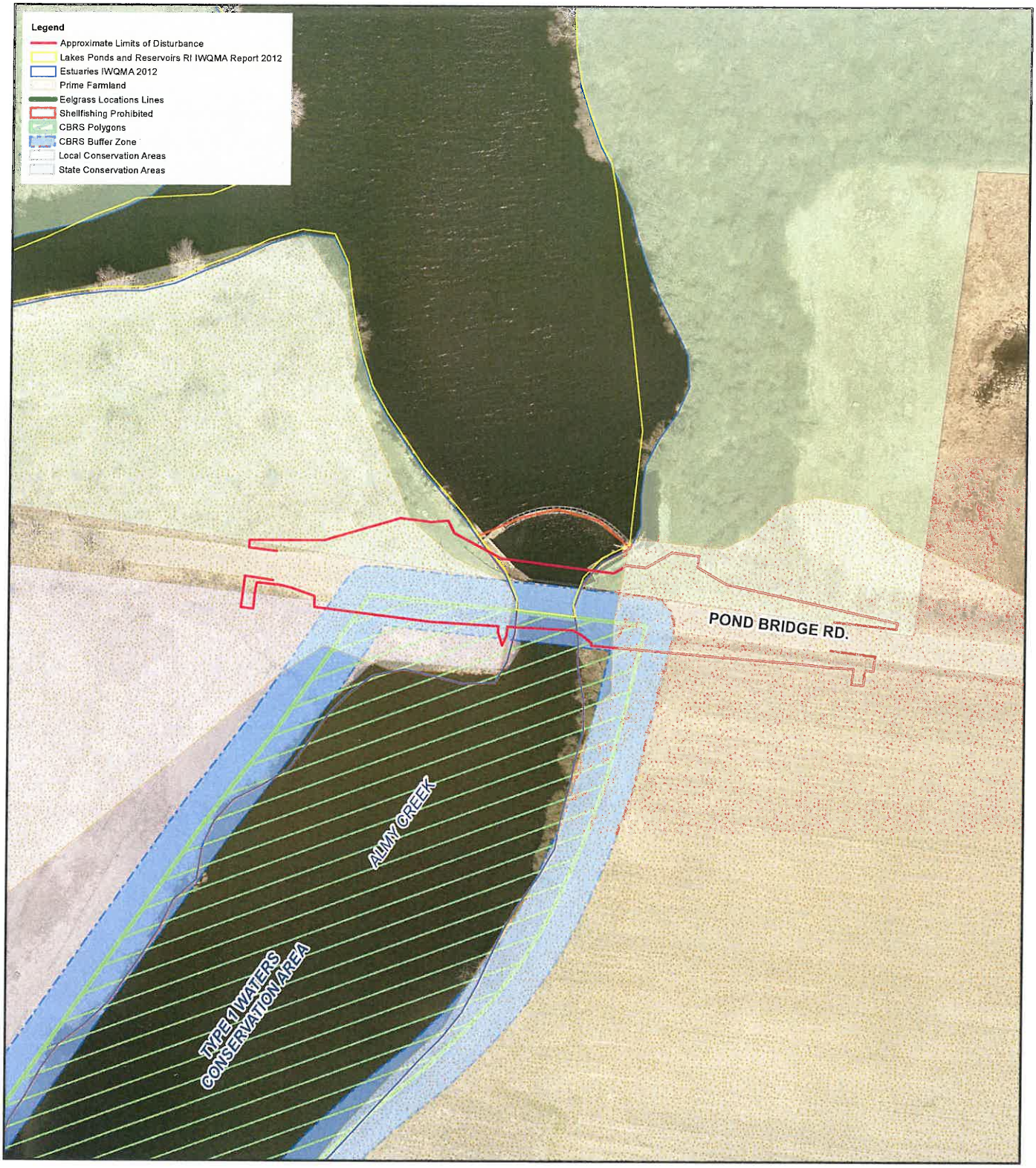
10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

PARE PROJECT No. 20085.01

AUGUST 2023

FIGURE 1

NONQUIT POND BRIDGE NO, 292
TIVERTON, RI



RIGIS

ANNOTATED AERIAL PHOTOGRAPH

SCALE:1"= 200'

N
W E
S

OCT 19 2023

8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

PARE PROJECT No. 20085.01

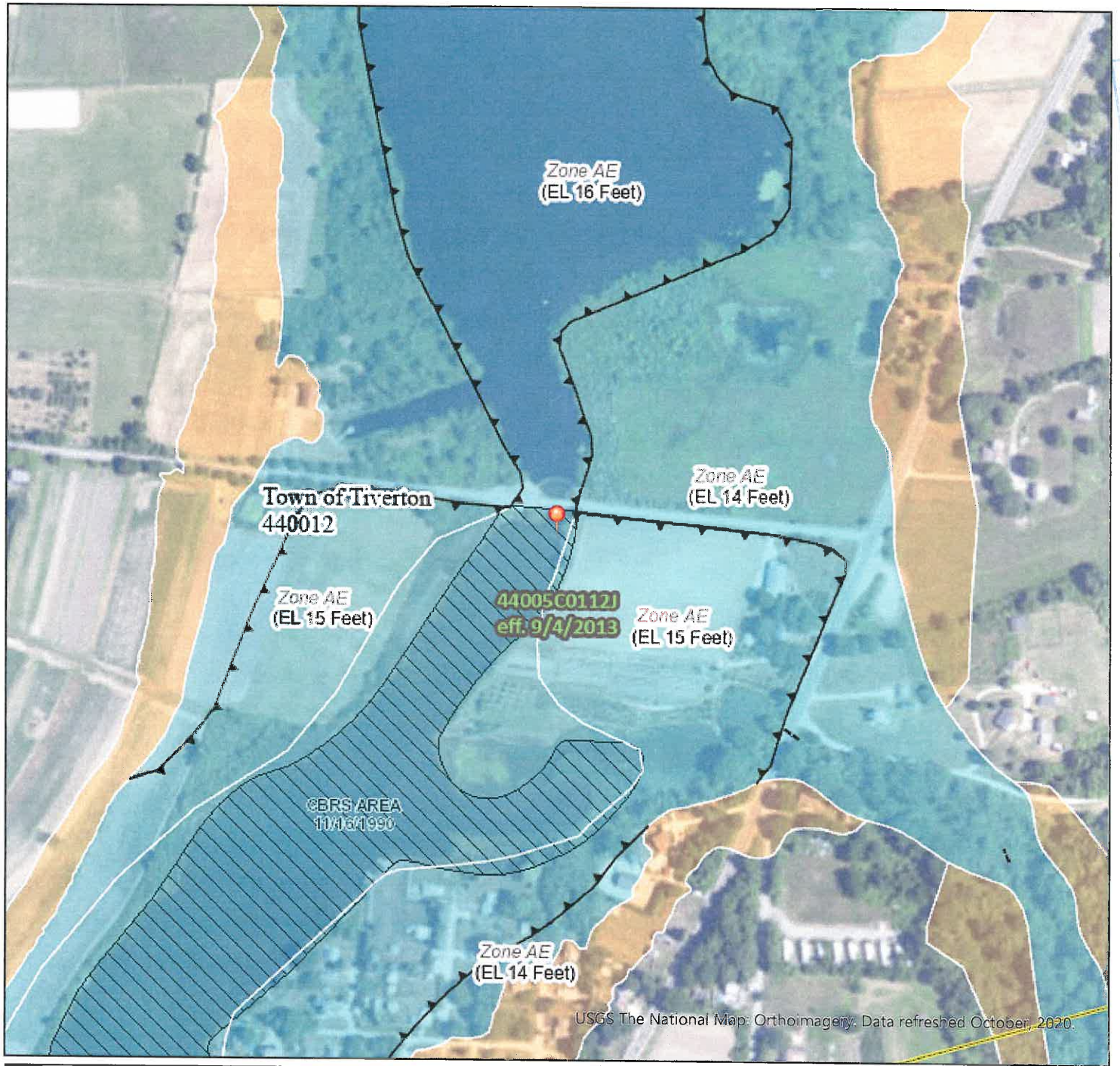
AUGUST 2023

FIGURE 2

NONQUIT POND BRIDGE NO. 292
TIVERTON, RI

National Flood Hazard Layer FIRMette

71°12'8"W 41°33'25"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

71°11'30"W 41°32'58"N

FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile Zone
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OCT 19 2023

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/21/2020 at 10:20 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

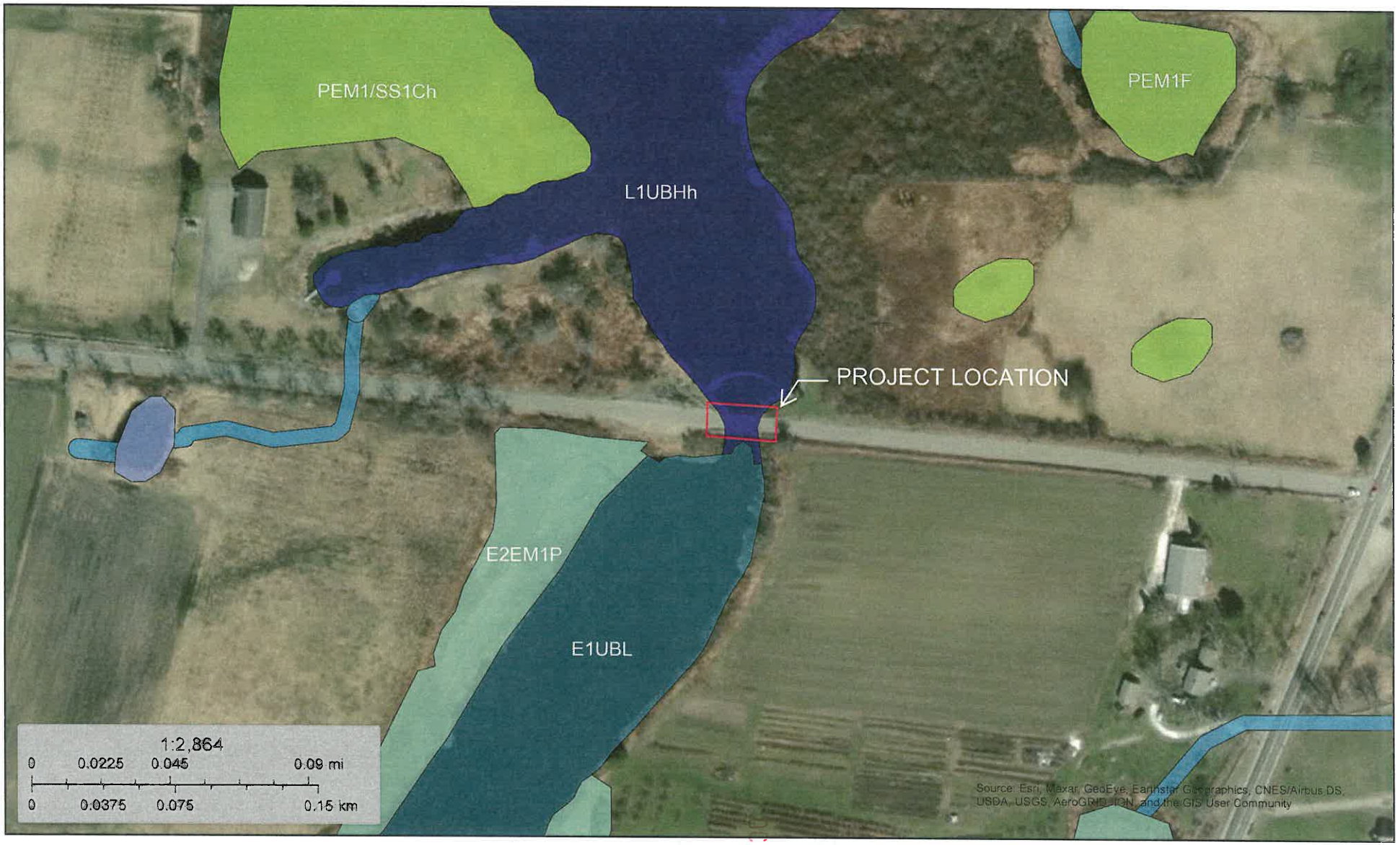
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

FIGURE 3

U.S. Fish and Wildlife Service

National Wetlands Inventory

Nonquit Pond Bridge No. 292



January 8, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

FIGURE 4

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Map Scale: 1:1,180 if printed on A landscape (11" x 8.5") sheet.

N

0 15 30 60 90 Meters

0 50 100 200 300 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties
Survey Area Data: Version 20, Jun 9, 2020

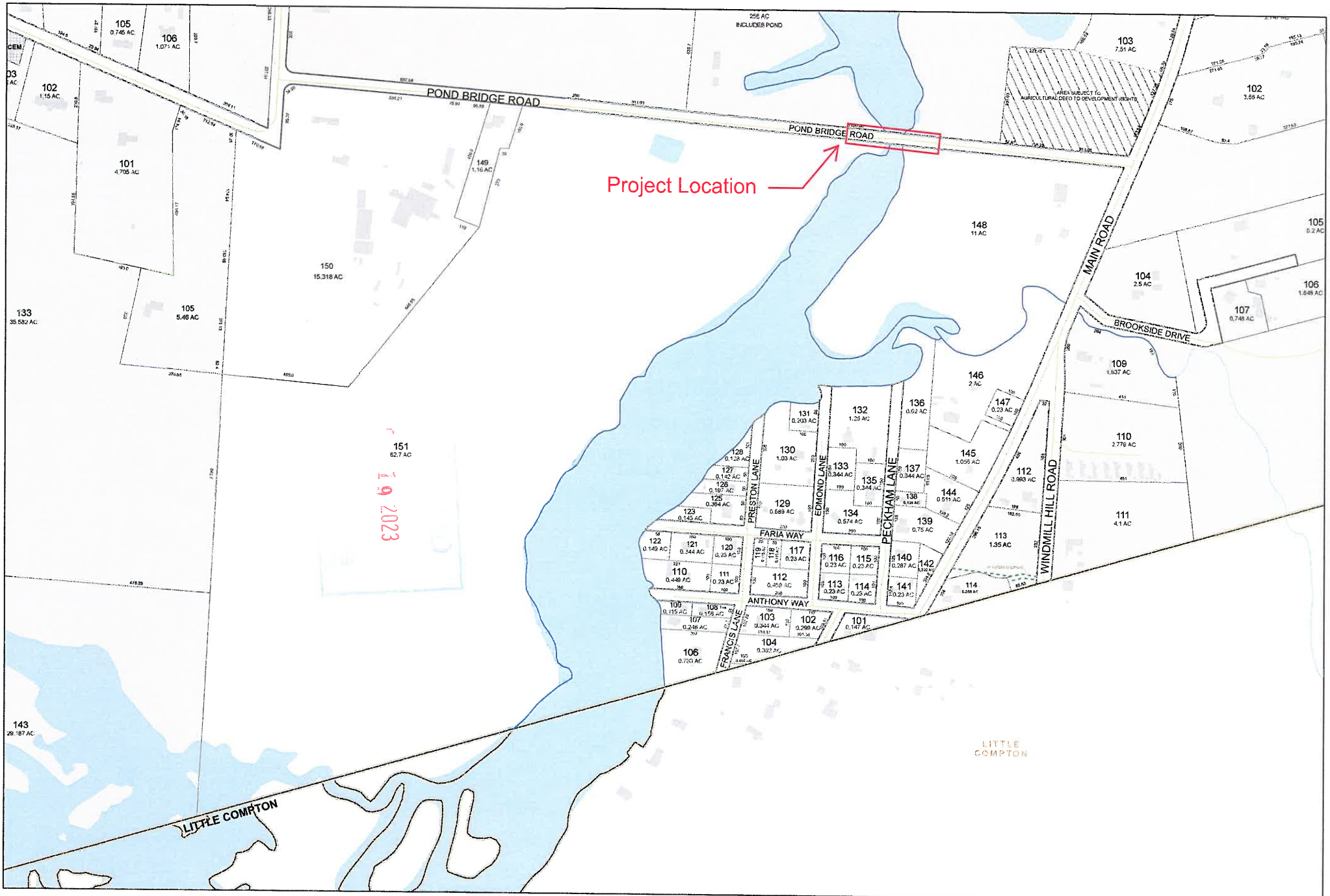
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 6, 2015—Sep 12, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ma	Mansfield mucky silt loam	0.5	13.2%
NeA	Newport silt loam, 0 to 3 percent slopes	0.8	23.3%
PmA	Pittstown silt loam, 0 to 3 percent slopes	1.2	35.1%
Se	Stissing silt loam	0.3	9.1%
W	Water	0.5	13.8%
Ws	Water, saline	0.2	5.5%
Totals for Area of Interest		**3.4**	**100.0%**



MainStreetMaps
by MainStreetGIS, LLC
www.mainstreetgis.com

Online mapping and property information available at:
www.mainstreetmaps.com/ri/tiverton

This map is for assessment purposes only and is not valid for legal description or conveyance.

Parcel mapping is current through 12/31/2020
Publication date: 5/12/2021

Data sources: RIGIS, E911, MassGIS, Town of Tiverton

0 125 250 500 Feet
1 inch = 200 feet
(when printed at 24" x 18")

N

Assessor's Plat Map
TOWN OF TIVERTON
Rhode Island
Prepared by MainStreetGIS, LLC

- Parcel Boundary
- Water Feature
- Private Right-of-Way
- Right-of-Way
- Town Boundary
- Easement
- Streets (E911/RIGIS 2017)
- Stream
- Water Body
- Building
- Cemetery
- Development Rights
- Condo / Other Parcel
- Tower

Locus Map

Index to Adjoining Plats

Plat
807

5/12/2021 Sheet 119 of 142

FIGURE 6-1

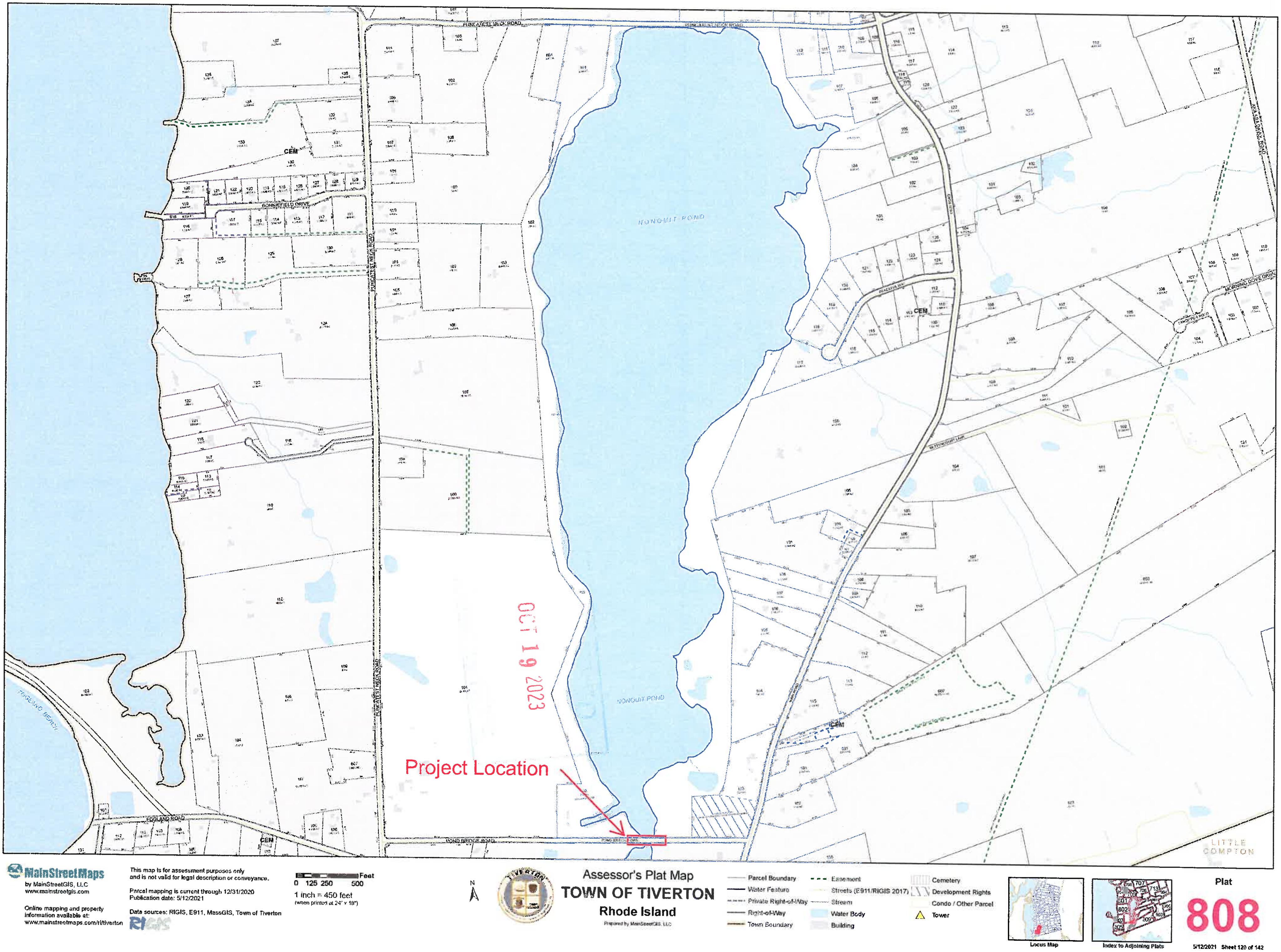

Project Location
OCT 19 2023
NONQUIT POND
PUNCATEST NECK ROAD
POND BRIDGE ROAD
FOGLAND ROAD
BONNIEFIELD DRIVE
MORNING DOVE DRIVE
FOGLAND BEACH
CEM
LITTLE COMPTON
MainStreetMaps
by MainStreetGIS, LLC
www.mainstreetgis.com
Online mapping and property information available at:
www.mainstreetmaps.com/ri/tiverton
This map is for assessment purposes only and is not valid for legal description or conveyance.
Parcel mapping is current through 12/31/2020
Publication date: 5/12/2021
Data sources: RIGIS, E911, MassGIS, Town of Tiverton
Feet
0 125 250 500
1 inch = 450 feet
(when printed at 24" x 18")
N
Assessor's Plat Map
TOWN OF TIVERTON
Rhode Island
Prepared by MainStreetGIS, LLC
Parcel Boundary
Water Feature
Private Right-of-Way
Right-of-Way
Town Boundary
Easement
Streets (E911/RIGIS 2017)
Stream
Water Body
Building
Cemetery
Development Rights
Condo / Other Parcel
Tower
Locus Map
Index to Adjoining Plats
Plat
808
5/12/2021 Sheet 120 of 142

FIGURE 6-2

Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 3

PROJECT NARRATIVE DESCRIPTION

I. Introduction

This Supporting Documentation has been prepared on behalf of the Rhode Island Department of Transportation (RIDOT) to supplement an Application for State Assent for the proposed replacement of Nonquit Pond Bridge No. 292 in Tiverton, RI. The project is located within the Pond Bridge Road Right-of-Way which crosses over Almy Creek immediately downstream of Nonquit Pond Dam. Almy Creek is a tidal river designated as a Type 1 Water (Conservation Areas) according to the Coastal Resources Management Program (CRMP). The project includes removal and replacement of the existing bridge superstructure, partial removal of the substructure, minor widening of the Pond Bridge Road approaches, and habitat restoration within a small area of saltmarsh to be temporarily disturbed by the proposed work.

The purpose of the project is to replace structurally deficient infrastructure with a bridge that meets current loading and safety standards. The proposed design is intended to accomplish the project goal while minimizing impacts to the surrounding environment to the maximum extent practicable. In addition to a Coastal Resources Management Council (CRMC) Assent, the project is anticipated to require coverage under the U.S. Army Corps of Engineers (USACE) General Permits (GPs) for Rhode Island as a Pre-Construction Notification (PCN), and a Rhode Island Department of Environmental Management (RIDEM) Water Quality Certification. RIDEM has issued a statewide WQC (WQC# 17-019) for projects covered under the GPs and therefore no individual WQC application is required. The project is anticipated to qualify as a NEPA Categorical Exclusion for RIDOT certification without separate FHWA review. A RIDOT Small Site Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the project. Disturbance is less than 1 acre therefore coverage under the RIPDES program is not required.

II. Existing Conditions

2.1 Nonquit Pond Bridge No. 292 and Roadway

Nonquit Pond Bridge carries Pond Bridge Road over Almy Creek. The bridge was built in 1939 by the Town of Tiverton using Works Progress Administration (WPA) funds to replace an existing structure that was washed out by the Hurricane of 1938, and has not been reconstructed since. The construction plans for the bridge are unavailable, however the following information about the structure is taken from Inspection and Load Rating Reports. The existing bridge is a single-span concrete-encased steel beam bridge with a concrete deck supported on concrete abutments. The bridge superstructure has a span of 35'-2"± and an out-to-out width of 22'-6"±. The superstructure consists of concrete encased steel stringers supporting a concrete deck with a bituminous wearing surface. The Nonquit Pond Bridge travel way measures 20 feet curb-to-curb and carries one lane of traffic in each direction. Concrete bridge parapets are present on both sides of the bridge. No sidewalks or bike lanes are currently present along the bridge roadway and the narrow width of the current bridge prevents the addition of these features. The existing bridge geometry is as follows:

Structure Information:

Bridge Number:	029201
Location:	Tiverton, Rhode Island
Route Carried:	Pond Bridge Road
Feature Intersected:	Nonquit Pond
Year Built:	1939
Dates of Rehabilitation:	None
Superstructure Type:	Concrete encased rolled steel beams
Substructure Type:	Reinforced concrete abutments (foundation unknown)
Number of Lanes:	2 lanes (1 each direction)
Load Rating/Posting:	9 Tons (2-axle), 13 Tons (3-axle)
Bridge Span Length:	35'-2" ±
Skew:	0± degrees
Bridge Width:	22'-6" ±
Roadway Width:	20'-0" ±
Road Surface:	Bituminous concrete pavement
Curb Height:	No curb present
Shoulder Width:	None
Sidewalk Width:	None
Railing Type:	Reinforced Concrete Parapet
Railing Height:	3'-0" ±
Railing Depth:	1'-0" ±

Utilities:	Overhead wire: National Grid Electric, Verizon, Cox; Unknown Conduit on North Fascia, Buried watermain south of bridge
Surrounding Features:	Nonquit Pond Dam & Fish Ladder, pump station, farmland
Geographical description(s):	Rural, Coastal, Agricultural
Composition of Vehicular Traffic:	Passenger, Agricultural

Pond Bridge Road is a rural local road in the Town of Tiverton. Pond Bridge Road is not part of the National Highway System (NHS). The existing geometric conditions of the approach roadway are as follows:

Number of Lanes:	2 lanes (1 each direction)
Approach Width:	20'-0" ±
Lane Width	10'-0" ±
Usable Shoulder Width:	None
Sidewalk Width:	None
Design Speed:	25 mph
ADT:	500
Truck Percentage:	10%
Sight Distance:	Exceeds minimum requirement
Signalization/Signage:	None

The horizontal and vertical alignments at the approaches are tangent. Steel guardrail is present at all approaches to the bridge.

The bridge is oriented in an east-west direction over the tidal waterway. Ebb tide flows south and flood tide flows north. Surrounding land use in the vicinity of the bridge consists of agricultural farmland to the south and northeast, ruderal grassland/shrub land to the northwest, and wetlands to the north and south.

Based on the RIDOT Bridge Inspection Report dated October 3, 2019 and field observations by Pare, the bridge is in overall Poor condition. The condition ratings of the bridge components are as follows: the bridge deck is rated 4 (Poor), the superstructure is rated 2 (Critical/Intolerable), and the substructure is rated 3 (Serious). The concrete decking exhibits extensive spalling and delamination exposing the reinforcing steel, which has experienced severe section loss. Concrete encasing steel components on the underside of the bridge have been completely spalled away and the exposed beams have heavy laminated rust and section loss. The substructure exhibits cracking, large, delaminated areas, and severe scaling with exposed reinforcing. Efflorescence and staining are present with evidence of bridge joint leakage.

The latest RIDOT Bridge Load Rating Report recommends that the bridge be posted. Calculations that account for the existing bridge condition have resulted in a bridge posting of 9-tons for two axle vehicles and a 13-tons for vehicles with three or more axles. These limits restrict the passage of certain school buses, emergency

vehicles, and trucks. Due to the existing conditions ratings, observed deficiencies, and load rating, the bridge is considered to be structurally deficient and in need of replacement.

2.2 Utilities

Overhead utilities are present over the north portion of the structure. An unknown utility is attached to the north fascia of the bridge. A buried watermain owned by the City of Newport is present along the south shoulder of the road but crosses under the waterway south of the bridge. The property adjacent to the north of the bridge is also owned by the City of Newport, which operates the dam and uses Nonquit Pond as a source for their water distribution system. An existing dry hydrant is located northwest of the bridge at the edge of a gravel turnaround area that is utilized by local fire departments.

2.3 Drainage

Under existing conditions, the roadway has no closed drainage system and sheet flow directs to the low point in the roadway outside of the bridge limits, then flows to either side of the roadway and into roadside drainage trenches or adjacent vegetated road shoulders. Currently there are no stormwater treatment areas in the project area.

2.4 Wetlands

The limits of the shoreline features, coastal wetlands, high tide line, freshwater wetlands, and Areas Subject to Storm Flowage (ASSF) were field delineated by Pare on July 16, 2020. CRMP and Regulations of the Rhode Island CRMC Freshwater Wetlands in the Vicinity of the Coast (the FWWIVC regulations) regulated wetland types in the vicinity of Nonquit Pond Bridge are described briefly below and in greater detail in the Wetland Delineation Report in Section 5.

Almy Creek is a tidally influenced tributary to the Sakonnet River. Nonquit Pond is impounded by the Nonquit Pond Dam, which discharges to the creek immediately upstream of the bridge. The dam demarcates the head of the tide to Almy Creek, and the freshwater Nonquit Pond is a designated drinking water supply for the City of Newport. Waters within Almy Creek are classified under the CRMP as Type 1- Conservation Areas.

The Rhode Island Department of Environmental Management (RIDEM) water quality classification for the Nonquit Pond (Waterbody ID# RI0007035L-08) is Class AA. Class AA waters are designated as a source of public drinking water supply or as tributary waters within a public drinking water supply watershed, for primary and secondary contact recreational activities and for fish and wildlife habitat. According to RIDEM's Clean Water Act Integrated List of Waterbodies – Appendix A 2016 Index of Waterbodies and Category Listing,1 the impairments affecting this waterbody segment are total phosphorus and total organic carbon (TOC). RIDEM has classified Nonquit Pond as a Category 5 waterbody that is not supporting fish and wildlife habitat or public drinking water supply. The waterbody is fully supporting primary and secondary contact recreation, and is not assessed for fish consumption. A TMDL is under development for the phosphorus and TOC impairments and scheduled to be adopted in 2019. The waterbody is a designated Special Resource Protection Water (SRPW) for ecological habitat and drinking water supply.

The RIDEM water quality classification for Almy Creek (Waterbody ID# RI0010031E-01B) is Class SA. Class SA waters have designated uses for swimming, primary and secondary contact recreation, fish and wildlife habitat; shellfishing; and fish consumption. However, it should be noted, the RIGIS data layer for Shellfish Harvest Restrictions shows the area to be prohibited from shellfishing. The waterbody is not listed as being impaired, however is a designated SRPW of the Sakonnet River for recreational and ecological uses including recreation, ecological habitat, federal park, and critical habitat for rare and endangered species.

Two areas of coastal wetlands were identified along the Almy Creek shoreline in the vicinity of the bridge. On the downstream side of the bridge, two areas of salt marsh occupy the intertidal zone on either side of the channel. The eastern saltmarsh perimeter was located by handheld GPS and no flags were hung. This area consists of low saltmarsh between elevations 0.5 and 1.5 of the intertidal zone. The western saltmarsh, defined as wetland flag series SM, begins near the southwest wingwall and borders the base of the bridge and roadway embankment slope. Low saltmarsh ranges between El. 0.75 and 1.5, and high saltmarsh between El. 1.5 and 3.0 at the base of the slope. The western saltmarsh continues to the southwest corresponding to the edge of creek, beyond the limits of the SM series. Upslope of the saltmarsh, a contiguous brackish wetland extends along the coastal bank and roadway shoulder, defined as flag series C, beginning at coastal bank flag R-112=C-1 and continuing west to border the roadway shoulder and agricultural field.

In the vicinity of the bridge, areas of manmade shoreline include bridge support structures and concrete retaining walls corresponding to the dam structure, inclusive of a fish ladder adjacent to the northeast wingwall and dam retaining wall. In all of these manmade shoreline areas, the creek edge transitions immediately to developed upland, with no contiguous wetland communities present upslope of the high tide mark.

Two freshwater wetland complexes occupy the vegetated areas bordering the upstream sides of Nonquit Pond in the vicinity of the bridge. The wetland edges in the vicinity of the project area were delineated in two series (A and B series) to establish the limits of the resource areas and their associated Buffer Zones and Jurisdictional Areas. Based on field reconnaissance and review of published mapping, the areas appear to be part of continuous, interconnected wetland complexes that ultimately border on a majority of the pond to the north. Under the FWWIVC regulations, these areas are classified as Freshwater Wetlands in the Vicinity of the Coast. Wetland A consists of a Shrub Wetland edge closest to the roadway that is contiguous to a larger marsh/wet meadow complex further to the north bordering the pond and the farmed agricultural field. Wetland B consists of a Scrub Shrub Swamp/Marsh complex in the area northwest of the bridge located along the upstream side of the dam embankment and pond edge. The wetland occupies a low-lying area between Nonquit Pond and the bordering City of Newport Water Division property and consists of a marsh interior with shrub wetland edges.

An overgrown vegetated drainage swale, classified under the FWWIVC Regulations as an Area Subject to Storm Flowage (ASSF), was identified along the shoulder of the roadway along the southwest embankment, upslope of the eastern bank bordering Almy Creek, downstream of the bridge. This area appears to convey drainage from the adjacent roadway into the creek, and is defined by flag series ASSF200. Two additional drainage patterns were identified in the vicinity of the bridge. Flag series ASSF defines the centerline of a narrow, eroded drainage pattern leading from the gravel parking area northwest of the bridge to the edge of Nonquit Pond. Flag series ASSF100 defines a worn walking path leading from the gravel parking area

southwest of the bridge down to Almy Creek. Both areas appear to convey drainage from the upland gravel areas to the corresponding waterbodies downslope.

According to the FEMA Flood Insurance Rate Map for Bristol County, Rhode Island (Community Panel 44005C0112J, effective date September 4, 2013), the site is located within the 100-year Floodplain associated with Almy Creek and Nonquit Pond. Nonquit Pond is mapped as Zone AE, subject to wave action, with a base flood elevation of 16 feet. The areas to the northeast and northwest of the bridge, the bridge itself, and the roadway are mapped as Zone AE with a base flood elevation of 14 feet. Almy Creek downstream of the bridge is mapped as a Coastal Barrier Resource Area (D02) System Unit under jurisdiction of the USFWS. The Almy Creek channel is mapped as a Zone AE, coastal flood zone subject to wave action, with a base flood elevation of 16 feet. The area downstream of the bridge is mapped as Zone AE, coastal flood zone subject to wave action, with a base flood elevation of 15 feet.

2.5 Threatened and Endangered Species

USFWS Section 7 Endangered Species Act

According to the U.S. Fish and Wildlife Service's Information for Planning and Conservation (IPaC) online mapping tool, the Northern Long-Eared Bat (*Myotis septentrionalis*) is the only federally-listed threatened species on the species list for the project area (see attached IPaC Official Species List in Section 6). However, no critical habitat for the Bat has been established within the project area. The project involves the demolition of the bridge superstructure and removal of one tree adjacent to the bridge's southwest abutment, therefore the project was evaluated for potential impacts to threatened or endangered species through the IPaC process as the Project "may affect, but is not likely to adversely affect (NLAA)" the northern long -eared bat. The effect determination was submitted on January 25, 2021 to the U.S. Fish and Wildlife Service under the FHWA Programmatic Biological Opinion (PBO) for Transportation Projects within the Range of the NLEB (presented in Section 6). The Service did not notify the lead Federal action agency or designated non-federal representative within 14 days, and therefore the project may proceed with the Proposed Action under the terms of the Not Likely to Adversely Affect (NLAA) concurrence provided in the PBO as of February 8, 2021. The following avoidance and minimization measures (AMMs) given under the terms of the NLAA concurrence provided in the PBO will be included in the contract documents:

General AMM 1: The project will ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures.

Tree Removal AMM 1: All phases/aspects of the project (e.g., temporary work areas, alignments) will be modified, to the extent practicable, to avoid tree removal in excess of what is required to implement the project safely.

Tree Removal AMM 2: Time of year restrictions will be applied for tree removal when bats are not likely to be present (inactive season November 1st-March 31st).

Tree Removal AMM 3: Tree removal will be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

Tree Removal AMM 4: The project will avoid cutting down/removal of all (1) documented Indiana bat or NLEB roosts (that are still suitable for roosting), (2) trees within 0.25 miles of roosts, and (3) documented foraging habitat any time of year.

NOAA NMFS Section 7 Endangered Species Act – Essential Fish Habitat

The data inquiry tool was used within NOAA National Marine Fisheries Service (NMFS) EFH Mapper (https://www.habitat.noaa.gov/application/efhmapper/index.html) to generate a list of species with potential to occur within the tidal reaches of Almy Creek. This list of species was then cross-checked with NOAA Fisheries Species Directory of ESA Threatened and Endangered Species (NOAA Fisheries Species Directory) to determine if any of the species within the project area are listed under the ESA, of which there are none. The species list that was generated is attached in Section 6. Programmatic consultation with NOAA NMFS Greater Atlantic Regional Fisheries Office, Habitat Conservation Division (GARFO HDC) for Essential Fish Habitat (EFH) was initiated on 1/25/21 by RIDOT through submittal of the Appendix B Verification Form (attached) of the FHWA Programmatic Essential Fish Habitat Consultation For Select Transportation Actions in the NMFS Greater Atlantic Region.

NOAA Fisheries lists the following time-of-year restrictions for in-water work (i.e., turbidity producing activities, noise activities, or activities which may encroach greater than 25% into a waterway with migration):

RI Managed Species	Time of Year Restrictions
Winter Flounder	February 1 to June 30
Diadromous Fish	March 15 to June 30 and September 1 to November 30*

*All diadromous areas: Use the fall TOY restriction in cases where an action will substantially block the waterway in the fall.

Time of year restrictions provided by NMFS during EFH consultation will be applied to in-water work, which is limited to placement of control of water (COW) measures and dewatering behind COW with minimal turbidity anticipated during placement of COW measures. The project is not anticipated to have a substantial effect on EFH and impacts have been avoided to the maximum extent practicable. EFH programmatic consultation was completed with RIDOT and GARFO HDC concurrence that the project will not have a substantial effect on EFH and the project is in compliance with all applicable EFH conservation recommendations, demonstrated by the signed Appendix B form provided in Section 6. Please note, since the EFH form was signed, follow up correspondence between NMFS and RIDOT has concluded the shellfish TOY restriction (May 1 to October 14) does not need to be implemented for this project. Furthermore, since the COW measures have been reduced to 25% of the channel width, NMFS has

responded that in-water work may occur at any time of the year behind COW, and COW measures should be installed outside of the TOY restrictions windows.

NOAA NMFS Section 7 Endangered Species Act – Protected Resources

Formal consultation with NOAA NMFS GARFO Protected Resources Division (GARFO PRD) was conducted by the submission of an Appendix A FHWA GARFO NLAA (Not Likely to have an Adverse Affect) Program Verification Form. RIDOT as FHWA's designated non-federal representative and GARFO PRD are in concurrence that the project is not likely to adversely affect ESA-listed species or designated critical habitat under NMFS jurisdiction in accordance with the Program, and all effects are either insignificant or discountable. The ESA Section 7 mapper and executed Appendix A consultation form are included in Section 6.

Rhode Island Endangered Species Act

Review of Rhode Island Natural Heritage Program data through the RIDEM Environmental Resource Map on 1/12/21 and again on 6/3/21 shows the project is not located within a Natural Heritage Area. Therefore, no effects are anticipated on state-listed threatened or endangered species.

Migratory Bird Treaty Act

The Migratory Bird Act (MBTA) states that is it unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg in part or in whole, without a federal permit issued in accordance with the Act's policies and regulations. The IPaC Resource List contains several migratory birds that could be found in the project area. However, species that may be found in this area are not limited to this list. When there is general vegetation removal with potential for nesting birds, it is recommended that if vegetation clearing will occur during the migratory bird breeding season (March 1- August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify RIDOT NRU to evaluate the situation. During the non-breeding season (September 1- February 28) vegetation removal is not subject to this restriction. For this project location, vegetation removal is proposed to occur during the non-breeding season, therefore habitat evaluation surveys will not be required to identify existing active or past nests.

Rhode Island Department of Fish & Wildlife (RIDEM DFW)

Although the project is not located within a state mapped Natural Heritage Area, it is located adjacent to a dam with a RIDEM fish ladder which provides passage for anadromous fish species. A project scope and preliminary plans were sent to RIDEM DFW on 1/26/21 for comment. DFW responded they are in agreeance with the TOY restrictions that NMFS and ACOE have implemented and have asked that even outside the TOY restrictions that the water controls do not encroach on more than 25%. Email correspondence between RIDOT NRU and RIDEM DFW is provided in Section 6.

2.6 Historic Resources

Euro-American settlement of the western shore of Tiverton as well as the area today called Tiverton Four Corners dates to the early 18th century. At that time, a ferry was established between Fogland Point and the east shore of Portsmouth. It is likely that that settlement necessitated a crossing of Nonquit Pond at its southern end. Although the 1870 Beers Atlas shows a bridge at this location, historical research has not yet established the structural type. It is likely that it was a timber stringer bridge resting on stone masonry abutments. This bridge was one of the four Tiverton structures washed out in the Hurricane of September 1938. The extent of damage to Nonquit Pond was such that the former freshwater body, utilized as a storage reservoir by the Newport Water Works Company (City of Newport), was rendered a tidewater salt pond.

By December of 1938 the Town voted to appropriate a modest $10,000 for a replacement structure on Pond Bridge Road. Shortly after, Representative George Winard ushered a bill through the General Assembly to make Pond Bridge Road part of the State road system. This new status and the availability of Works Progress Administration (WPA) funding allowed a more ambitious bridge replacement project to move forward. The bridge was to be named Nonquit Pond Bridge 292. The lack of any Department of Public Works (DPW) engineering drawings suggests that while there was likely coordination with that agency, the state WPA office managed design and construction.

The WPA chose a deck of concrete-encased, rolled steel I-beams resting on reinforced concrete abutments. The parapet was solid concrete with WPA plaques inserted. For a span of this size and proximity to salt water, this choice was consistent with the work being carried out elsewhere in the state by the DPW. The bridge was open to traffic by January of 1940. As built, no provision was made to address the influx of saltwater into Nonquit Pond. This issue was addressed over the next decade with the construction on the north side of the span of an attached dam and spillway (RI DEM No. 396) to eliminate any saltwater contamination of Nonquit Pond. Subsequently a concrete fish ladder was built at the northeast corner of the bridge and dam.

Nonquit Pond Bridge 292 has provided communication between the Tiverton Four Corners area and the town's western shore for eighty years.

A summary of historic and tribal coordination completed for this project is provided in Section VI.

III. Proposed Project

The proposed project involves replacing the existing deteriorated concrete bridge structure with a new single span bridge. The existing concrete bridge abutments will be left in place but will be cut down to provide adequate clearance for the new bridge. The new bridge abutments will be constructed behind the existing abutments. This method of construction allows the foundations to be constructed "in the dry," outside of both the waterway limits. Temporary impacts to the waterway will result from dewatering necessary during construction, however these impacts will be short-term and temporary in nature and the project presents little or no potential for significant impact to the waterway.

The bridge will be replaced in its existing location and the new superstructure will remain within the limits of the existing substructure, thus not encroach on the channel beyond the existing substructure footprint. The bridge will be widened by approximately 8.5-feet for safety purposes, to increase safe passage for pedestrians/bicyclists and vehicles simultaneously, however the superstructure will remain within the footprint of the existing abutments and wingwalls. Currently, the bridge is 20' wide with no shoulders for pedestrians and bicyclists. The proposed bridge width will accommodate two 11-foot travel lanes with 3-foot shoulders.

The proposed vertical and horizontal profiles of the bridge will be closely matched, while the overall width of the roadway over the bridge will be increased by 8-feet. The approach roadway work will consist of full depth pavement reconstruction to the limits shown on the plans.

The proposed structure consists of a NEXT D prestressed concrete beam superstructure with a bituminous wearing surface, supported on concrete abutments with steel micropiles drilled into bedrock. The bridge span is 55'-6" long, with a total out-to-out width of 31'-0". The total roadway width is 28'-0" with 6" granite curbs and 12" concrete parapets on both sides of the structure.

The proposed bridge replacement consists of removing and disposing of the existing superstructure and the upper portions of the abutments and wingwalls. Shielding will be placed beneath the structure to prevent debris from falling into the channel, and the overhead utilities will be temporarily relocated to the north of their existing locations. After demolition, the remaining portions of the substructure will be repaired for use as scour protection for the proposed abutments which will be placed behind the existing portions.

The proposed substructure consists of reinforced concrete abutments and wingwalls, supported on steel micropiles. The steel micropiles will be drilled into the bedrock below, and the pile caps will be cast around them, followed by the abutment and wingwall stems cast on top of the pile caps. Once the substructure is cast and cured, the NEXT D prestressed concrete beams will be erected, and closure pours will be placed between each beam to create a composite superstructure.

After the superstructure is constructed, the concrete parapets and granite curbs will be placed on the superstructure and wingwalls, the approach slabs will be placed, and the roadway will be paved with bituminous concrete to the limits of the project. Finally, the roadway will be striped, permanent signing will be placed, guardrails will be installed, and landscaping will be completed.

3.1 Utilities

Overhead utilities on the north side of the bridge, an unknown utility attached to the north fascia, and a water main are present at Bridge No. 292. The overhead utilities will be temporarily relocated to the north during construction with temporary utility poles. The existing poles will be relocated slightly north of their existing locations, to accommodate the guardrail layout, following construction. As part of the temporary relocation two alternatives have been proposed. The first includes the use of two anchor poles across the street on the east and west sides of the bridge as well as guy wires to support them. The second alternative uses push poles to reduce wetland clearing. Further coordination with National Grid is required to determine the location of temporary utility pole support structures. Please note the proposed layout on the Project Plans depicts the alternative anticipated to have the maximum impacts to vegetation, however final layout will be determined prior to construction.

The water main is located south of the bridge and will remain in place.

A temporary utility bridge will be constructed to support a water pipe across the bridge. This pipe is proposed to link the dry hydrant connection on the west side of the bridge with the temporary connection to the east of the bridge. This feature will be utilized by local fire departments during filling of tanks, by means of a pump truck connecting the dry hydrant to the pipe and pumping water to the east side of the bridge for filling.

Further investigation of the unknown utility is required to determine the type of utility and its disposition during and after construction.

3.3 Drainage and Stormwater Measures

Due to the limited size of the project area and numerous site constraints including right-of-way, adjacent wetlands, and site usage by RIDEM DFW and local fire departments, no suitable locations in or adjacent to the project site were identified for the addition of stormwater treatment BMPs. A roadside drainage swale to the southeast of the bridge will be relocated and sized to match the existing swale to be removed. A stone wall is present to the south of the swale, which will be relocated slightly south to accommodate the shift of the swale. A paved swale will be constructed at the low point of the road to convey flow towards the earthen portion of the swale. The western end of the swale will be reinforced by stone for velocity protection.

The proposed area of disturbance is less than 1 acre and therefore coverage under the RIPDES General Permit for the Discharge of Stormwater Associated with Construction Activity is not required. A RIDOT Small Site SWPPP has been prepared, and the project plans include detailed erosion and sediment control notes and specify that erosion and sediment control Best Management Practices shall be provided in accordance with the SWPPP.

3.4 Control of Water and Construction Phase Erosion Controls

During demolition of the bridge, the contractor will use shielding to protect the channel from debris entering the waterway. The top portion of bridge will be removed from the topside, and existing concrete abutments will remain to reduce impacts to the waterway.

In order for the work to be performed "in the dry," control of water (COW) measures (i.e., sandbags, super sacks, etc.) will be installed around each bridge abutment during demolition and patching repairs, and dewatering behind the sandbags is anticipated. Although means and methods for COW, and design of the system are ultimately the responsibility of the contractor, it is anticipated that super sacks or sandbag barriers with a filter fabric lining will be utilized. The dewatering effluent will be pumped to a dewatering bag, which will then discharge into Almy Creek. Proposed locations of dewatering basins are shown on the Project Plans.

Compost filter socks will be installed along the perimeter of pervious surfaces within the limits of disturbance as shown on the Project Plans.

IV. Construction Sequence

The temporary erosion controls will be in place prior the start of excavation, demolition, or other earthwork activities. The dewatering operations will include the use of settling basins, filter bags, or other appropriate methods to treat dewatering effluent prior to discharge into the adjacent waterway. Existing overhead utilities on the north side of the roadway will be temporarily relocated further north to avoid interference with construction operations. The general sequence of construction operations is anticipated to be as follows:

- Signage and messaging for the detour route will be placed as shown on the Temporary Traffic Control Plans. After alerting the Town and public as required, Pond Bridge Road will be closed to traffic in advance of the bridge.
- Temporary control of water measures and shielding will be placed as required to begin demolition of the structure. The Contractor shall remove and dispose the existing superstructure and portions of the substructure to the limits shown on the plans.
- With control of water measures in place, the Contractor shall repair the portions of the existing concrete abutments and wingwalls that will remain.
- Excavate behind existing abutment walls. Drill and grout micropiles, to a depth of 20-feet into the bedrock at the locations specified on the plans.
- Construct formwork, place reinforcing, and pour concrete for cast-in-place pile caps, and abutment and wingwall stems.
- Place elastomeric bearing pads, and erect precast concrete NEXT beams, and approach slabs.
- Pour closure between beams, end of decks, end diaphragms, and sections of approach slabs.
- Construct the parapets and endposts.
- Relocate utility poles and overhead wires to the proposed final alignment.
- Install filter strips at the locations shown on the plans.
- Install guardrail, place curbing, asphalt, striping, and signage.
- Open structure to normal operating conditions.
- Complete required landscaping.

V. Wetland Impacts

The replacement of Nonquit Pond Bridge, temporary utility relocation, and installation of stormwater treatment filter strips have been designed in order to avoid impacts to the waterway and surrounding coastal and freshwater wetlands to the maximum extent practicable.

Resource Area	Permanent Impacts (SF)	Temporary Impacts (SF)	Total Impacts (SF)	Proposed Activities
Tidal Waters Almy Creek (Waters of the U.S.)	0	400±	400±	Temporary: COW measures (i.e., sandbags and/or supersacks), dewatering behind COW
Saltmarsh	0	10	10	Temporary: inclusive of impacts to tidal waters, 10 s.f. of saltmarsh substrate temporarily impacted due to dewatering
Shoreline Feature (Manmade Shoreline)	110± linear feet	0	110± linear feet	Permanent: existing bridge abutments cut to accommodate new bridge
Shoreline Feature (Coastal Wetland)	0	140±	140±	Temporary: select clearing for guy wire clearance only (no grubbing)
200-foot Contiguous Area	4,374±	14,265±	18,640±	Permanent: relocation and construction of swale, associated grading, vegetation removal, guardrail installation, construction of bridge components outside existing impervious surfaces, grading of gravel parking area outside existing limits, roadway widening, landscaping Temporary: vegetation trimming, roadway resurfacing, installation of temporary utility poles, site access, temporary water pump service bypass
Freshwater Wetlands	0	341±	341±	Temporary: select trimming and pruning for overhead wire clearance only
Freshwater Wetland Buffer Zones	4,374±	14,265±	18,640±	Permanent: relocation and construction of swale, associated grading, vegetation removal, guardrail installation, construction of bridge components outside existing impervious surfaces, grading of gravel parking area outside existing limits, roadway widening Temporary: vegetation trimming, roadway resurfacing, installation of temporary utility poles, site access, temporary water pump service bypass
Freshwater Wetland Buffers	0	414±	414±	Temporary: vegetation trimming for temporary overhead utilities
Area Subject to Storm Flowage	80± linear feet	0	80± linear feet	Permanent: relocation of a roadside drainage swale to match existing conditions and drainage patterns

Tidal Waters and Waters of the United States (WOTUS)

As presented in Table 1, proposed temporary impacts to the tidal waters of Almy Creek will total approximately 400 square feet. The minor temporary impacts to the creek channel include site access, temporary COW measures, and dewatering during demolition and abutment repairs. Temporary fill in tidal waters results from the temporary COW measures which will be removed upon completion of the work in these areas. COW measures will be installed from the topside of the bridge, and no heavy equipment will be allowed within the channel. Protective shielding will be installed below the bridge to contain debris from entering the channel during demolition. No permanent impacts to tidal waters are anticipated from the proposed work. Temporary impacts to 10 square feet of saltmarsh are described below under Coastal Wetlands.

Manmade Shoreline Features

Permanent impacts to the existing bridge support structures will total approximately 110 linear feet due to partial removal of the upper portions of wingwalls and abutments. The bottom portion will remain in place to function as scour protection for the new abutments, to be installed landward of the existing abutment.

Coastal Wetlands

Temporary impacts to the freshwater wetland contiguous to the coastal wetland (classified as Coastal Wetland under the CRMP) will total approximately 140 square feet due to vegetation clearing. Vegetation will be selectively cleared for the purpose of utility pole guy wire installation. No grubbing is proposed in this area, and the vegetation is anticipated to revegetate naturally following removal of the temporary facilities.

Inclusive of the temporary tidal water impacts is a 10 square foot area of unvegetated saltmarsh adjacent to the southeast wingwall. This area will be protected from foot traffic by means of a temporary platform or similar placed over the unvegetated substrate during construction activities, and will be removed once work in this area is complete. Low saltmarsh plantings are proposed in this area to mitigate for the temporary impacts caused by dewatering, and no additional fill material is anticipated as the existing substrate provides a planting media base for the proposed saltmarsh plantings.

CRMC 200-foot Contiguous Area and 100-year Floodplain

The entire project area landward of the shoreline features lies within Floodplain and the 200-foot Contiguous Area. Work within these jurisdictional areas is necessary to achieve the project goal, and only minor impacts to the natural environment are anticipated from the proposed work.

Permanent impacts will result from relocation and construction of the drainage swale, vegetation removal, site grading, guardrail installation, construction of bridge components outside of existing impervious surfaces, grading of the gravel turnaround area outside of the existing limits, landscaping, and roadway widening. The remaining area within the limits of disturbance will experience temporary impacts due to roadway resurfacing, vegetation trimming, installation of temporary utility poles, site access, and a temporary water pipe for fire trucks along the north of Pond Bridge Road.

Approximately 2,040 square feet of vegetation removal is proposed along the southern roadway shoulder to accommodate the tapered roadway and relocate the adjacent vegetated drainage swale and a section of stone wall. The swale will be planted with loam and a native coastal salt tolerant seed mix upon completion of the work to provide a native coastal buffer for the downstream creek. Approximately 915 square feet of select pruning and trimming will take place in areas northeast and northwest of the bridge, and approximately 180 square feet of select clearing in an area southwest of the bridge, to accommodate for overheard wire clearance during temporary utility pole relocation. Only limbs or branches that may interfere with the wires will require trimming, and the remainder of the area will remain in its natural state.

The trimming will impact approximately 375 square feet of Freshwater Wetlands, however special care will be taken to only trim those areas necessary for the work to be completed. No grubbing is proposed in Freshwater Wetlands, and only the minimum amount of trimming necessary will take place.

No net loss of floodplain will occur as the proposed structure will closely match the existing profiles. Overall the reduction of bridge abutments will result in a net gain of 40 cubic yards of floodplain.

The project will result in an overall increase of approximately 1,450 square feet of impervious surface due to bridge and minimal roadway widening.

Freshwater Wetlands

As described above, select vegetation trimming and pruning for overhead wire clearance will temporarily impact approximately 341 square feet of Freshwater Wetlands. No vegetation removal or other ground disturbing activities are proposed within these areas.

Buffer Zones to Freshwater Wetlands

Work within the Buffer Zone associated with Freshwater Wetlands upstream of the bridge consists of approximately 18,640 square feet of impacts which includes the entire project area. Impacts to Buffer Zones are identical to impacts to Contiguous Area both of these jurisdictional areas cover the entire project.

Of these total impacts, 4,374 square feet will be permanent due to vegetation clearing along the southern roadway shoulder to accommodate the roadway improvements and relocation of the roadside drainage swale. As previously stated, this area will be revegetated upon completion of the work with a native coastal seed mix. This work is not located within Buffer to the Freshwater Wetland, as it is located on the opposite side of Pond Bridge Road from the freshwater wetland. The remaining permanent impacts will result from increase of width of the roadway in the vicinity of the bridge, grading of the gravel turnaround areas utilized by fire trucks, regrading of the roadside swale, installation of guard rails, and relocation of a stone wall to accommodate the realigned swale.

The remaining 14,265 square feet will be temporary impacts due to roadway resurfacing, construction access, installation of temporary utility poles, vegetation trimming to the northwest and southwest of the bridge, installation of temporary utility poles, site access, and a temporary water pipe.

Within Buffer Zones, approximately 414 square feet of vegetated Buffer will be temporarily impacted. This will be as a result of select pruning and trimming to accommodate for overheard wire clearance during temporary utility pole relocation. Only limbs or branches that may interfere with the wires will require trimming, and the remainder of the area will remain in its natural state. Special care will be taken to only trim those areas necessary for the work to be completed. No grubbing is proposed in Buffer, and only the minimum amount of trimming necessary will take place.

Areas Subject to Storm Flowage

To accommodate the section of proposed roadway that will be tapered to match the existing roadway, a roadside drainage swale, identified as ASSF200 series, will be relocated slightly south. The proposed roadway shoulder slope will closely match the existing elevation of the swale, in order to maintain existing drainage patterns. The swale will be revegetated upon completion of the work to provide a vegetated buffer to the downstream creek. The work will impact approximately 80 linear feet of ASSF, however the existing drainage pattern in this area will be closely matched.

There are two additional ASSFs that were identified at the site (flag series ASSF and ASSF100), however the proposed project is not anticipated to impact these areas.

VI. Historic Coordination

Pare Corporation was tasked by the Rhode Island Department of Transportation (RIDOT) to prepare a Preliminary Structures Report to assess alternatives to address the structurally deficient Nonquit Pond Bridge Number 029201 in Tiverton, Rhode Island. Based on the 2015 Rhode Island Historic Bridge Inventory Update, Nonquit Pond Bridge is considered to have historic and cultural significance due to its construction in 1939-1940 as part of the Works Progress Administration (WPA) programs during the Great Depression. Unfortunately, due to its close proximity to a coastal environment, the bridge has become structurally deficient with considerable deterioration of the superstructure and substructure. The bridge is posted for 9-tons for 2-axle vehicles and 13-tons for 3-axle vehicles, which limits access for certain emergency vehicles, school buses, and trucks.

Given the balance of public safety and cost, with options to preserve aspects of cultural and historic significance, it was recommended to replace the structure. The structure would be replaced while maintaining portions of the existing substructure, matching the aesthetics of the existing structure, and incorporating the existing plaques in the replacement structure to retain as much of the structure's historic and cultural significance as possible.

Because this project is receiving funding from the Federal Highway Administration (FHWA), it must comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and Section 4(f) of the United States Department of Transportation Act (US DOT Act), both as amended.

The Town of Tiverton is generally sensitive for pre-contact Native American and contact-era archaeological evidence. Although the tidal surge of the September 1938 Hurricane caused general disturbance in the vicinity of the bridge, temporary easements or staging areas should be evaluated for potential soil disturbance. This potential for archaeological sensitivity should be considered as planning for this project moves forward.

As of now, the Preliminary Structures Report has been submitted by the RIDOT CRU as part of the Section 106 and 4(f) process to determine if replacement of the structure is acceptable. Pare's subconsultant, AHS, Inc., is continuing with RI Historic Resource Archive documentation following a Phase II Archaeological survey performed in February 2023. FHWA provided a comment letter stating the replacement of the bridge would constitute an adverse effect on the historic property. AHS will assist with a Memorandum of Agreement in order to resolve adverse effects under Section 106. The MOA can be provided upon request.

VII. Compliance with CRMC Policies and Standards

The proposed project includes the removal and replacement of the existing Nonquit Pond bridge, restoration and widening of the roadway over the bridge and the bridge approaches, relocation of utility poles, and habitat restoration within a small portion of saltmarsh. Although the project includes widening of the existing roadway by approximately 8.5 feet over the bridge, the proposed bridge superstructure that carries the roadway will remain within the footprint of the existing bridge substructure. The proposed bridge replacement and roadway repairs appear to meet the criteria of the CRMP for a Category A State Assent. The construction of the existing bridge predates the Council, and it is unlikely that the structure has been permitted by a Council Assent. The applicable CRMP standards are addressed below to demonstrate consistency in the project design.

1.1.11 Coastal Buffer Zones

Impacts to the coastal buffer zone include vegetation clearing south of the roadway within a drainage swale to accommodate relocating the swale and an adjacent stone wall to accommodate the proposed bridge and roadway widening. This area will be stabilized and restored with loam and a native coastal salt tolerant seed mix. The embankment slope to the southwest was previously cleared during surveying activities, and will be planted with native coastal vegetation according to the planting schedule on the "Vegetation Impact and Landscape Plan" sheet of the Project Plans.

1.3.1 (B) Filling, Removing, or Grading of Shoreline Features

Replacement of the bridge structure will require partial removal of the existing bridge wingwalls and abutments which constitute the manmade shoreline feature surrounding the existing bridge. Removal is limited to the upper portions of the wingwalls and abutments, as described in Section III above, and removal will not extend below the high tide line or Mean High Water. As part of the bridge replacement approximately 110 linear feet of manmade shoreline will be partially removed and replaced with new abutments positioned behind the existing abutments and wingwalls. Lower portions of the existing abutments and wingwalls will remain and function as scour protection for the new structure. Appropriate erosion and sedimentation controls will be installed prior to the partial demolition and removal of the manmade shoreline and will remain until work is fully complete and stabilized.

Installation of a temporary utility pole and guy wires will require select vegetation clearing within a coastal wetland for guy wire clearance only. No grubbing or other earth disturbance is proposed for this work. The work will temporarily impact approximately 140 square feet of coastal wetland.

As required under § 1.3.1(B)1(c) an Erosion and Sediment Control Plan is included on the "Drainage and Utility" sheet of the Project Plans. All work associated with the abutment and wingwall replacement, and vegetation trimming will be conducted in accordance with the applicable standards of § 1.3.1(B).

1.3.1 (F) Treatment of sewage and stormwater

Due to the limited size of the project area and numerous site constraints including right-of-way, adjacent wetlands, and site usage by RIDEM DFW and local fire departments, no suitable locations in or adjacent to the project site were identified for the addition of stormwater treatment BMPs. The project conforms to the RIDOT Linear Stormwater Manual according to the maximum extent practicable.

1.3.1 (J) Filling in Tidal Waters

Temporary fill in tidal waters (below the HTL) consists of approximately 46 cubic yards of sandbags/supersacks associated with COW measures. The fill will be limited to the construction period and is unavoidable in order to properly perform the bridge replacement. All work will be conducted in accordance with the applicable standards of Section 1.3.1(J) of the CRMP. The COW measures are necessary to reduce sedimentation impacts during construction and allow concrete abutment repairs to be performed in the dry. It is not anticipated that the temporary COW measures will degrade or permanently impact Almy Creek and the fill materials will be removed upon completion of the work.

1.3.1 (M) Public Roadways, Bridges, Parking Lots, Railroad Lines and Airports

The proposed project represents the replacement of an existing public bridge and roadway. Impacts to tidal waters, shoreline features, and the Contiguous Area have been minimized to the extent practicable through an iterative design process. The proposed design avoids permanent fill in tidal waters and the bridge will remain within the footprint of the existing substructure. Surrounding coastal wetlands and vegetated areas that provide water quality benefits to Almy Creek will be protected during construction. All clearing within the 200-foot Contiguous Area associated with the relocation of utility lines has been minimized to the extent practicable. Cleared vegetation will only be grubbed in the swale location, and where possible, only pruning and trimming will be conducted to the extent that overhead wires are provided clearance during relocation.

Freshwater Wetlands in the Vicinity of the Coast

The project complies with the Freshwater Wetland and Buffer Protection Standards included in §9.7.1 of the FWWIVC regulations to the extent practicable as demonstrated below.

A. General Freshwater Wetlands Protection Standard

Temporary impacts to Freshwater Wetlands in the Vicinity of the Coast will result from temporary utility pole installation described in Section III and 1.3.1 (M) above. In their current location the utility poles along Pond Bridge Road interfere with the proposed limits of work and will need to be relocated in order for the work to be accomplished. Select trimming and pruning of vegetation within approximately 341 square feet of freshwater wetlands is required to provide clearance for the relocated overhead wires supported by the temporary poles. Trimming limits have been minimized to the extent practicable and vegetation will not be grubbed to allow for natural re-growth following project completion. Trimming and pruning of vegetation will be performed as allows in order to minimize clearing in both biological wetlands and their buffers.

B. Freshwater Wetlands Buffer Standard

As the proposed project is a bridge replacement project, there is no designated target buffer width. The vegetation edge surrounding the roadway has been established in order to allow safe travel for vehicles and pedestrians and the is no feasible location for the installation of new buffer plantings. Access for the Division of Marine Fisheries is required to the northeast of the bridge and therefore the grassed area adjacent to the fish ladder is unavailable for plantings. The gravel turnarounds to the northwest and southwest of the bridge are required for safety vehicles (mainly firetrucks) and therefore these areas are also unavailable for plantings. Therefore, the area within and in the vicinity of the site is currently vegetated to the greatest extent practicable, with the exception of areas where plantings are currently proposed along the southwest embankment.

C. Setback Standards

A 5-foot accessory structure setback and 20-foot primary structure setback both apply for the proposed project. The bridge is the only structure proposed and it is a replacement of the existing bridge. Minor increases in size to improve public safety are proposed, however this is an in-kind replacement and cannot be proposed elsewhere due to the existing built infrastructure that surrounds it.

D. Rare or Endangered Species Standard

No Natural Heritage Area (December, 2022) is mapped in the vicinity of the site. Additionally, there are no rare freshwater wetland types (as defined in 9.3(a)(60)) in the vicinity of the site.

According to the U.S. Fish and Wildlife Information for Planning and Consultation (IPaC) tool, the Northern Long-Eared Bat *(Myotis septentrionalis)* is listed as Endangered and the Monarch Butterfly (*Danaus plexippus*) is listed as Candidate under the Federal Endangered Species Act as of July 25, 2023. The Northern Long-Eared Bat and the Monarch butterfly are both mapped for "wherever found" by the IPaC tool, however, there are no known hibernacula for the Northern Long-Eared Bat in Rhode Island. There will be minor vegetation clearing and most of the work is proposed on developed land; therefore, no impacts to rare species or endangered species habitat are anticipated. The only proposed area for clearing that will not be replanted or revegetated naturally is to the southeast of the bridge. This area is predominantly shrubs and sparse saplings with a high population of invasive species that grow between the roadway and the field. As such, in the opinion of Pare it does not provide high priority habitat for the Northern Long-Eared Bat or the Monarch Butterfly and therefore, there should be no reduction of the buffer's ability to ensure the long term viability of these species. Due to the avoidance of work in naturally vegetated areas and mapped rare species habitat to the greatest extent practicable, the project meets the Rare and Endangered Species Standard.

E. Flood Protection Standard

No net loss of floodplain will occur as the proposed structure will closely match the existing profiles. Overall the reduction of bridge abutments will result in a net gain of 40 cubic yards of floodplain.

F. Surface Water and Groundwater Diversion Standard

It is not anticipated that the flow of groundwater or surface water into or out of freshwater wetlands will be adversely impacted by the project. The proposed grading scheme matches the existing contours of the site to the extent practicable and drainage patterns are preserved to the extent practicable. Peak flow rates will be maintained from the existing condition and an increase in erosion or scour is not anticipated.

To accommodate the section of proposed roadway that will be tapered to match the existing roadway, a roadside drainage swale, identified as ASSF200 series, will be relocated slightly south. The proposed roadway shoulder slope will closely match the existing elevation of the swale, in order to maintain existing drainage patterns. The swale will be revegetated upon completion of the work to provide a vegetated buffer to the downstream creek. The work will impact approximately 80 linear feet of ASSF, however the existing drainage pattern in this area will be closely matched.

G. Stormwater Management Standard

Due to the limited size of the project area and numerous site constraints including right-of-way, adjacent wetlands, and site usage by RIDEM DFW and local fire departments, no suitable locations in or adjacent to the project site were identified for the addition of stormwater treatment BMPs. The project conforms to the RIDOT Linear Stormwater Manual according to the maximum extent practicable.

H. Erosion and Sedimentation Control Standard

As required under § 1.3.1(B)1(c) an Erosion and Sediment Control Plan is included on the "Drainage and Utility" sheet of the Project Plans. All work associated with the abutment and wingwall replacement, and vegetation trimming will be conducted in accordance with the applicable standards of § 1.3.1(B) of the CRMP. Erosion and sedimentation controls will be implemented throughout the site in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook and Rhode Island Stormwater Design and Installation Manual for work upgrading of the channel.

I. Water Quality Standard

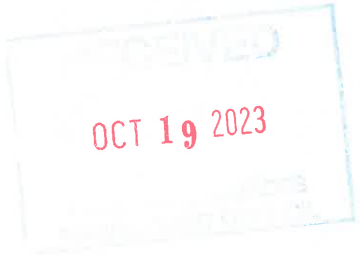
The project is not anticipated to result in adverse impacts to surface water or groundwater resources. There will be no direct impacts to freshwater surface water resources and the minor increases in impervious surfaces are located closer to tidal waters on the site than freshwater wetlands.

VIII. Compliance with Federal Regulations

Almy Creek is a tidal water of the United States and under the jurisdiction of the U.S. Army Corps of the Engineers (USACE) and it is anticipated that the proposed project will qualify as a PCN under the General Permits for the State of Rhode Island.

The historic significance of Nonquit Bridge requires project compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and Section 4(f) of the United States Department of Transportation Act (US DOT Act), both as amended. Refer to Section VI of this Project Narrative for historic coordination to date. Ongoing coordination with RIHPHC will continue throughout the application review process and will be made available upon receipt.

Coordination with NOAA NMFS and USFWS has been completed prior to this application review process, as addressed in Section 2.5 of this Project Narrative, and conditions pertaining to protected wildlife will be met by the project design.



Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 4

ANNOTATED SITE PHOTOGRAPHS

Photo No. 1: View of Pond Bridge Road and Nonquit Pond Bridge facing east.

Photo No. 2: View of northern parapet and bridge plaque.

Photo No. 3:View of roadway and bridge facing west.

Photo No. 4: Typical view of bridge underside facing west.

Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 5

WETLAND DELINEATION DOCUMENTATION

PARE CORPORATION

WETLAND FIELD REPORT

PROJECT TITLE: Nonquit Pond Bridge No. 292

DATE: Original: 7/16/20
Updated: 7/20/23

LOCATION: Tiverton, Rhode Island

WEATHER: Partly cloudy, 80°

PARE PROJECT NO.: 20085.01

PERFORMED BY: Erika Klinkhammer

DISCUSSIONS AND COMMENTS

Pare Corporation (Pare) delineated coastal wetlands, shoreline features, and freshwater wetlands within the vicinity of the Nonquit Pond Bridge No. 292 in accordance with the Rhode Island Coastal Resources Management Council (CRMC) Coastal Resources Management Program (CRMP) and Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (the FWWIVC regulations), and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North Central and Northeast Region (U.S. Army Corps of Engineers, 2012). Inspection and delineation of wetlands were completed on July 16, 2020. Updates to the field report were completed in order to adhere to the new FWWIVC regulations promulgated on July 1st 2022 by the CRMC.

The site is located along Pond Bridge Road approximately 775 feet west of the intersection with Main Street, where the Nonquit Pond Bridge No. 292 crosses Almy Creek, a tidal tributary to the Sakonnet River. Immediately upstream of the bridge, Nonquit Pond is impounded by the Nonquit Pond Dam, which discharges to the creek upstream of the bridge. Adjacent to the upstream eastern abutment, a fish ladder provides passage for migrant fish species between Nonquit Pond and Almy Creek.

Pink field flags and pin flags were placed at appropriate intervals along the edges of coastal and freshwater wetlands and the inland boundaries of shoreline features within the vicinity of the proposed work upstream and downstream of the bridge. Primary parameters evaluated included vegetation, visual indicators of hydrology, visual indicators of shoreline protection structures, and high tide mark (drift lines). Observed wetland and hydrologic indicators are described in the following sections. The site contains the following CRMP and FWWIVC regulated wetland types: **Tidal Waters, Manmade Shoreline, Coastal Wetlands, 200-foot Contiguous Area, Freshwater Wetlands** with associated **Buffer Zones** and **Jurisdictional Areas,** and **100-year Floodplain**.

WETLAND DESCRIPTIONS

Nonquit Pond

Nonquit Pond is a 196-acre impoundment of Borden Brook in Tiverton. The Nonquit Pond Dam is located at the southern end of the pond and is accessible via a gravel parking area extending northwest from Pond Bridge Road. The edges of the pond bordering the project site and access routes were delineated in order to establish the boundaries of the pond and associated **200-foot buffer zone** and **200-foot jurisdictional area** that extends upslope from the delineated edge.

Flag series P-1 to P-3 and P-100 to P-103 define the eastern and western edges of the pond, respectively, beginning at the dam spillway and extending upstream. The eastern series corresponds to the Ordinary High Water (OHW) mark along a riprap lined embankment extending from the pond edge to a gentle grassed slope leading towards the roadway. The series begins at the upstream crest of the dam and terminates a short distance to the north where the riprap ends and transitions to a vegetated earthen pond edge along a freshwater wetland edge (A-series, described in a later section), continuing upstream and offsite. The western series corresponds to the OHW mark along a vegetated earthen embankment dominated by Reed Canary Grass (*Phalaris arundinancea*), beginning at the upstream crest of the dam and terminating approximately 50 to the north.

The pond appears to have an unconsolidated rocky and mucky bottom, most of which was unvegetated at the time of delineation. A small stand of Pickerel Weed (*Pontederia cordata*) colonizes the western shallow edges of the pond. The edges of the pond along the grassed areas bordering the roadway and gravel parking area appear to be periodically maintained, and vegetation is limited to low-growing shrubs and herbaceous vegetation.

The Rhode Island Department of Environmental Management (RIDEM) water quality classification for the Nonquit Pond is Class AA. Class AA waters are designated as a source of public drinking water supply or as tributary waters within a public drinking water supply watershed, for primary and secondary contact recreational activities and for fish and wildlife habitat. According to RIDEM's Clean Water Act Integrated List of Waterbodies – Appendix A 2016 Index of Waterbodies and Category Listing,1 the impairments affecting this waterbody segment are total phosphorus and total organic carbon (TOC). RIDEM has classified Nonquit Pond as a Category 5 waterbody that is not supporting fish and wildlife habitat or public drinking water supply. The waterbody is fully supporting primary and secondary contact recreation, and is not assessed for fish consumption. A TMDL is under development for the phosphorus and TOC impairments and scheduled to be adopted in 2019.

Almy Creek

Almy Creek is a tidal waterway that originates at the outlet of the Nonquit Pond Dam and extends southwest, entering the Sakonnet River approximately 0.9 miles downstream. The head of the tide is defined by the downstream face of the Nonquit Pond Dam. Upstream of the bridge, the creek edges are defined by vertical concrete retaining and wingwalls to the west and the concrete fish ladder and wingwalls to the east. Downstream of the bridge, the creek consists of a well-defined channel contained by a steep earthen slope to the east, and a gradual vegetated slope to the west bordered by a large saltmarsh system. A fringe of saltmarsh grasses is also present along the base of the eastern slope within the waterway. The creek channel is approximately 70 feet wide with a rocky, unconsolidated bottom and mucky soils. With the exception of the salt marsh areas (described in a later section), the channel appears to be mostly unvegetated.

The RIDEM water quality classification for Almy Creek (Waterbody ID# RI0010031E-01B) is Class SA. Class SA waters have designated uses for swimming, primary and secondary contact recreation, fish and wildlife habitat; shellfishing; and fish consumption. However, it should be noted, the RIGIS data layer for Shellfish Harvest Restrictions shows the area to be prohibited from shellfishing. The waterbody is not listed as being impaired, however is a designated SRPW of the Sakonnet River for recreational and ecological uses including: recreation, ecological habitat, federal park, and critical habitat for rare and endangered species.

In the vicinity of the proposed project, the Creek is classified as Type 1: Conservation Areas. Type 1 waters include "*water areas that are within or adjacent to the boundaries of designated wildlife refuges and conservation areas, water areas that have retained natural habitat or maintain scenic values of unique or unusual significance, and water areas that are particularly unsuitable for structures due to their exposure to severe wave action, flooding, and erosion.*" Because the Almy Creek is a tidal waterway under the jurisdiction of CRMC, an associated **200-foot Contiguous Area** offsets the creek's most inland shoreline features. Each of the shoreline features identified in the vicinity of the proposed project are described in the following sections.

Manmade shoreline

Portions of the shoreline features in the vicinity of the proposed project consist of **Manmade Shoreline**, which is defined in Section 1.1.2 as:

"*...characterized by concentrations of shoreline protection structures and other alterations, to the extent that natural shoreline features are no longer dominant.*"

In the vicinity of the bridge, areas of manmade shoreline include vertical stone retaining walls and bridge support structures. On the upstream side of the bridge, Almy Creek is contained by vertical concrete walls, of which the face corresponds with the high tide line. Flag series R-100 to R-102 correspond to the upstream corners of walls to the west, and R-1 to R-2 correspond to the to the waterward face of the fish ladder and upstream bridge abutment. The remaining portions of bridge substructure were not flagged as there was no suitable location to hang flags, therefore survey data will be used to determine the limits of the manmade shoreline in these areas. In these locations, the creek edge transitions immediately to developed upland, and there are no contiguous wetland communities present upslope of the high tide mark. Additionally, there is a sharp break between the shoreline feature and open water downslope of the feature with no salt marsh plant communities present.

Downstream of the bridge, the manmade shoreline consists of bridge wingwalls backed by earthen embankments with no coastal wetlands present immediately upslope of the features. An area of shrubs and vines that was recently cleared for surveying purposes occupies the landward corner of the embankment adjacent to the western wingwall, consisting of Multiflora Rose, Oriental Bittersweet, Poison Ivy and Autumn Olive. The area adjacent to the eastern wingwall is colonized by mostly upland herbaceous vegetation. Land downgradient of the shoreline feature consists of a gradually sloping, tidally flooded rocky substrate colonized by patches of Smooth Cordgrass (*Spartina alterniflora*), Salt Meadow Cordgrass (*Spartina patens*), and Hightide Bush (*Iva frutescens*). These areas are classified as coastal wetlands and are discussed in the next section.

Coastal Bank

Downstream of the bridge wing walls, the edges of Almy Creek are defined by earthen slopes that are best classified as **Coastal Bank.** The western edge of Almy Creek is contained by an elevated earthen embankment giving way to a gradually sloping coastal bank consisting of mucky low-lying soils nearest the shoreline and low saltmarsh vegetation (SM-series, described in a later section). The high tide line was flagged with series R-103 to R-109, according to the highest drift lines on the vegetation, beginning at the

face of the bridge and ending approximately 80 feet beyond the bend of embankment slope to the southwest.

The eastern edge of creek downstream of the bridge is contained by a steep elevated earthen bank giving way to a scarped shoreline before sloping downwards to a marginal coastal bank consisting of musky low-lying soils near the shoreline. Flag series R-3 to R-6 defines the high tide line in this area, which corresponds to the top of the coastal bank, and also acts as the shoreline feature and upland boundary of the creek. A fringe of saltmarsh occupies a small portion of the shoreline between R-3 and R-5. The embankment is vegetated with mostly upland and invasives species (i.e., Autumn Olive and Oriental Bittersweet), with no adjoining coastal wetlands upslope of the coastal bank in this area.

Coastal Wetlands

According to Section 1.1.2, "*Coastal wetlands include salt marshes and freshwater or brackish wetlands contiguous to salt marshes or physiographic features.*" Several coastal wetlands were identified along the creek shoreline in the vicinity of the bridge. These include two areas of Salt Marsh vegetation and a contiguous freshwater wetland located downstream of the Silver Creek Bridge. Coastal wetland areas in the vicinity of the site are discussed below.

Salt Marsh

Several tidally flooded areas vegetated with Smooth Cordgrass (*Spartina alterniflora*), Salt Meadow Cordgrass (*Spartina patens*), and Hightide Bush (*Iva frutescens*) were observed along the shoreline at both the eastern and western ends of the bridge. These areas are classified as **Salt Marsh**, which is defined under Section 1.1.2 as:

"*Areas regularly inundated by salt water through either natural or artificial water courses and where one or more of the following species predominate: smooth cordgrass (Spartina alterniflora), salt meadow cordgrass (Spartina patens), spike grass (Distichilis spicata), black rush (Juncus gerardi), saltworts (Salicornia spp.), sea lavender (Limonium carolinianum), saltmarsh bulrush (Scirpus sp.), or high tide bush (Iva frutescens).*

Salt Marsh areas in the vicinity of the bridge include the following:

- **SM-Series**: Downstream of the bridge, the western edge of Almy Creek consists of mucky soils with some scattered rock at the base of the wingwall and earthen slope. This area is located below the high tide line and colonized by Hightide Bush (*Iva frutescens*) and Smooth Cordgrass (*Spartina alterniflora*). Flag series SM-1 to SM-8 defines the edges of the saltmarsh, with flags hung on the landward side of wetland and GPS points taken on the waterward side, as no suitable location was appropriate to hang flags on or around vegetation in the channel. At the time of delineation, the tide was coming in, covering the waterward edge of Smooth Cordgrass. Beyond the limits of saltmarsh, the coastal wetland transitions to a brackish then forested wetland contiguous to the coastal wetland (Wetland C, described in a later section).

- **GPS-located Series**: On the eastern edge of Almy Creek downstream of the bridge, the shoreline begins at the base of a steep escarped earthen slope and forms a narrow gradual slope towards the channel, consisting of mucky soils with some scattered rocks. This area is located below the high tide line and colonized mostly with Saltmarsh Cordgrass (Smooth Cordgrass (*Spartina alterniflora*). No suitable location was appropriate to hang flags on or around vegetation in the channel, therefore GPS points were taken to delineate the waterward and landward edges of the saltmarsh in this area.

Coastal Forested Wetland

A wetland complex classified as a **Forested Wetland** under the FWW regulations occupies the vegetated areas bordering the downstream edge of Pond Bridge Road west of the bridge. The portion of the wetland in the vicinity of the project site was delineated to establish the limits of the resource area. Based upon field reconnaissance and review of published mapping, the forested wetland area appears to be less than 3 acres in size however is part of a continuous interconnected wetland complex that ultimately borders Almy Creek to the south. Because the wetland complex ultimately borders on the shoreline and salt marsh to the south, most of the area appears to be classified as a **Coastal Wetland** under Section 1.1.2 of the CRMP and has an associated **200-foot Contiguous Area** that encompasses the uplands within the project area.

Flag series C-1 to C-12 defines the northern edge of the wetland in the vicinity of the bridge, beginning along a vegetated embankment slope extending from a gravel parking area to the creek and continuing west along the treeline bordering Pond Bridge Road. The series begins at coastal bank flag R-112=C-1 downslope of the gravel parking area and ends approximately 400 feet to the west.

The wetland is colonized by a variable community of vegetation. The grassed edges directly bordering the gravel parking area and roadway appear to be regularly maintained and the adjacent shrub line is dominated by invasive shrubs and climbing vines. Further west, the wetland is dominated by freshwater wetland vegetation including trees, sapling, shrubs, herbaceous vegetation and climbing vines. The wetland interior appears to be seasonally flooded, and wetland edges closes to the roadway appear to be saturated. The wetland borders maintained farmland to the southwest. Further west, the wetland tapers between the roadway and farmland and continues in such a manner offsite. Vegetation included, but not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Wild Black Cherry	*Prunus serotina*	FACU
Willow	*Salix sp.*	Assume FAC
Autumn Olive	*Elaeagnus umbellata*	Assume NI
Arrowwood	*Viburnum dentatum*	FAC
Black Elderberry	*Sambucus nigra*	FACW
Multiflora Rose	*Rosa multiflora*	FACU
Beach Rose	*Rosa rugosa*	FACU
Oriental Bittersweet	*Celastrus orbiculatus*	UPL
Cinnamon Fern	*Osmunda cinnamomea*	FACW
Jewelweed	*Impatiens capensis*	FACW
Sensitive Fern	*Onoclea sensibilis*	FACW
Thin-leaved Goldenrod	*Euthamia graminifolia*	FAC

Freshwater Wetlands

Two freshwater wetland complexes occupy the vegetated areas bordering Nonquit Pond upstream of the bridge. The portions of the wetlands in the vicinity of the project area were delineated in two series (A and B series) to establish the limits of the wetlands and their associated buffers. Under the updated FWWIVC Regulations, both Wetland A and B receive a **100-foot Buffer Zone** as they are **Shrub Swamp/Marsh Wetland** complexes. Both wetlands will also receive a **100-foot Jurisdictional Area**. Based on field reconnaissance and review of published mapping, the areas appear to be part of continuous, interconnected wetland complexes that ultimately border on a majority of the pond to the north. The **Buffers** to the freshwater wetlands exist strictly on the northern side of Pond Bridge Road as there is no vegetated connection to forested areas on the southern side of the roadway. Under the FWWIVC regulations, these areas are classified as Freshwater Wetlands in the Vicinity of the Coast, and each area is described in the following sections.

Wetland A

Flag series A-1 to A-17 defines the western and southern edges of a **Shrub Wetland** located along the upstream side of the dam embankment. The series begins at the northern edge of the pond at flag P-3=A-1 and extends in a southeasterly direction within the treeline before turning east to border the Pond Bridge Road grassed shoulder embankment. The wetland follows the roadway shoulder before turning north and west to border a farmed field.

Most of the wetland in the vicinity of the bridge and roadway consists of a saturated shrub wetland, although some forested areas are located further north and west. Some areas closely bordering the road shoulder area dominated by invasive shrubs and climbing vines. Further north, the wetland transitions to an emergent wetland with marsh vegetation visible along the edges of the farmed field and the pond. Vegetation included, but not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Swamp White Oak	*Quercus bicolor*	FACW
Arrowwood	*Viburnum dentatum*	FAC
Bayberry	*Morella pensylvanica*	FAC
Autumn Olive	*Elaeagnus umbellata*	Assume NI
Black Elderberry	*Sambucus nigra*	FACW
Pokeweed	*Phytolacca americana*	FACU
Speckled Alder	*Alnus incana*	FACW
Spreading Dogbane	*Apocynum androsaemifolium*	UPL
Oriental Bittersweet	*Celastrus orbiculatus*	UPL
Multiflora Rose	*Rosa multiflora*	FACU
Canada Goldenrod	*Solidago canadensis*	FACU
Cinnamon Fern	*Osmunda cinnamomea*	FACW
Jewelweed	*Impatiens capensis*	FACW
Purple Loosetrife	*Lythrum salicaria*	OBL

Wetland B

Flag series B-1 to B-16 defines the southern edges of a **Scrub Shrub Swamp/Marsh** complex located along the upstream side of the dam embankment and pond edge. The wetland occupies a low-lying area between Nonquit Pond and the bordering City of Newport Water Division property and consists of a marsh interior with shrubs growing along the wetland edges.

The series begins at the northern edge of the pond at flag P-101=B-1 and extends in a westerly direction along the northern side of an embankment slope extending from a gravel parking area north of Pond Bridge Road. In this area, the wetland is occupied by submergent vegetation bordering the pond and transitions to emergent and herbaceous vegetation as the wetland continues west. The wetland turns slightly to the south continuing to border the parking area embankment before transitioning to a shrub wetland edge bordering upon the roadway embankment. The wetland generally follows the toe of slope from the roadway embankment which corresponds to the shrub and treeline, before turning north to border the maintained grassed City of Newport property. Most of the wetland in the vicinity of the bridge and roadway consists of a semi-permanently flooded interior with seasonally flooded/saturated edges. Between flags B-6 and B-16, most of the wetland edge bordering the road shoulder is dominated by invasive shrubs and climbing vines. Further north, the wetland transitions to marsh vegetation contiguous to a shrub scrub wetland bordering the pond edge to the northwest and offsite. Vegetation included, but not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Northern White Cedar	*Thuja occidentalis*	FACU
Swamp White Oak	*Quercus bicolor*	FACW
Willow	*Salix spp.*	Assume FAC
Arrowwood	*Viburnum dentatum*	FAC
Autumn Olive	*Elaeagnus umbellata*	Assume NI
Black Chokeberry	*Aronia melanocarpa*	FAC
Black Elderberry	*Sambucus nigra*	FACW
Speckled Alder	*Alnus incana*	FACW
Oriental Bittersweet	*Celastrus orbiculatus*	UPL
Multiflora Rose	*Rosa multiflora*	FACU
Canada Goldenrod	*Solidago canadensis*	FACU
Cinnamon Fern	*Osmunda cinnamomea*	FACW
Jewelweed	*Impatiens capensis*	FACW
Joe Pye Weed	*Eutrochium purpureum*	FAC
Meadowsweet	*Spirea alba*	FACW
Purple Loosetrife	*Lythrum salicaria*	OBL
Reed Canary Grass	*Phalaris arundinacea*	FACW
Sensitive Fern	*Onoclea sensibilis*	FACW
Stinging Nettle	*Urtica dioica*	FAC
Tansy	*Tanacetum vulgare*	FACU
Wrinkleleaf Goldenrod	*Solidago rugosa*	FAC

Two Hundred Foot (200') Contiguous Area

A **200-Foot Contiguous Area** extends from the landward edge of shoreline features, including manmade shoreline, coastal bank, and coastal wetlands. According to Section 1.1.4, the 200-foot contiguous area is defined as:

"... all lands and waters directly adjoining shoreline features that extend inland two hundred (200) feet from the inland border of that shoreline feature."

The majority of the project area is located within the Contiguous Area.

Area Subject to Storm Flowage (ASSF)

Three drainage swales were identified throughout the project area that are classified as **Areas Subject to Storm Flowage (ASSFs)**. According to Section 2.4 of the FWW Regulations, an ASSF is defined as: "*Drainage swales and channels that lead into, out of, pass through or connect other freshwater wetlands or coastal wetlands, and that carry flows resulting from storm events, but may remain relatively dry at other times.*" Each area is described briefly below.

ASSF Series

Flag series ASSF-1 to ASSF-3 defines the centerline of a shallow earthen and gravel swale located along the northern edge of the gravel parking area to the northwest of the bridge, upgradient of the Nonquit Pond edge. This feature appears to convey some drainage from the adjacent gravel area into the pond near flag P-101, however not all as evident by pooling within the gravel area. The ASSF is sparsely vegetated with herbaceous vegetation (mostly grass).

ASSF 100 Series

A worn walking path was identified along the southern edge of a gravel parking area southwest of the bridge along the coastal bank and bisecting the saltmarsh downgradient. The area appears to have been created by erosion resulting from frequent foot traffic to gain access to the shoreline and conveys drainage from the upland gravel area downslope towards the Almy Creek. Flag series ASSF 100 to ASSF 101 defines the centerline of the feature, beginning downslope near the edge of creek and ending immediately upslope at the edge of the gravel area.

ASSF 200 Series

Flag series ASSF-200 to ASSF-205 defines the centerline of a d drainage swale located along the southern roadway shoulder east of the bridge. The swale is located upgradient of the earthen slope bordering Almy Creek, downstream from the bridge. This area appears to convey drainage from the adjacent roadway into the creek. The swale is vegetated with shrubs and herbaceous vegetation. The eastern end corresponds to the roadside swale and the western end follows the observed drainage patterns along the backside of the wingwall towards the creek.

100-Year Floodplain

According to the FEMA Flood Insurance Rate Map for Bristol County, Rhode Island (Community Panel 44005C0112J, effective date September 4, 2013), the site is located within the 100-year Floodplain associated with Almy Creek and Nonquit Pond. Nonquit Pond is mapped as Zone AE, subject to wave action, with a base flood elevation of 16 feet. The areas to the northeast and northwest of the bridge, the bridge itself, and the roadway are mapped as Zone AE with a base flood elevation of 14 feet. Almy Creek downstream of the bridge is mapped as a Coastal Barrier Resource Area (D02) System Unit under jurisdiction of the USFWS. The Almy Creek channel is mapped as a Zone AE, coastal flood zone subject to wave action, with a base flood elevation of 16 feet. The area downstream of the bridge is mapped as Zone AE, coastal flood zone subject to wave action, with a base flood elevation of 15 feet.

EK/dp

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Photo No. 1: View of the Nonquit Pond facing north from the downstream face of Nonquit Pond Dam.


Photo No. 2: View of the eastern side of Nonquit Pond and RIDEM fish ladder facing south.

Photo No. 3: View of the western end of a forested wetland complex (Wetland A) extending from the eastern edge of Nonquit Pond within the treeline adjacent to the roadway.

Photo No. 4: View of the eastern end of a wetland complex (Wetland B) bordering the western edge of Nonquit Pond extending west to border a gravel parking area and the roadway. An ASSF extends from the edge of the gravel area to the pond edge (ASSF Series).

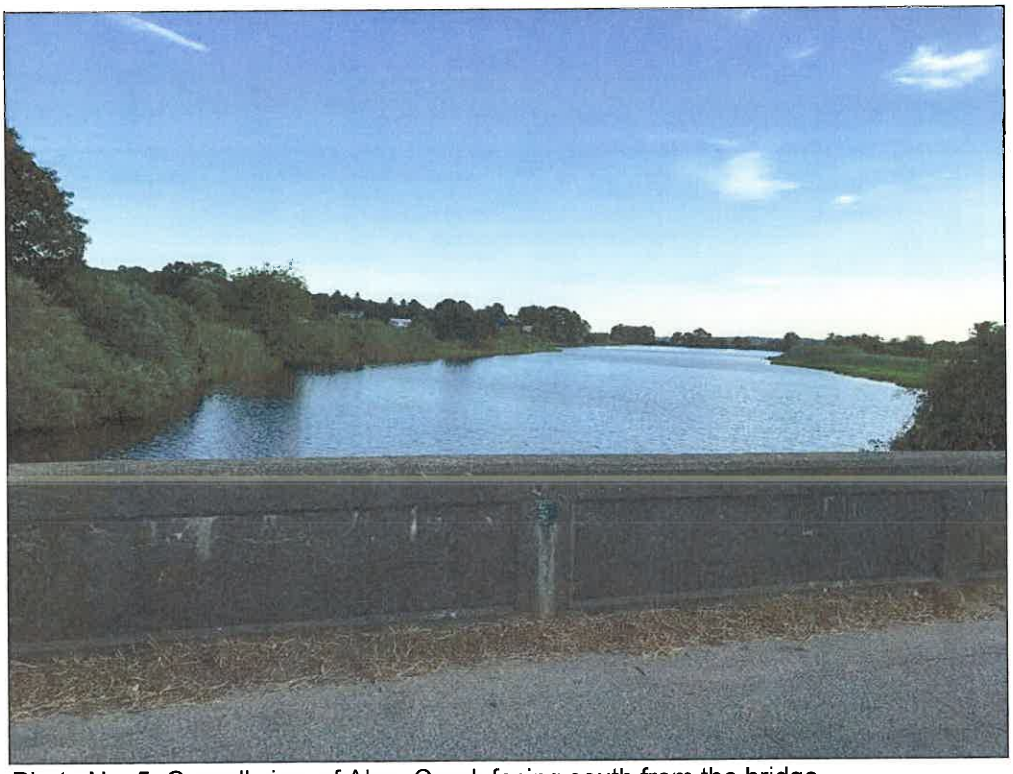


Photo No. 5: Overall view of Almy Creek facing south from the bridge.

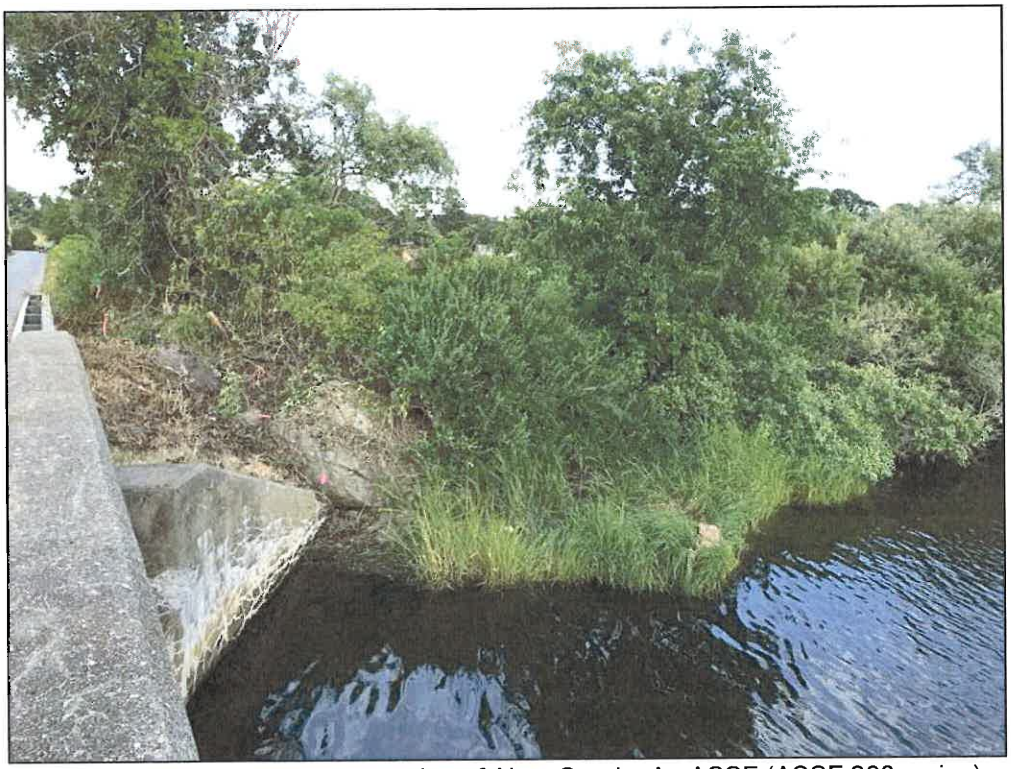


Photo No. 6: View of the eastern edge of Almy Creek. An ASSF (ASSF 200 series) extends from a roadside swale to the creek edge. A fringe of saltmarsh occupies the tidal shoreline.

Photo No. 7: View of the manmade shoreline components of the bridge and Almy Creek facing north. Saltmarsh SM-series begins a short distance south of the bridge and extends west.

Photo No. 8: View of the SM-series saltmarsh along the embankment southwest of the bridge, facing west. The flag series in this location also corresponds to the High Tide Line.

Photo No. 9: View of a degraded walking path leading from the gravel parking area to Almy Creek. The area appears to convey drainage from the upland area to the creek and was delineated as the ASSF 100 series.

Photo No. 10: View of the shoreline features southwest of the bridge, facing west. In this location, the shoreline feature transitions from saltmarsh (R/SM series) closest to the creek to brackish wetland (Wetland C) along the far side of the gravel parking area and further west adjacent to the roadway.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nonquit Pond Bridge No. 292 City/County: Tiverton/Newport Sampling Date: 7/16/20

Applicant/Owner: Rhode Island Department of Transportation State: RI Sampling Point: A3 upland

Investigator(s): E. Klinkhammer - Pare Corporation Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Gradual roadway slope Local relief (concave, convex, none): concave Slope (%): 3%+/-

Subregion (LRR or MLRA): LRR R Lat: 41.553276 Long: -71.197046 Datum: NAD83

Soil Map Unit Name: Mansfield mucky silt loam NWI classification: N/A (upland)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Bordering pond

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: A3 upland

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5')			
1. Grass	80	Y	FACU
2. Rubus flagellaris	10	N	FACU
3. Trifolium arvense	10	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1. None			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: A3 upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3"	10YR 3/1	100%					SL	A- silt fill material (non-native)

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

Fine, silty, loose fill material in A horizon. Gravel subbase at 3"

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nonquit Pond Bridge No. 292 City/County: Tiverton/Newport Sampling Date: 7/16/20

Applicant/Owner: Rhode Island Department of Transportation State: RI Sampling Point: A3 wetland

Investigator(s): E. Klinkhammer - Pare Corporation Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Gradual roadway slope Local relief (concave, convex, none): concave Slope (%): 3%+/-

Subregion (LRR or MLRA): LRR R Lat: 41.553276 Long: -71.197046 Datum: NAD83

Soil Map Unit Name: Mansfield mucky silt loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes X	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

Bordering pond - plot taken inside of upland upslope of flag

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X*	No _____	Depth (inches): *pond nearby
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: A3 wetland

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Elaeagnus umbellata	50	Y	NI
2. Sambucus nigra	50	Y	FACW
3. Quercus bicolor	5	N	FACW
4. Rosa multiflora	10	N	FACU
5.			
6.			
7.			
	115	= Total Cover	

Herb Stratum (Plot size: 5')	Absolute % Cover	Dominant Species?	Indicator Status
1. Phytolacca americana	20	Y	FACU
2. Solidago canadensis	10	N	FACU
3. Toxicodendron radicans	20	Y	FAC
4. Impatiens capensis	20	Y	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	= Total Cover	

Woody Vine Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Celastrus orbiculatus	20	Y	UPL
2.			
3.			
4.			
	20	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = ______

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: A3 wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1.5-0"	10YR 3/6	100%					SL	O
0-6"	10YR 3/1	100%					SL	A
0-6"	10YR 3/2	90%	2.5YR 2.5/4	10%	D	M	SL	B

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Sandy, gravelly B horizon

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nonquit Pond Bridge No. 292 City/County: Tiverton/Newport Sampling Date: 7/16/20

Applicant/Owner: Rhode Island Department of Transportation State: RI Sampling Point: B5 upland

Investigator(s): E. Klinkhammer - Pare Corporation Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Gradual roadway slope Local relief (concave, convex, none): concave Slope (%): 3%+/-

Subregion (LRR or MLRA): LRR R Lat: 41.553276 Long: -71.197046 Datum: NAD83

Soil Map Unit Name: Pittstown silt loam, 0 to 3 percent slopes NWI classification: N/A (upland)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Bordering pond and roadway embankment

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

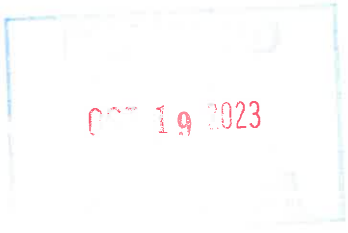
Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



VEGETATION – Use scientific names of plants.

Sampling Point: B5 upland

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Rosa multiflora	20	Y	FACU
2. Prunus serotina	20	Y	FACU
3. Aronia melanocarpa	10	N	FAC
4. Thuja occidentalis	10	N	FACW
5. Lonicera tatarica	20	Y	FACU
6.			
7.			
	80 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Solanum dulcamara	10	N	FAC
2. Tanacetum vulgare	30	Y	FACU
3. Solidago canadensis	30	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1. Celastrus orbiculatus	30	Y	UPL
2.			
3.			
4.			
	30 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: B5 upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6"	10YR 3/1	100%					SL	A- silt fill material (non-native)

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Fine, silty fill material in A horizon. Gravel subbase at 6"

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nonquit Pond Bridge No. 292 City/County: Tiverton/Newport Sampling Date: 7/16/20

Applicant/Owner: Rhode Island Department of Transportation State: RI Sampling Point: B5 wetland

Investigator(s): E. Klinkhammer - Pare Corporation Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Gradual roadway slope Local relief (concave, convex, none): concave Slope (%): 3%+/-

Subregion (LRR or MLRA): LRR R Lat: 41.553276 Long: -71.197046 Datum: NAD83

Soil Map Unit Name: Pittstown silt loam, 0 to 3 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes X	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

Bordering pond and roadway embankment

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: B5 wetland

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus bicolor	15	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Sambucus nigra	20	Y	FACW
2. Salix sp.	10	Y	FAC
3. Alnus incana	10	Y	FACW
4.			
5.			
6.			
7.			
	40 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Cirsium vulgare	10	N	FACU
2. Urtica dioica	10	N	FAC
3. Boehmeria sp.	20	N	FACU
4. Lythrum salicaria	10	N	OBL
5. Impatiens capensis	20	N	FACW
6. Phalaris arundinacea	40	Y	FACW
7.			
8.			
9.			
10.			
11.			
12.			
	110 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

OCT 19 2023

SOIL

Sampling Point: B5 wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8"	10YR 3/2	90%	10YR 4/1 & 2.5YR 4/1	10%	D	M	SL	A
8-12+"	10YR 3/1	90%	2.5YR 3/1	10%	D	M	SL	B

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

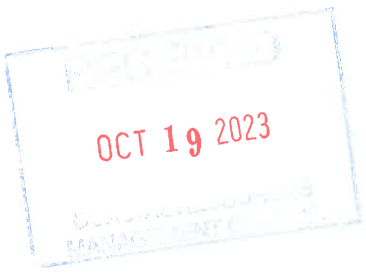
Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:



WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nonquit Pond Bridge No. 292 City/County: Tiverton/Newport Sampling Date: 7/16/20

Applicant/Owner: Rhode Island Department of Transportation State: RI Sampling Point: C2 upland

Investigator(s): E. Klinkhammer - Pare Corporation Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Gradual roadway slope Local relief (concave, convex, none): concave Slope (%): 3%+/-

Subregion (LRR or MLRA): LRR R Lat: 41.553276 Long: -71.197046 Datum: NAD83

Soil Map Unit Name: Pittstown silt loam, 0 to 3 percent slopes NWI classification: N/A (upland)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Bordering salt marsh and roadway embankment

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

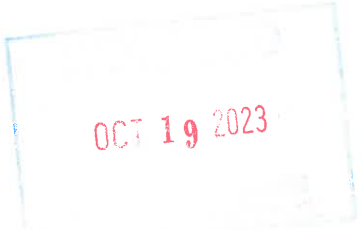
Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



VEGETATION – Use scientific names of plants.

Sampling Point: C2 upland

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Prunus serotina	30	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Rosa multiflora	40	Y	FACU
2. Sambucus nigra	5	N	FACW
3. Lonicera tatarica	20	Y	FACU
4.			
5.			
6.			
7.			
	65	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Taraxacum officinale	5	N	FACU
2. Grass	60	Y	FACU
3. Solidago canadensis	40	Y	FACU
4. Euthamia graminifolia	10	N	FAC
5. Cirsium vulgare	10	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1. Celastrus orbiculatus	20	Y	UPL
2.			
3.			
4.			
	20	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: C2 upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6"	10YR 3/1	100%					SL	A

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Gravel subbase at 6"

RECEIVED

OCT 19 2023

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Nonquit Pond Bridge No. 292 City/County: Tiverton/Newport Sampling Date: 7/16/20

Applicant/Owner: Rhode Island Department of Transportation State: RI Sampling Point: C2 wetland

Investigator(s): E. Klinkhammer - Pare Corporation Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Gradual roadway slope Local relief (concave, convex, none): concave Slope (%): 3%+/-

Subregion (LRR or MLRA): LRR R Lat: 41.553276 Long: -71.197046 Datum: NAD83

Soil Map Unit Name: Pittstown silt loam, 0 to 3 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes X	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

Bordering salt marsh and roadway embankment

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: C2 wetland

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus bicolor	15	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Berberis thunbergii	20	N	NI
2. Rosa multiflora	20	N	FACU
3. Sambucus nigra	20	N	FACW
4. Viburnum dentatum	20	N	FAC
5. Salix sp.	30	Y	FACU
6.			
7.			
	110 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Alnus rugosa	10	Y	FACW
2. Euthamia graminifolia	10	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1. Celastrus orbiculatus	20	Y	UPL
2.			
3.			
4.			
	20 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

OCT 19 2023

SOIL

Sampling Point: C2 wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12"	2.5YR 3/1	98%	2.5YR 2.5/4	2%	D	M	SL	A

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
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- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
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Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
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- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

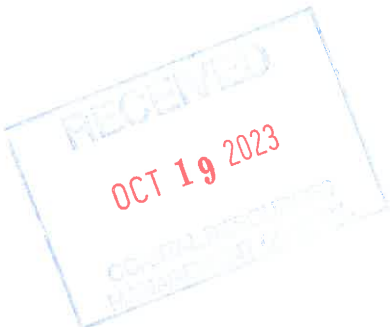
Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:



Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 6

DRAFT CATEGORICAL EXCLUSION CHECKLIST

CATEGORICAL EXCLUSION DETERMINATION
PROJECT NARRATIVE AND CHECKLIST

NONQUIT POND BRIDGE NO. 292
POND BRIDGE ROAD
APPROXIMATELY 230' EAST AND WEST OF NONQUIT POND BRIDGE
TIVERTON

2018-EB-038
BRDG-005
2602V/BRDG-005

Prepared for: Jon Fontana
Prepared by: Erika Klinkhammer, Pare Corporation

RI dot
Driven to get you there

U.S. Department of Transportation
Federal Highway Administration

10/2/2023

Categorical Exclusion Determination Project Narrative and Checklist

RIDOT Project No. 2018-EB-038

Table of Content

A. PROJECT NARRATIVE

The project includes the replacement of Nonquit Pond Bridge No. 292 superstructure and partial removal of the upper portions of the abutments and wingwalls. Nonquit Pond Bridge carries Pond Bridge Road over Almy Creek in the Town of Tiverton, Rhode Island. The existing bridge is a single-span concrete-encased steel beam bridge with a concrete deck supported on concrete abutments. The bridge is approximately 40 feet long, 22½-feet wide out-to out and consists of a 20-foot roadway with concrete parapets. Nonquit Pond Dam is located immediately upstream of the bridge with a fish ladder along the eastern wingwall and dam embankment leading from the freshwater Nonquit Pond to the downstream tidal channel (Almy Creek).

The proposed structure consists of a NEXT D prestressed concrete beam superstructure with a bituminous wearing surface, supported on concrete abutments with steel micropiles drilled into bedrock. The bridge span is 55'-6" long, with a total out-to-out width of 31'-0". The total roadway width is 28'-0" with 6" granite curbs and 12" concrete parapets on both sides of the structure.

The proposed bridge replacement consists of removing and disposing the existing superstructure and the upper portions of the abutments and wingwalls. Shielding will be placed beneath the structure to prevent debris from falling into the channel, and the overhead utilities will be temporarily relocated to the north of their existing locations. After demolition, the remaining portions of the substructure will be repaired for use as scour protection for the proposed abutments which will be placed behind the existing portions.

The proposed substructure consists of reinforced concrete abutments and wingwalls, supported on steel micropiles. The steel micropiles will be drilled into the bedrock below, and the pile caps will be cast around them, followed by the abutment and wingwall stems cast on top of the pile caps. Once the substructure is cast and cured, the NEXT D prestressed concrete beams will be erected, and closure pours will be placed between each beam to create a composite superstructure.

After the superstructure is constructed, the concrete parapets and granite curbs will be placed on the superstructure and wingwalls, the approach slabs will be placed, and the roadway will be paved with bituminous concrete to the limits of the project. Finally, the roadway will be striped, permanent signing will be placed, guardrails will be installed, and landscaping will be completed.

The project will result in an increase of approximately 1,450 s.f. impervious surface due to widening the bridge by 8.5-feet, and additional pavement to taper the existing roadway to the widened bridge.

Vegetation clearing and the removal of one tree are proposed along the southeast roadway embankment to facilitate the widened bridge and additional pavement required to match the roadway profile. Additional select vegetation trimming and pruning are proposed in locations where utility poles must be temporarily relocated and guy wires and/or anchor poles must be installed to support the relocated poles to the north and south of the roadway. Two of these areas to the east and west of the bridge are located in freshwater wetlands, and a third area south of the roadway and west of the bridge is located in a coastal wetland, which will experience temporary impacts from the trimming, however no grubbing or earth disturbance is proposed outside the footprint of the poles and anchors. All vegetation clearing and trimming is proposed to occur in the winter during the Northern Long-eared Bat inactive season (November 1st- March 31st) and the non-breeding season for migratory birds (September 1st - February 28th).

In-water work is limited to installation of control of water (C.O.W.) measures (i.e., sandbags, super sacks,

etc.) around each bridge abutment during demolition and patching repairs. Dewatering is anticipated to occur to facilitate concrete repairs in the dry. In-water work may occur outside of any required time-of-year restrictions. Additionally, through coordination with NOAA NMFS the in-water work may occur at any time of the year if restriction to the channel if minimized to 25% or less of the channel width. C.O.W. measures have been reduced to 25% of the channel width since the initial EFH form was signed (see NOAA NMFS correspondence following EFH form).

A small portion of saltmarsh (10 sq. ft.) adjacent to the southeast wingwall will be temporarily impacted from C.O.W. and dewatering. The area is currently unvegetated, however will be protected from foot traffic by temporary placement of a platform over the area. Saltmarsh plantings are proposed to mitigate for the temporary impacts to dewatering. Additional native plantings are proposed along the southwest embankment adjacent to the wingwall, to provide habitat restoration to a previously disturbed area.

Based on the RIDOT Bridge Inspection Report dated October 3, 2019 and field observations by Pare, the bridge is in overall Poor condition. The condition ratings of the bridge components are as follows: the bridge deck is rated 4 (Poor), the superstructure is rated 2 (Critical/Intolerable), and the substructure is rated 3 (Serious). The concrete decking exhibits extensive spalling and delamination exposing the reinforcing steel, which has experienced severe section loss. Concrete encasing steel components on the underside of the bridge have been completely spalled away and the exposed beams have heavy laminated rust and section loss. The substructure exhibits cracking, large, delaminated areas, and severe scaling with exposed reinforcing. Efflorescence and staining are present with evidence of bridge joint leakage.

The latest RIDOT Bridge Load Rating Report recommends that the bridge be posted. Calculations that account for the existing bridge condition have resulted in a bridge posting of 9-tons for two axle vehicles and a 13-tons for vehicles with three or more axles. These limits restrict the passage of certain school buses, emergency vehicles, and trucks. Due to the existing conditions ratings, observed deficiencies, and load rating, the bridge is considered to be structurally deficient and in need of replacement.

1. WATER RESOURCES

Categorical Exclusion Determination Project Narrative and Checklist

RIDOT Project No. 2018-EB-038

A. Wetland and Waterway Impact Summary

	YES	NO
Project will impact federal/state jurisdictional freshwater/coastal wetlands and/or waterways:	☒	☐

If no, briefly explain what methods were used to determine the presence/absence of wetlands and waterways and/or why no impact is anticipated:

Brief summary of how wetlands and/or waterways were mapped/delineated, locations and types.

Nonquit Pond is a designated drinking water supply for the City of Newport. Two wetland complexes are present to the east and west of the pond, classified as Freshwater Wetlands under the Coastal Resources Management Council (CRMC) Freshwater Wetlands in the Vicinity of the Coast regulations. Downstream of the bridge, two areas of saltmarsh are present along the eastern and western shorelines in the vicinity of the bridge, classified as coastal wetlands under the Coastal Resources Management Program (CRMP). Upgradient and further west from the bridge, the saltmarsh transitions to a brackish and freshwater wetland. Almy Creek is considered a navigable waterway and therefore classified as a Water of the United States (WOTUS). Vegetated wetlands contiguous to Nonquit Pond and Almy Creek are classified as adjacent wetland and qualify as WOTUS.

Direct Impact(s) Table

Estimated waterway and **federal (biological)** wetland temporary and/or permanent direct impacts:

Type/Name	**Temporary Impact** (acres/square feet round up to nearest 100') (below OHW/MHW)	**Impact Description**	**Permanent Impact** (acres/square feet round up to nearest 100') (below OHW/MHW)	**Impact Description**
Tidal Waters	400 square feet	Temporary impacts to tidal waters due to dewatering.		
Salt Marsh	10 square feet	Temporary impacts to salt marsh due to dewatering.		
Freshwater Wetlands	341 square feet	Temporary due to select trimming and pruning to facilitate temporary overhead wire relocation		
Coastal Buffer Vegetation			+- 2,040 square feet	Vegetation and removal of one tree to facilitate the widened bridge and additional pavement required to

				match the roadway profile.

Discussion of any indirect impacts, including impacts to state jurisdictional wetland buffers, to waterways and **federal (biological)** wetlands, if applicable:

Although the demolition of the existing and reconstruction of the proposed bridge will occur over water, the project does not involve any alterations or adverse effects on the natural environment. The roadway will be widened slightly at the bridge approaches to accommodate the slightly widened structure, however existing drainage patterns will be maintained by relocating a roadside swale (Area Subject to Storm Flowage) to the southeast of the bridge.

Avoidance, Minimization, and Mitigation Measures

Provide a brief summary of specific measures to avoid and minimize impact to wetlands and/or surface waters:

Work within the tidal waters of Almy Creek is unavoidable, however is limited to placement of C.O.W. measures and dewatering behind the C.O.W., in order for the work to occur in the dry. Cranes and construction equipment will be staged outside of the waterway, and no excavation or dredging is proposed within the channel. A small area (approximately 10 sq. ft.) of saltmarsh adjacent to the southeast wingwall will be impacted by C.O.W./dewatering, and saltmarsh plugs will be planted following removal of C.O.W. as a mitigation measure. The area of saltmarsh will be protected from foot traffic by means of placement of a platform over the unvegetated substrate, or similar. The proposed roadway work is located within Areas Subject to Storm Flowage, Buffer Zone and 200-foot Contiguous Area to Shoreline Features, as well as 100-year Floodplain. A drainage swale classified as an ASSF will be relocated slightly south in order to maintain existing drainage patterns. Temporary utility pole relocations will require select trimming and pruning of vegetation at the outer edges of freshwater wetlands to the northeast and northwest of the bridge, and vegetation clearing in a limited area of coastal wetland is proposed to facilitate installation of temporary utility pole guy wires. No grubbing is proposed in these areas therefore they are anticipated to revegetate naturally. In addition, vegetation clearing is proposed along the southern side of the roadway east of the bridge in order to facilitate relocation of the drainage swale (ASSF). The swale will be replanted with loam and a coastal salt tolerant seed mix approved by RIDOT. Saltmarsh plantings are proposed in the 10 s.f. area adjacent to the downstream southeast wingwall, to mitigate for temporary impacts due to dewatering, as well as to provide habitat restoration to the previously disturbed substrate in that area. The southwest embankment adjacent to the bridge wingwall will be planted with native coastal species to revegetate the previously cleared slope. Time of year restrictions will be adhered to for in-water work (i.e., turbidity producing activities, noise activities, or activities which may encroach greater than 25% into a waterway with migration) to protect Winter Flounder, and diadromous fish species during spring and fall migration. Please note, since the C.O.W. measures have been reduced to 25% of the channel width, NMFS has responded that in-water work may occur at any time of the year behind C.O.W., and C.O.W. measures should be installed outside of the TOY restrictions windows.

☒ All impacts have been *avoided* to the maximum extent possible.

☒ The project scale has been *minimized* to the maximum extent to achieve the project's intent (Limit of Disturbance reduced).
☒ No other location can support the proposed project.
☒ No other feasible alternative designs exist that would result in less impact.
☐ Other alternatives exist, but are not feasible because (please explain):
Enter text here...

☒ Soil erosion and sediment controls are proposed.
☐ Other: Enter text here...

Compensatory *mitigation* decision and justification, if applicable. Include any commitments coordinated with Federal & State Agencies:

Coordination has taken place with United States Department of the Interior Fish and Wildlife services in regards to threatened, endangered, proposed and candidate species, as well as proposed and final designate critical habitat, that may occur within the boundary of the project, or be affected by the project, See attached documentation.

Supporting Documentation (check all that apply and attach to the Appendices):
☒Location map
☒ wetland delineations/report
☒ agency coordination
☐ Other:

B. Executive Order 11990, Protection of Wetlands — YES ☒ NO ☐

Project potentially impacts federal jurisdictional (biological) wetlands and/or state jurisdictional wetland buffers:

Executive Order 11990 requires that federal agencies avoid long- and short-term impacts from destruction or modification of wetlands to the greatest extent possible. Compliance with the Rhode Island Department of Environmental Management (RIDEM) Freshwater Wetlands Rules and Regulations, the RI Coastal Resources Management Council (CRMC) Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast, the Coastal Zone Management Program, and approval through U.S. Army Corps of Engineers (USACE) under Section 404 address the intent of EO 11990.

Based on the above considerations (*Section 1.A*), it is determined that there is no practicable alternative to the proposed construction in wetlands. The proposed action includes all the practicable measures to minimize harm to wetlands which may result from such use (per FHWA Technical Advisory T6640.8A and Executive Order 11990). ☒ ☐

*If **No**, the project cannot be approved as proposed*

State agency jurisdiction and permit type anticipated:
☐RIDEM Freshwater Wetlands
☐SW wetland review

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Type: Enter text here...

☒CRMC Freshwater Wetlands in the Vicinity of the Coast
Type: Inclusive of CRMC Assent application

☒CRMC Assent (*see Section 1.F*)
Supporting Documentation (*check all that apply*):
☒ Section 1.A
☒ Other: RIDOT Stormwater Management Plan Checklist, RIDOT Small Site Stormwater Pollution Prevention Plan

C. Clean Water Act (CWA) Section 404/401	YES	NO
The project will temporarily or permanently fill/discharge or dredge into biological wetlands or navigable waterways (*see Section 1.A*) of the U.S and will require approval by the USACE:	☒	☐

Type of permit anticipated:
☐USACE non-reporting Self-Verification (SV)
GP #:_____
☐USACE Self-Verification (SV)
GP #
☒USACE Pre-Construction Notification (PCN)
GP #:2
☐USACE Individual Permit (IP)

☒ Water Quality Certification (WQC)
☐ Fill in waters of the State (Coverage under the PGP and WQC 22-011)
☒ USACE Fill in Coastal Waters (Coverage under the PGP and WQC 22-011)
☐USACE Individual Permit (RIDEM WQC Application Required)

Summarize any coordination, mitigation and/or commitment measures discussed, if applicable:
☒ *See Section 1.A*
☐ Other: **Enter text here...**

Supporting Documentation (check all that apply):
☒agency coordination
☐ Other: **Enter text here...**

D. Executive Order 11988, Flooding Encroachments	YES	NO

Categorical Exclusion Determination Project Narrative and Checklist

RIDOT Project No. 2018-EB-038

Project encroaches into the base (100 year) floodplain in fresh or marine waters:	☐	☒
Identify floodplain map source and date: Panel 44005C0112J 9/3/13		
The proposed action involves replacement of a stream crossing (culvert or bridge):	☒	☐
If **Yes**, complete form A.1 and A.2 from the Road Stream Crossing Design Manual.		
The proposed action has the potential to change the base flood elevation (encroachment):	☐	☒
If **Yes**, complete a hydraulic analysis.		
There is a significant encroachment as defined by 23 CFR 650.105(q):	☐	☒
If **Yes**, attach a copy of FHWA's finding required by 23 CFR 650.115.		
Project is consistent with E.O. 11988 (Floodplain Protection):	☒	☐

Summarize floodplain impacts and avoidance, minimization, and/or mitigation measures if any. Include any coordination, commitments and/or mitigative measures:

According to the FEMA Flood Insurance Rate Map for Bristol County, Rhode Island (Community Panel 44005C0112J, effective date September 4, 2013), the site is located within the 100-year Floodplain associated with Almy Creek and Nonquit Pond. Nonquit Pond is mapped as Zone AE, subject to wave action, with a base flood elevation of 16 feet. The areas to the northeast and northwest of the bridge, the bridge itself, and the roadway are mapped as Zone AE with a base flood elevation of 14 feet. Almy Creek downstream of the bridge is mapped as a Coastal Barrier Resource Area (D02) System Unit under jurisdiction of the USFWS. The Almy Creek channel is mapped as a Zone AE, coastal flood zone subject to wave action, with a base flood elevation of 16 feet. The area downstream of the bridge is mapped as Zone AE, coastal flood zone subject to wave action, with a base flood elevation of 15 feet. No fill within floodplain is proposed, therefore no impacts to floodplain are anticipated.

Supporting Documentation (check all that apply):
☒FEMA maps
☐hydraulic analysis
☐agency coordination
☐Road-stream crossing design manual Table A.1 & A.2
☐Other: Enter text here...

E. **Rivers and Harbors Act (RHA) Section 10 Permit**	**YES**	**NO**
Project will involve excavation or fill within any navigable waters of the U.S. and will require approval by the USACE under Section 10:	☒	☐

Summarize any coordination and/or commitments measures discussed, if applicable:
Temporary fill only, consisting of sandbag cofferdams will be utilized during construction, however no other fill (temporary or permanent) is proposed within the waterway. The bridge components will not impede on the waterway and the existing bottom portions of the substructure will remain. No new structures are proposed within the waterway. The project is anticipated for coverage under the Programmatic General Permit.

Supporting Documentation (check all that apply):

☒agency coordination

☒Other: Wetland delineations, anticipated permit requirements, avoidance minimization or mitigation/compensation measures agreed upon, and commitments.

F. RHA Section 408 Permit: **YES** **NO**

Project involves the alteration, occupation, or use of a USACE civil works project: ☐ ☒

Summarize proposed impacts and any coordination, commitments and/or mitigative measures, if applicable:
Enter text here...

Supporting Documentation (check all that apply):

☒USACE 408 maps (reviewed, Sakonnet River project not in the vicinity of Nonquit Bridge)

☐agency coordination

☐Other:

G. RHA Section 9 Bridges Coast Guard Coordination **YES** **NO**

Project will involve the construction or reconstruction or modification of a bridge or causeway in or over navigable waters of the US: ☒ ☐

Type of U.S. Coast Guard (USCG) permitting anticipated:

☐USCG Bridge Permit

☒USCG Bridge Permit Exception

☐USCG Navigational Lighting Authorization

☒Other coordination: Anticipated permit requirements, avoidance minimization or mitigation/compensation measures agreed upon, commitments, and agency correspondence.

Summarize any coordination, commitments and/or mitigative measures, if applicable:
USCG Exception letter sent to Jeff Stieb, USCG on 2/2/21. Email response from Jeff Stieb from the First Coast Guard District on 2/11/21 concurs that project qualifies as repair and a Coast Guard Permit is not required.

Supporting Documentation (check all that apply):

☒agency coordination
☐Other: Enter text here...

H. Coastal Zone Management Act (CZMA)	YES	NO
Project will be located within an area that is regulated under the RI Coastal Resources Management Program:	☒	☐
Project will be located within an area covered by a Special Area Management Plan (SAMP):	☒	☐

SAMP type: Shoreline Change

Type of assent anticipated:
☒Category A
☐Category B
☐Maintenance Application

The project is consistent to the maximum extent practicable with the enforceable policies of the state's coastal zone management program:	☒	☐

Summarize impacts to coastal zone (reference *Section 1.A* if applicable) and explain how the project will be consistent with the state's coastal zone management program:
A small area (approximately 10 sq. ft.) of saltmarsh adjacent to the southeast wingwall will be impacted by C.O.W./dewatering, and saltmarsh plugs will be planted following removal of C.O.W as a mitigation measure. The area of saltmarsh will be protected from foot traffic by means of placement of a platform over the unvegetated substrate, or similar. A drainage swale classified as an ASSF will be relocated slightly to maintain existing drainage patterns. No changes in grade are proposed that would result in a loss of floodplain, and disturbed native vegetation will be restored.

Supporting Documentation (check all that apply):
☒agency coordination
☒Other: Anticipated permit requirements, avoidance minimization or mitigation/compensation measures agreed upon, and commitments.

I. Coastal Barrier Resources Act (CBRA)	YES	NO
Part of the project/action is in the boundary of a coastal barrier resource system (CBRS) unit:	☒	☐
Project activities qualify for an exception listed in 16 USC 3505(a):	☒	☐

USFWS Review Date: 1/11/2021

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Supporting Documentation (check all that apply):

☒Interagency CRBA consultation documentation
☐Maps
☐agency coordination
☐Other: Enter text here...

J. Clean Water Act Section 402 YES NO

Type of permitting anticipated (check all that apply):

☐RIPDES Construction General Permit (CGP) (equal to or greater than one acre of disturbance down to the erodible surface)

- Disturbed Area: _____ acres
- RIDOT Large-Site SWPPP required

☒RIDOT Small-Site SWPPP (less than 1 acre of disturbance down to the erodible surface)

- Disturbed Area: <1 Acre
- RIDOT Small-Site SWPPP required

Describe best management practices to minimize discharge of pollutants (in addition to SWPPP) to waters of the State:
Compost filter sock will be installed along the limit of disturbance to prevent sediment migration to wetlands and waterbodies (Nonquit Pond and associated freshwater wetlands, Almy Creek, saltmarshes). Control of water measures will be installed within Almy Creek to prevent sediment migration and allow work to be performed in the dry. A Small Site SWPPP is being prepared detailing consistency with the RI Erosion and Sediment Control Handbook.

☐RIPDES Remediation General Permit (RGP) (dewatering of contaminated material)

RIDOT Consent Decree YES NO

Project complies with the RIDOT Consent Decree ☐ ☒
☐ Exempt

Please explain why project is exempt or why treatment goal can't be met.
Due to the limited size of the project area and numerous site constraints including right-of-way, adjacent wetlands, and site usage by RIDEM DFW and local fire departments, no suitable locations in or adjacent to the project site were identified for the addition of stormwater treatment BMPs. Additionally, the Stormwater Group did not recommend removing vegetation unless it was necessary for construction as it is a coastal environment and erosion is a concern. A roadside drainage swale to the southeast of the bridge

will be relocated and sized to match the existing swale to be removed. A RIDOT Small Site Stormwater Pollution Prevention Plan is being prepared, and the project plans include detailed erosion and sediment control notes and specify that erosion and sediment control BMPs shall be provided in accordance with the SWPPP.

The project will clean, flush, inspect, and repair drainage system, including all catch basins, drainage manholes, outfalls, conveyance, and STU's in project area. ☐ ☒

☐ Exempt

Summarize any coordination, commitments and/or mitigative measures for the above requirements, if applicable:
There are no structural stormwater units in the project area that would require cleaning.

Supporting Documentation (check all that apply):

☒Worksheets A and B1
☒approval from RIDOT Environmental Division
☐Other

K. Safe Drinking Water Act	YES	NO
Project proposes Groundwater Discharge (GWD)/ Underground Injection Control (UIC):	☐	☒
Project is located within a sole source aquifer:	☐	☒
If located in a Sole Source Aquifer, does the project need EPA approval?	☐	☐

If **Yes**, date of EPA approval: Click or tap to enter a date.

Supporting Documentation (check all that apply):

☐agency coordination
☐EPA approval
☐Other:

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2. THREATENED & ENDANGERED SPECIES

A. U.S. Fish & Wildlife Service (USFWS) Section 7 Endangered Species Act (ESA)

	YES	NO
Are there listed T&E species, Other than the Northern Long Eared Bat (NLEB), that potentially occur in the project's action area and/or project has designated critical habitat present within the project's action area:	☐	☒

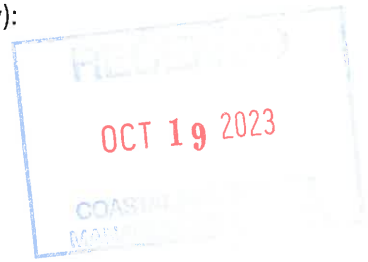
Species Name	**Suitable Habitat** *Is suitable habitat for listed species present in your action area?* **(Choose from drop down below.)**	**Species Presence** *Does the species occur in your action area?* **(Choose from drop down below.)**	**Effect Determination** *Consider all potential effects from the action to threatened or endangered species.* **(Choose from drop down below.)**	**Notes/Information** *Explain what info was used to determine presence of suitable habitat and/or species.*
	Don't know-suitable habitat may be present	Species not present	No Effect	

If NLAA, date of USFWS Concurrence: Click or tap to enter a date.
If LAA, date Biological Opinion (BO) Issued: Click or tap to enter a date.

If consultation was completed, summarize any coordination and conservation measures that will be applied to avoid or minimize effects to species, if applicable:
Official Species List generated on 12/22/21 shows no species other than NLEB.

Supporting Documentation (check all that apply):

- ☒USFWS species list
- ☐NLAA concurrence letter
- ☐biological opinion
- ☐agency coordination
- ☒Other: IPaC Species List



B. USFWS Northern Long-Eared Bat (NLEB) Section 7 ESA

	YES	NO
The proposed project will potentially impact the endangered NLEB:	☐	☒
An effect determination was made using the FHWA Programmatic BO:	☒	☐
Was a Presence/Absence Summer Survey Conducted?	☐	☒

Date of Survey: Click or tap to enter a date.

☐Present ☐Absent

Was a visual emergence survey conducted?	☐	☒

Categorical Exclusion Determination Project Narrative and Checklist

RIDOT Project No. 2018-EB-038

Date of Survey: Click or tap to enter a date.
☐Present ☐Absent

Was a bridge assessment conducted? ☒ ☐
Date of Survey: 1/15/2021
☐Present ☒Absent

Effect Determination
☐ No Effect ☒ NLAA ☐ LAA

If NLAA, Date of USFWS Concurrence/Verification Letter: **1/25/2021**
If LAA, Date BO Issued: Click or tap to enter a date.

Summarize any coordination and avoidance, minimization, and mitigation measures that will be applied, if applicable: General AMM 1: The project will ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures. Tree Removal AMM 1: All phases/aspects of the project (e.g., temporary work areas, alignments) will be modified, to the extent practicable, to avoid tree removal in excess of what is required to implement the project safely. Tree Removal AMM 2: Time of year restrictions will be applied for tree removal when bats are not likely to be present (inactive season November 1st-March 31st). Tree Removal AMM 3: Tree removal will be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). Tree Removal AMM 4: The project will avoid cutting down/removal of all (1) documented Indiana bat or NLEB roosts (that are still suitable for roosting), (2) trees within 0.25 miles of roosts, and (3) documented foraging habitat any time of year.

Supporting Documentation (check all that apply):
☒USFWS species list
☒USFWS concurrence/verification letter
☒biological opinion
☒agency coordination
☐Other: Enter text here...

B. National Marine Fisheries Service (NMFS) Greater Atlantic Regional Fisheries Office (GARFO)Section 7 Endangered Species Act (ESA) YES NO

Project will potentially impact NMFS ESA listed species: ☒ ☐
If **No**, but the Section 7 mapper results show resources are present based on project location, select why no potential impacts are anticipated:
☐No work anticipated below Mean High Water (MHW).
☒No use of vessels or barges anticipated.
☐Other:

An effect determination was made using the following:

☒FHWA NLAA Programmatic

☐Individual Consultation

Effect Determination

☐ No Effect ☒ NLAA ☐ LAA

Date Consultation Initiated: **3/8/2021**
Date of NMFS Concurrence: **3/16/2021**
If LAA, Date BO Issued: Click or tap to enter a date.

Summarize any coordination, commitments and/or mitigative measures, if applicable:

Formal consultation with NOAA NMFS GARFO Protected Resources Division (GARFO PRD) was through the submission of an Appendix A FHWA GARFO NLAA (Not Likely to have an Adverse Affect) Program Verification Form. RIDOT as FHWA's designated non-federal representative and GARFO PRD are in concurrence that the project is not likely to adversely affect ESA-listed species or designated critical habitat under NMFS jurisdiction in accordance with the Program, and all effects are either insignificant or discountable. The ESA Section 7 mapper and executed Appendix A consultation form are attached.

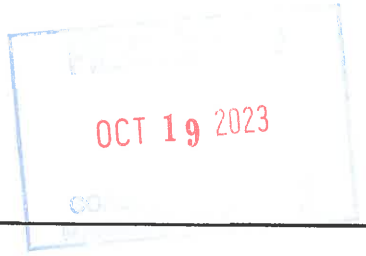
Supporting Documentation (check all that apply):

☒ESA Section 7 Mapper Species List

☒Verification Form

☒Agency coordination

☐Other: Enter text here...



C. **RIDEM RI State-listed Species**	YES	NO
There are state listed T&E species that potentially occur in the project's action area:	☐	☒
Natural Heritage Area (NHA) #: Click or tap here to enter text.		
Is there suitable habitat for the species within the project action area?	☐	☐
If yes, were species found during a presence/absence survey?	☐	☐
Did coordination with RIDEM Fish & Wildlife occur to discuss potential Best Management Practice's (BMPs)?	☒	☐

Although the project is not located within a state mapped Natural Heritage Area, it is located adjacent to a dam with a RIDEM fish ladder which provides passage for anadromous fish species. A project scope and preliminary plans were sent to RIDEM DFW on 1/26/21 for comment. DFW responded they are in

agreeance with the TOY restrictions that NMFS and ACOE have implemented and have asked that even outside the TOY restrictions that the water controls do not encroach on more than 25%. Email correspondence between RIDOT NRU and RIDEM DFW is attached.

Supporting Documentation (check all that apply):

☐NHA species list

☒Agency coordination

☐Other: Avoidance and minimization or mitigation/compensation measures agreed upon, and commitments.

3. SPECIAL RESOURCES

A. NMFS GARFO Essential Fish Habitat (EFH)	YES	NO
Project will potentially impact essential fish habitat:	☒	☐

If **No**, but EFH mapper results show resources are present based on project location, explain why no potential impacts are anticipated:

☐No work anticipated below Ordinary High Water (OHW) and/or MHW.
☒No use of vessels or barges anticipated.
☐Impassable downstream dam is present and impedes anadromous fish passage.
☐Other: Enter text here...

An effect determination was made using the following:

☒FHWA EFH Programmatic
☐Individual Consultation – Abbreviated
☐Individual Consultation - Expanded

Effect Determination:

☐No Adverse Effect (no consultation)
☒The adverse effect on EFH is not substantial (programmatic or individual-abbreviated)
☐The adverse effect on EFH is substantial (individual-expanded)

Date Consultation Initiated: **1/25/2021**
Date of NMFS Concurrence: **3/2/2021**
Summarize any coordination, commitments and/or mitigative measures, if applicable:

Supporting Documentation (check all that apply):

☒EFH mapper species list
☒verification form
☒agency coordination
☒Other: Individual Consultation Documentation, avoidance minimization or mitigation/compensation measures agreed upon, and commitments, and agency correspondence.

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B. Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act	YES	NO
There is suitable habitat for migratory birds and/or migratory birds are known to likely to occur in the project area	☒	☐
The project is within suitable habitat for Bald or Golden Eagles and/or Bald or Golden Eagles are known to likely to occur in the project area:	☒	☐
If suitable habitat, were surveys conducted for evidence of migratory birds and/or Bald or Golden Eagles within the project area?	☐	☒

If yes, describe survey results and any coordination with the USFWS (if applicable):

The Bald Eagle is not a Bird of Conservation Concern in the project area, but warrants attention because of the Eagle Act or potential susceptibilities in offshore areas from certain types of development or activities.

Describe avoidance and minimization measures, including timing windows, that will be followed to comply with the MBTA and the Bald and Golden Eagle Protection Act:

☒If clearing and grubbing, tree removal, staging areas or other land disturbing activities will occur during the migratory bird breeding season (March 1st- August 31st), the Contractor /Environmental Monitor will inspect the affected right-of-way for bird nests before commencing work. If any active nest is discovered, work will stop and the RIDOT Natural Resources Unit (NRU) shall be contacted.

☒ Before commencing any bridge-related construction activities during the migratory bird breeding season (March 1st-August 31st), the Contractor/Environmental Monitor will inspect the bridge(s) for bird nests. If any active nest is discovered, work will stop and the RIDOT NRU shall be contacted.

☒The Contractor will not disturb any active nests (completed or partially completed nests that contain eggs or nestlings). If any active nest is discovered and the nest cannot be avoided, work shall stop and the RIDOT NRU shall be contacted to evaluate the potential for disturbance of nests. The project will avoid the removal and destruction of active bird nests except through federal and state approved options.

☒At no time will large nests of ospreys, hawks, falcons or eagles be destroyed. If it is determined that raptor or eagle roosts may be present, the Contractor will coordinate with RIDOT NRU prior to construction.

☒Other: IPaC lists several migratory birds that could be found in this area. However, species that may be found in this area are not limited to this list. When there is general vegetation removal with potential for nesting birds, it is recommended that if vegetation clearing will occur during the migratory bird breeding season (March 1- August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify RIDOT NRU to evaluate the situation. During the non-breeding season (September 1- February 28) vegetation removal is not subject to this restriction. For this project location if vegetation removal is to occur during the breeding season, habitat evaluation surveys may be required to identify existing active or past nests.

Supporting Documentation (check all that apply):

☐Survey documentation/reports
☒agency coordination
☐Other: Enter text here...

C. Marine Mammal Protection Act (MMPA)	YES	NO
The project will potentially result in incidental harassment or take of marine mammals in U.S. waters:	☐	☒

If yes, type of coordination
☐USFWS

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☐NMFS

The project will require the following permits from the NMFS:
☐Incidental Harassment Authorization (IHA)
☐Letter of Authorization (LOA)
☒N/A
Summarize any coordination, commitments and/or mitigative measures, if applicable:
Enter text here...

Supporting Documentation (check all that apply):
☐agency coordinate
☐Other: Enter text here...

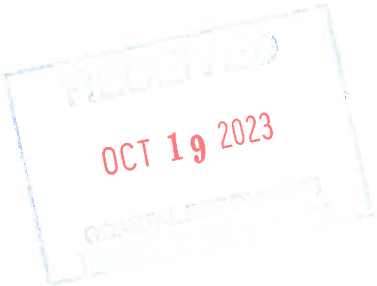
D. Wild and Scenic Rivers Act	YES	NO
Proposed project occurs on or adjacent to a designated wild and scenic river, a congressionally authorized study river, or upstream, downstream or on a tributary of such river:	☐	☒

Effect Determination:
☐No Adverse Effect ☐Adverse Effect.

Date of National Park Service (NPS) Approval: Click or tap to enter a date.

Summarize any coordination, commitments and/or mitigative measures, if applicable:
Enter text here...

Supporting Documentation (check all that apply):
☐agency coordination
☐ Other Enter text here...



4. SECTION 4(f) PROPERTIES

☐No Section 4(f)
☐De Minimis Evaluation
☐ Exempt as an Improvement Project (23 CFR 774.13(g))
☐Programmatic Evaluation
☐Individual Evaluation
☐Supporting Documentation (check all that apply):
☒Section 4(f) Checklist
☐Documentation of De Minimis Evaluation or Exemption under Improvement Project (23 CFR 774.13(g))
☐Programmatic Section 4(f) Evaluation
☐Individual Section 4(f) Evaluation

Supporting Documentation:
☒Section 4(f) Checklist

Summary of Findings from the Cultural Resources Unit:
The area north of the bridge is mapped as local conservation land, and the area southeast of the bridge is mapped as state conservation land, however these areas do not appear to qualify as a 4(f) properties . See attached Section 4(f) Checklist for more information.

5. HISTORICAL PROPERTIES

Effect Determination:
☐No Historic Properties Present – "No Effect" Determination
☐Historic Properties Present – No Adverse Effect Determination or PA Form
☒Historic Properties Present – Adverse Effect Determination

Supporting Documentation (check all that apply):
☐ "No Effect" Determination Documentation
☐PA Form
☒Standard Section 106 Review Documentation

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Summary of Findings from the Cultural Resources Unit:

Pare Corporation was tasked by RIDOT to prepare a Preliminary Structures Report to assess alternatives to address the structurally deficient Nonquit Pond Bridge Number 029201 in Tiverton, Rhode Island. Based on the 2015 Rhode Island Historic Bridge Inventory Update, Nonquit Pond Bridge is considered to have historic and cultural significance due to its construction in 1939-1940 as part of the Works Progress Administration (WPA) programs during the Great Depression. Unfortunately, due to its close proximity to a coastal environment, the bridge has become structurally deficient with considerable deterioration of the

superstructure and substructure. The bridge is posted for 9-tons for 2-axle vehicles and 13-tons for 3-axle vehicles, which limits access for certain emergency vehicles, school buses, and trucks.

Given the balance of public safety and cost, with options to preserve aspects of cultural and historic significance, it was recommended to replace the structure. The structure would be replaced while maintaining portions of the existing substructure, matching the aesthetics of the existing structure, and incorporating the existing plaques in the replacement structure to retain as much of the structure's historic and cultural significance as possible.

Because this project is receiving funding from the FHWA, it must comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and Section 4(f) of the United States Department of Transportation Act (US DOT Act), both as amended.

The Town of Tiverton is generally sensitive for pre-contact Native American and contact-era archaeological evidence. Although the tidal surge of the September 1938 Hurricane caused general disturbance in the vicinity of the bridge, temporary easements or staging areas should be evaluated for potential soil disturbance. This potential for archaeological sensitivity should be considered as planning for this project moves forward.

As of now, the Preliminary Structures Report has been submitted by the RIDOT CRU as part of the Section 106 and 4(f) process to determine if replacement of the structure is acceptable. Pare's subconsultant, AHS, Inc., is continuing with RI Historic Resource Archive documentation following a Phase II Archaeological survey performed in February 2023. FHWA provided a comment letter stating the replacement of the bridge would constitute an adverse effect on the historic property. AHS will assist with a Memorandum of Agreement in order to resolve adverse effects under Section 106. The MOA can be provided upon request.

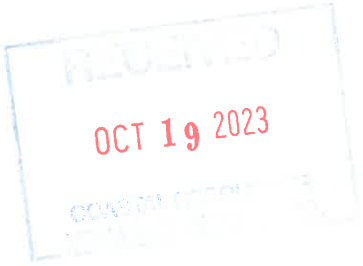
6. NOISE

☐Type I Project - i.e. highway on new location, substantial geometric alteration of an existing highway, addition or relocation of interchange lanes or ramps)

☐Type II Project - noise abatement program or project

☒Type III Project - project that does not meet the classification of Type I or Type II project. Type III projects do not require a noise analysis

Supporting Documentation:
Temporary noise from construction equipment is anticipated.



7. RIGHT-OF-WAY REQUIREMENTS

	YES	NO
Project will involve the permanent acquisition of more than minor amounts of right of way or involves non-residential or residential displacement:	☐	☒

Parcel Summary

Permanent Acquisition Type	Impact Description
Permanent easement (905 square feet) – City of Newport property, Plat 808/Lot 102	Highway construction
Permanent easement (1391 square feet) – Hart, Richard Davis, Plat 807/Lot 148	Highway construction

Discuss impacts to the activities or functions of the affected properties, if applicable:

A majority of the project is located within the right-of-way, however a permanent easement is required for the guardrail to the northwest of the bridge on City of Newport property. A small portion of private property to the southeast of the bridge will be acquired for a section of relocated stone wall in order to accommodate the relocated roadside swale and roadway widening. Temporary easements are required for utility pole relocations and temporary utility pole installations, and native plantings along the southwest embankment, all within private property. The project will not result in the permanent acquisition of more than minor amounts of right-of-way that would adversely affect the activities or functions of the affected properties or businesses.

All acquisitions and relocations shall be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.	☒	☐

Supporting Documentation:
Right-of-Way Plans

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8. OTHER ENVIRONMENTAL IMPACTS

A. Hazardous Waste and other Contaminated Materials

	YES	NO
Does the project require excavation of known contaminated/regulated soil, regardless of depth? (e.g. work near railroad corridors or historic urban fill)?	☐	☒

If yes, summarize RIDEM coordination.
Enter text here...

Will properties that have the potential to or are known to be contaminated, be acquired as part of this project?	☐	☒

If yes, summarize RIDEM coordination.

Does the project require excavation of 2' or more below the existing ground surface? ☒ YES ☐ NO

If yes, will groundwater be encountered? ☐ YES ☒ NO

Check the applicable assessments conducted to date:

- ☐ Corridor Land Use Evaluation
- ☐ Phase I Environmental Site Assessment
- ☐ Phase II Environmental Site Assessment

Summarize (RECs) Recognized Environmental Concerns (Note any Superfund Sites within a one-mile radius, state listed sites within a ½ mile radius, and any Underground Storage Tanks)
Enter text here...

Summarize RIDEM coordination, conclusions and recommendations supported by the findings of the assessment.
Enter text here...

Supporting Documentation (check all that apply):

- ☐ site maps
- ☐ Environmental Site Assessment(s)
- ☐ agency coordination
- ☐ Other: Click or tap here to enter text.

B. Farmland Protection Policy Act YES NO

Project will impact farmland listed as prime or of statewide importance: ☐ YES ☒ NO

Does the project convert prime or unique agricultural land to nonagricultural uses? ☐ YES ☒ NO

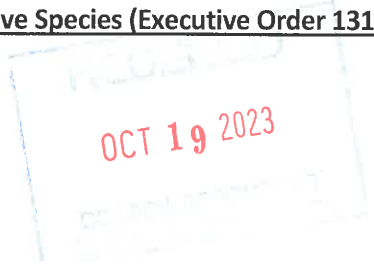
If yes, date of Natural Resource Conservation Service approval: Click or tap to enter a date.

*The project is located within an area mapped as Prime Farmland; however, the bridge is located within a previously developed area not suitable for farmland use. The minor amount of property to be acquired as a permanent easement for the swale relocation southeast of the bridge on private property will result in a de minimus impact to the adjacent farmland.

Supporting Documentation (check all that apply):

- ☐ agency coordination
- ☐ Other:

C. Invasive Species (Executive Order 13112 & 13751) YES NO



Project will involve ground disturbance:	☒	☐
If yes, a survey for invasive species resulted in the presence of invasive species/noxious weeds within the project area or adjacent to the project:	☒	☐
The project includes all practicable measures to minimize the introduction or spread invasive species (appropriate tools, techniques, management strategies, and risks for invasive species prevention, control, and management been considered in the planning process)	☒	☐

Summarize avoidance and minimization measures that will prevent the introduction, continued existence, or spread of noxious weeds or invasive species, if any. Include any commitments or mitigative measures:

Plantable soil placement should follow RIDOT Standard Specification L.01.03.1 – Loam. All planting media should be screened and free from invasive species. The area southeast of the bridge to be cleared of vegetation for the swale relocation will result in removal of invasive species including, but not limited to, Multiflora Rose and Oriental Bittersweet. A native coastal salt tolerant seed mix will be planted in the area where vegetation clearing if proposed, for restoration of native species.

Supporting Documentation (check all that apply):

☐survey results
☐agency coordination
☐Other: Field investigations, avoidance minimization or mitigation/compensation measures agreed upon, and commitments.

D. Vegetation and Roadside Management	YES	NO
The project will result in impacts to natural/native plant communities, landscape and ornamental plantings, vegetation providing an engineering function, or vegetation of exceptional visual quality:	☒	☐

If yes, please describe the impacts and how impacts will be minimized or mitigated (BMPs, RIDOT Standard Specs, etc.)

Temporary utility pole relocations will require select trimming and pruning of the outer edges of freshwater wetlands to the NE and NW of the bridge, and vegetation clearing in a limited area of coastal wetland is proposed to facilitate installation of temporary utility pole guy wires. No grubbing is proposed in these areas therefore it is anticipated to revegetate naturally. In addition, vegetation clearing is proposed along the southern side of the roadway east of the bridge in order to facilitate relocation of the drainage swale (ASSF). The swale will be replanted with loam and a native coastal salt tolerant seed mix.

Habitat restoration plantings are proposed to the southwest of the bridge to provide a vegetated native coastal buffer to the waterway, and to mitigate for previous vegetation clearing impacts. Saltmarsh plantings are proposed in an area adjacent to the downstream southeast wingwall, to mitigate for temporary impacts due to dewatering, as well as habitat restoration.

The proposed project will occur on a designated Rhode Island Scenic Roadway: ☐ ☒

RI Scenic Roadways Board (SRB) Effect Determination anticipated:
- ☐No Adverse Effect
- ☐Adverse Effect

Summarize any coordination, commitments and/or mitigative measures discussed with the SRB, if applicable:
Enter text here...

Supporting Documentation (check all that apply):
- ☐agency coordination
- ☐Other: Enter text here...

E. Community Impacts, Environmental Justice, and Title VI Compliance YES NO

Consultation with RIDOT Title VI Coordinator/Office of Civil Rights – Title VI/Environmental Justice Analysis:

There are significant EJ populations (low-income, minorities, LEP, Age 64+, and individuals with disabilities) within the project area (0.5-mile radius): ☐ ☒

There are disproportionately high and adverse social, economic, and environmental impacts to EJ populations expected from this project: ☐ ☒

There are significant temporary EJ impacts expected during the construction of this project: ☐ ☒

If there is an affect to EJ populations, summarize the public outreach effort and mitigation to engage and protect these populations:
Enter text here...

Supporting Documentation:
See attached EJSCREEN ACS Summary Report

B. Categorical Exclusion (CE) Determination Checklist

Starting with Section 1, answer the questions by checking Yes or No.

After each of the following sections, there will be instructions that direct the preparer to continue to the next appropriate section of the checklist. The source(s) of the information used should be listed at the bottom of the response to each question and supporting documentation should be attached to the checklist. The preparer should refer to RIDOT's *Categorical Exclusion Project Narrative and Checklist Detailed Instructions* for further information and guidance on completing this checklist.

SECTION 1-CATEGORICAL EXCLUSIONS	YES	NO
1. Is the project on the list of CEs?	☒	☐

If "Yes," the preparer should check the CE that is being considered and then complete Section 2 below.
If "No," the preparer should complete Section 2 below.

List of Categorical Exclusions

Categorical Exclusions in 23 CFR 771.117(c) (The "C" List)

1. ☐ Activities that do not involve or lead directly to construction, such as planning and research activities; grants for training; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed; and Federal-Aid system revisions that establish classes of highways on the Federal Aid highway system. A feasibility study would be an example of this CE.
2. ☐ Approval of utility installations along or across a transportation facility.
3. ☐ Construction of bicycle and pedestrian lanes, paths, and facilities. Examples include walkways, sidewalks, shared-use paths and facilities, and small passenger shelters provided no new disturbance will occur.
4. ☐ Activities included in RIDOT's highway safety plan under 23 USC 402.
5. ☐ Transfer of Federal lands pursuant to 23 U.S.C. 107(d) and/or 23 U.S.C. 317 when the land transfer is in support of an action that is not otherwise subject to FHWA review under NEPA.
6. ☐ Installation of noise barriers or alterations to existing publicly-owned buildings to provide noise reduction. Examples include maintenance and/or replacement of existing noise wall panels and/or posts.
7. ☐ Landscaping. Examples include herbicidal spraying; mowing or brush removal/trimming projects; and beautification or facility improvement projects (*e.g.*, landscaping, curb and gutter replacement, installation of park benches, or decorative lighting).
8. ☐ Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and

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railroad warning devices where no substantial land acquisition or traffic disruption will occur. Examples include the installation or maintenance of signs, pavement markings/raised pavement markers/sensors, traffic calming activities, new or replacement right-of-way fencing, and general pavement marking or "line painting" projects.

9. ☐ The following actions for transportation facilities damaged by an incident resulting in an emergency declared by the Governor of Rhode Island and concurred by the Secretary of the United States Department of Transportation (the Secretary), or a disaster or emergency declared by the President pursuant to the Robert T. Stafford Act (42 U.S.C. 5121):

   (a) Emergency repairs under the FHWA Emergency Relief Program (23 U.S.C. 125); and

   (b) The repair, reconstruction, restoration, retrofitting, or replacement of any road, highway, bridge, tunnel, or transit facility, including ancillary transportation facilities (such as pedestrian/bicycle paths and bike lanes), that is in operation or under construction when damaged and the action:

   (i) Occurs within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction); and

   (ii) Is commenced within a two-year period beginning on the date of the declaration.

10. ☐ Acquisition of scenic easements. Examples include conservation easements and mitigation easements.

11. ☐ Determination of payback under 23 USC 156 for property previously acquired with Federal Aid participation.

12. ☐ Improvements to existing rest areas and truck weigh stations. Examples include resurfacing of existing parking areas, truck stop electrification, and construction/installation of alternative energy facilities at existing facilities.

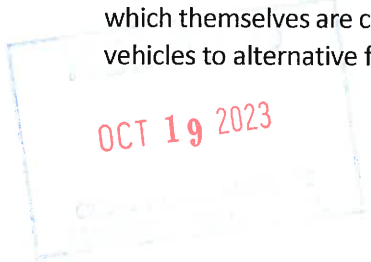
13. ☐ Ridesharing activities. Examples include transportation corridor fringe parking facilities and park and-ride lots.

14. ☐ Bus and rail car rehabilitation.

15. ☐ Alterations to facilities or vehicles in order to make them accessible for elderly and handicapped persons.

16. ☐ Program administration, technical assistance activities, and operating assistance to transit authorities to continue existing service or increase service to meet routine changes in demand.

17. ☐ The purchase of vehicles whose use can be accommodated by existing facilities or by new facilities which themselves are categorically excluded. An example would be the purchase or conversion of vehicles to alternative fuel uses.



18. ☐ Track and rail bed maintenance and improvements when carried out within the existing right-of-way.

19. ☐ Purchase and installation of operating or maintenance equipment to be located within the transit facility and with no significant impacts off the site.

20. [Not Applicable]

21. ☐ Deployment of intelligent transportation systems.

22. ☐ Projects, as defined in 23 U.S.C. 101, that would take place entirely within the existing operational right-of-way. Examples include:

    ☐ Tower lighting.

    ☐ Guardrail installation and replacement (including median cable barriers) where roadway ditches and backslopes will not be relocated.

    ☐ Improvements to existing RIDOT maintenance facilities.

    ☐ Construction of new RIDOT maintenance facilities within an existing operational right-of-way.

    ☐ Work on pedestrian and vehicle transfer structures and associated utilities, buildings, and terminals.

23. Federally-funded projects:

    ☐ (a) That receive less than $5 million of Federal funds (as adjusted annually by the Secretary to reflect any increases in the Consumer Price Index prepared by the Department of Labor); or

    ☐ (b) With a total estimated cost of not more than $30 million (as adjusted annually by the Secretary to reflect any increases in the Consumer Price Index prepared by the Department of Labor) and Federal funds comprising less than 15 percent of the total estimated project cost.

24. ☐ Localized geotechnical and other investigation to provide information for preliminary design and for environmental analyses and permitting purposes, such as drilling test bores for soil sampling; archaeological investigations for archaeology resources assessment or similar survey; and wetland surveys. (This CE only applies to stand alone projects, not for environmental surveys being conducted as part of a project with an environmental document).

25. ☐ Environmental restoration and pollution abatement actions to minimize or mitigate the impacts of any existing transportation facility carried out to address water pollution or environmental degradation. These actions include retrofitting and construction of stormwater treatment systems to meet Federal and State requirements under Sections 401 and 402 of the Federal Water Pollution Control Act (33 USC 1341; 1342).

26. ☐ Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes or parking lanes. Examples include:

    ☐ Construction of highway safety and truck escape ramps.

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☐ Construction of bicycle lanes and pedestrian walkways, sidewalks, shared-use paths, or facilities and trailhead parking that do not otherwise qualify for a CE C-1 designation.

☐ Beautification or facility improvement projects (*e.g.*, landscaping, curb and gutter installation and replacement, ADA ramps/curb ramps, installation of park benches, or decorative lighting).

☐ Implementation of Complete Street elements to improve safety and/or pedestrian, bicycle, transit, vehicular, or freight mobility.

27. ☐ Highway safety or traffic operations improvement projects, including the installation of ramp metering control devices and lighting. Examples include lane reduction changes, provided that traffic analyses are completed.

28. ☒ Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.

29. ☐ Purchase, construction, replacement, or rehabilitation of ferry vessels (including improvements to ferry vessel safety, navigation, and security systems) that would not require a change in the function of the ferry terminals and can be accommodated by existing facilities or by new facilities which themselves are within a CE.

30. ☐ Rehabilitation or reconstruction of existing ferry facilities that occupy substantially the same geographic footprint, do not result in a change in their functional use, and do not result in a substantial increase in the existing facility's capacity. Example actions include work on pedestrian and vehicle transfer structures and associated utilities, buildings, and terminals.

SECTION 2-CE AND UNUSUAL CIRCUMSTANCES QUESTIONS		YES	NO
2.	Does the project induce significant impacts to planned growth or land use for the area?	☐	☒
3.	Does the project require the relocation of significant numbers of people?	☐	☒
4.	Does the project have a significant impact on any natural, cultural, recreational, historic, or other resource?	☐	☒
5.	Does the project involve significant air, noise, or water quality impacts?	☐	☒
6.	Does the project have a significant impact on travel patterns?	☐	☒
7.	Does the project involve substantial controversy on environmental grounds?	☐	☒
8.	Does the project have a significant impact on Section 4(f) properties or on historic properties?	☐	☒
9.	Is the project inconsistent with any Federal or state requirement or administrative determination relating to the environmental aspects of the action?	☐	☒

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If the answer for any of the questions within Section 2 is "Yes," then the project does not qualify as a CE and an EA or EIS is required. If the answer for all the questions within Section 2 is "No," complete Section 3 below.

SECTION 3-SEGMENTATION QUESTIONS		YES	NO
10.	Is the action a linear project?	☐	☒

If the answer is "Yes," the preparer should complete Questions 11 through 13. If the answer is "No," the preparer should not respond to Questions 11 through 13 and advance to Section 4 below.

11.	Does the project have independent utility?	☐	☐
12.	Does the project connect logical termini?	☐	☐
13.	Does the project allow further consideration of alternatives for other reasonably foreseeable transportation improvements?	☐	☐

If any of the answers for Questions 11, 12, and 13 is "No," then the project does not qualify as a CE and consultation between RIDOT and FHWA is required. If the answers for Questions 11, 12, and 13 are "Yes," complete Section 4 below.

SECTION 4-PROGRAMMATIC CE CONDITION QUESTIONS		YES	NO
14.	Does the project involve the permanent acquisition of more than minor amounts of right-of-way or involve non-residential or residential displacements?	☐	☒
15.	Does the project have a substantial environmental impact from the intended future use of land involved in the sale, transfer, or lease of state-owned property?	☐	☒
16.	Will the project have a finding of adverse effect on historic properties?	☒	☐
17.	Does the project have a disproportionately high and adverse impact on minority or low-income populations?	☐	☒
18.	Is the project a Type I project requiring a noise analysis?	☐	☒
19.	Does the project require the use of Section 4(f) properties necessitating the preparation of an Individual Section 4(f) Evaluation?	☐	☐
20.	Does the project require the use of Section 6(f) properties?	☐	☒
21.	Does the project require a U.S. Army Corps of Engineers Section 10 permit or Individual Section 404 permit?	☐	☒
22.	Does the project require a U.S. Coast Guard bridge permit?	☐	☒
23.	Does the project adversely affect Federally-listed threatened or	☐	☒

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endangered species or critical habitat?

24.	Does the project involve a floodplain encroachment other than for functionally dependent uses or actions that facilitate open space use?	☐	☒
25.	Does the project involve construction in, across, or adjacent to a river component designated or proposed for inclusion in the National System of Wild and Scenic Rivers?	☐	☒
26.	Does the project convert prime or unique agricultural land to nonagricultural uses?	☐	☒
27.	Does the project affect a known Superfund site?	☐	☒
28.	Does the action involve any changes in access control?	☐	☒
29.	Does the project involve the construction of temporary access or closure of existing road, bridge, or ramps?	☒	☐

*a temporary detour route will be in place during construction while the bridge is temporarily closed, however upon completion the bridge will reopen. No permanent closure is proposed.

If the answers to Questions 14 through 29 are "No" then the project qualifies as a Programmatic CE. If any of the answers to Questions 14 through 28 are "Yes" then the project cannot be classified as a Programmatic CE and an Individual CE approval from FHWA is required. If the answer to Question 29 is "Yes", complete Question 30 below.

		YES	NO
30.	Does the project meet the following conditions for construction of temporary access or closure of existing road, bridge, or ramps?	☒	☐

- Provisions have been made for access by local traffic and are posted;
- There will be no adverse effects on through-traffic dependent business;
- The temporary access or closure of existing road, bridge, or ramps will not interfere with a local special event or festival;
- The temporary access or closure of existing road, bridge, or ramps will not substantially change the environmental consequences of the project; or
- There is no substantial controversy associated with the temporary access or closure of existing road, bridge, or ramps.

Categorical Exclusion Determination Project Narrative and Checklist

RIDOT Project No. 2018-EB-038

Submitted By:

_____ _____

Jon Fontana Date
Project Manager

Approval:

_____ _____

Vincent Palumbo, P.E. Date
Managing Engineer

Approval:

_____ _____

Lori A. Fisette Date
Administrator, Division of Project Management

For Individual CEs, the FHWA Division Administrator's signature is also required.

_____ _____

Division Administrator (or designee) Date

FHWA Comments/Conditions:

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RHODE ISLAND DEPARTMENT OF TRANSPORTATION CATEGORICAL EXCLUSION REEVALUATION

RIDOT is conducting a reevaluation of this CE because one or more of the following circumstances has occurred:

☐ There are substantial changes in the proposed action that are relevant to environmental concerns or;

☐ There are significant new circumstances or information relevant to environmental concerns and that have a bearing on the proposed action or its impacts or;

☐ The project has not commenced (*i.e.,* has not started construction) within three years from the project's CE determination and RIDOT has not re-examined the environmental studies during that time.

A. Date Categorical Exclusion Approved: Click here to enter text.

B. Are the proposed improvements substantially different than those approved for the Categorical Exclusion?

☐ Yes ☐ No Explanation: Click here to enter text.

C. Have there been changes in the project surroundings?

☐ Yes ☐ No Explanation: Click here to enter text.

D. Are the environmental impacts from the proposed improvements substantially different?

☐ Yes ☐ No Explanation: Click here to enter text.

The above information verifies that the current proposed action, when compared to that for which a CE was approved, will not result in substantially different environmental impacts. The CE classification for the proposed action is, therefore, still valid.

Submitted By:

_____ _____

{Insert Name Here}
Project Manager

Date

Approval:

_____ _____

{Insert Name Here}
Managing Engineer

Date

RECEIVED
OCT 19 2023

Approval:

_____ _____

{Insert Name Here} Date
Administrator, Division of Project Management

For Individual CEs, the FHWA Division Administrator's signature is also required.

_____ _____

Division Administrator (or designee) Date

FHWA Comments/Conditions:

RIGIS

SITE LOCATION M

SCALE:1"=2,000'

N
W E
S

8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

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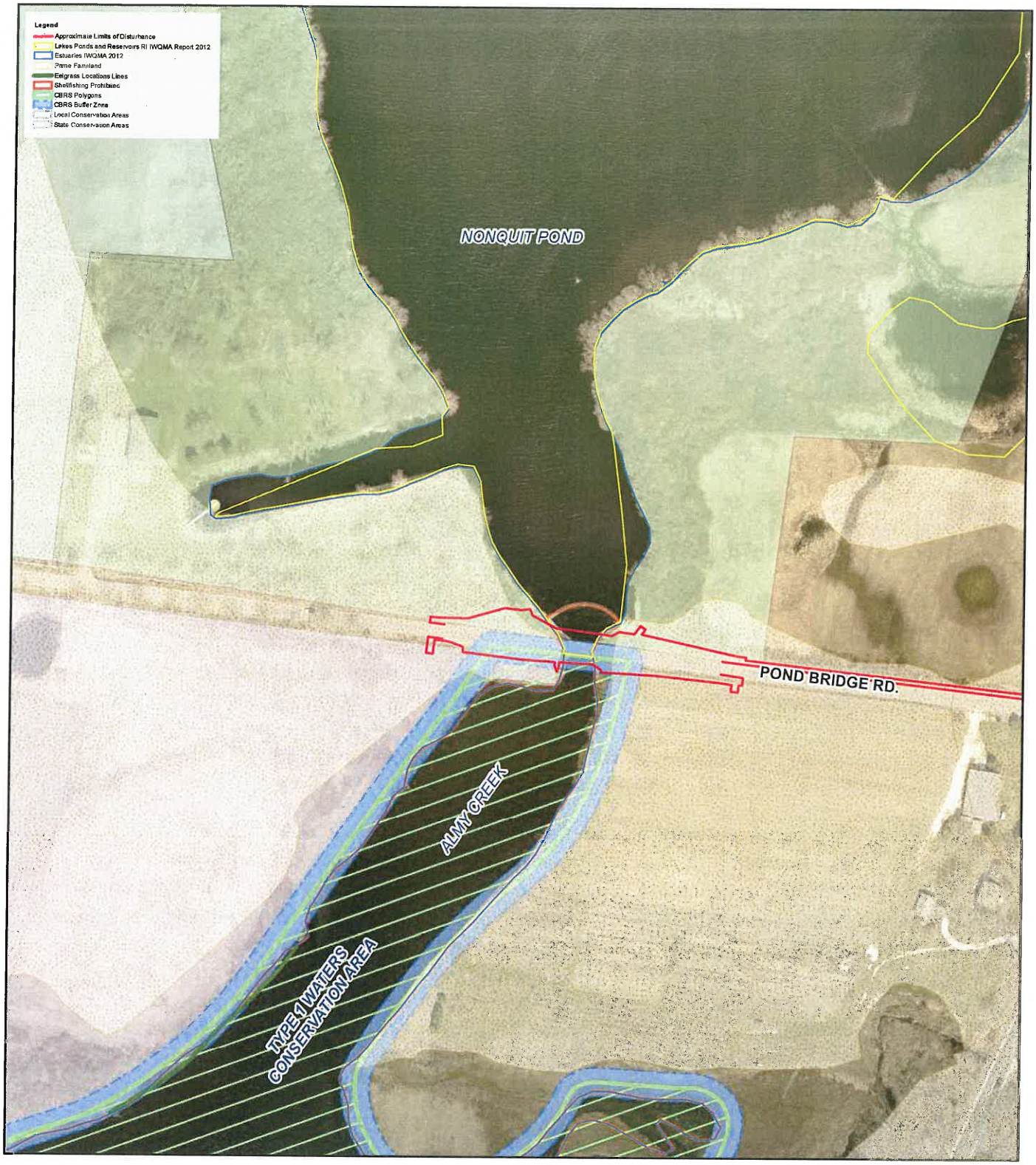
PARE PROJECT No. 20085.01 AUGUST 2023

FIGURE 1

NONQUIT POND BRIDGE NO, 292
TIVERTON, RI



RIGIS

ANNOTATED AERIAL PHOTOGRAPH

SCALE:1"= 200'

N
W E
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8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

PARE PROJECT No. 20085.01

AUGUST 2023

OCT 19 2023

FIGURE 2

NONQUIT POND BRIDGE NO. 292
TIVERTON, RI

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Consultation Code: 05E1NE00-2021-SLI-0810
Event Code: 05E1NE00-2021-E-03392
Project Name: Nonquit Pond Bridge No. 292

January 21, 2021

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

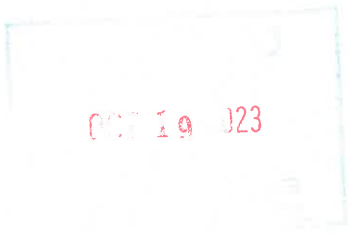
Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List



Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2021-SLI-0810
Event Code: 05E1NE00-2021-E-03392
Project Name: Nonquit Pond Bridge No. 292
Project Type: BRIDGE CONSTRUCTION / MAINTENANCE
Project Description: Nonquit Pond Bridge No. 292 carries Pond Bridge Road over Almy Creek in the Town of Tiverton, Rhode Island. The existing bridge is a single-span concrete-encased steel beam bridge with a concrete deck supported on concrete abutments. The bridge is approximately 40 feet long, 22½-feet wide out-to out and consists of a 20-foot roadway with concrete parapets. Nonquit Pond Dam is located immediately upstream of the bridge with a fish ladder leading from Nonquit Pond to the downstream tidal channel.

RIDOT proposes to replace the structurally deficient Nonquit Pond Bridge to address ongoing deficiencies. The proposed structure consists of a NEXT D prestressed concrete beam superstructure with a bituminous wearing surface, supported on concrete abutments with steel micropiles drilled into bedrock. The bridge span is 55'-6" long, with a total out-to-out width of 31'-0". The total roadway width is 28'-0" with 6" granite curbs and 12" concrete parapets on both sides of the structure.

The proposed bridge replacement consists of removing and disposing the existing superstructure and the upper portions of the abutments and wingwalls. Shielding will be placed beneath the structure to prevent debris from falling into the channel, and the overhead utilities will be temporarily relocated to the north of their existing locations. After demolition, the remaining portions of the substructure will be repaired for use as scour protection for the proposed abutments which will be placed behind the existing portions. Construction is anticipated to take place Spring-Fall 2022.

The proposed substructure consists of reinforced concrete abutments and wingwalls, supported on steel micropiles. The steel micropiles will be drilled into the bedrock below, and the pile caps will be cast around them, followed by the abutment and wingwall stems cast on top of the pile caps. Once the substructure is cast and cured, the NEXT D prestressed concrete beams will be erected, and closure pours will be placed between each beam to create a composite superstructure.

After the superstructure is constructed, the concrete parapets and granite curbs will be placed on the superstructure and wingwalls, the approach slabs will be placed, and the roadway will be paved with bituminous concrete to the limits of the project. Finally, the roadway will be striped,

permanent signing will be placed, guardrails will be installed, and landscaping will be completed.

The project will result in an increase of impervious surface due to widening the bridge by 5-feet on either side, and additional pavement to taper the existing roadway to the widened bridge. Vegetated filter strips will be installed northeast and northwest of the bridge to mitigate for increased impervious cover and meet the project stormwater treatment goal.

Minimal tree and vegetation clearing are proposed along the southeast embankment to facilitate the widened bridge and additional pavement required to match the roadway profile. Clearing is proposed to occur in the winter during the Northern Long-eared Bat inactive season (November 1st- March 31st) and the non-breeding season for migratory birds (September 1st - February 28th).

In-water work is limited to control of water (i.e., sandbags, super sacks, etc.) around each bridge abutment during demolition and patching repairs. Dewatering is anticipated to occur to facilitate concrete repairs in the dry. In-water work may occur outside of any required time-of-year restrictions.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.553304175654425,-71.19723122401061,14z

Counties: Newport County, Rhode Island

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

Nonquit Pond Bridge No. 292

LOCATION

Newport County, Rhode Island

DESCRIPTION

Nonquit Pond Bridge No. 292 carries Pond Bridge Road over Almy Creek in the Town of Tiverton, Rhode Island. The existing bridge is a single-span concrete-encased steel beam bridge with a concrete deck supported on concrete abutments. The bridge is approximately 40 feet long, 22½-feet wide out-to out and consists of a 20-foot roadway with concrete parapets. Nonquit Pond Dam is located immediately upstream of the bridge with a fish ladder leading from Nonquit Pond to the downstream tidal channel.

RIDOT proposes to replace the structurally deficient Nonquit Pond Bridge to address ongoing

deficiencies. The proposed structure consists of a NEXT D prestressed concrete beam superstructure with a bituminous wearing surface, supported on concrete abutments with steel micropiles drilled into bedrock. The bridge span is 55'-6" long, with a total out-to-out width of 31'-0". The total roadway width is 28'-0" with 6" granite curbs and 12" concrete parapets on both sides of the structure.

The proposed bridge replacement consists of removing and disposing the existing superstructure and the upper portions of the abutments and wingwalls. Shielding will be placed beneath the structure to prevent debris from falling into the channel, and the overhead utilities will be temporarily relocated to the north of their existing locations. After demolition, the remaining portions of the substructure will be repaired for use as scour protection for the proposed abutments which will be placed behind the existing portions. Construction is anticipated to take place Spring-Fall 2022.

The proposed substructure consists of reinforced concrete abutments and wingwalls, supported on steel micropiles. The steel micropiles will be drilled into the bedrock below, and the pile caps will be cast around them, followed by the abutment and wingwall stems cast on top of the pile caps. Once the substructure is cast and cured, the NEXT D prestressed concrete beams will be erected, and closure pours will be placed between each beam to create a composite superstructure.

After the superstructure is constructed, the concrete parapets and granite curbs will be placed on the superstructure and wingwalls, the approach slabs will be placed, and the roadway will be paved with bituminous concrete to the limits of the project. Finally, the roadway will be striped, permanent signing will be placed, guardrails will be installed, and landscaping will be completed.

The project will result in an increase of impervious surface due to widening the bridge by 5-feet on either side, and additional pavement to taper the existing roadway to the widened bridge. Vegetated filter strips will be installed northeast and northwest of the bridge to mitigate for increased impervious cover and meet the project stormwater treatment goal.

Minimal tree and vegetation clearing are proposed along the southeast embankment to facilitate the widened bridge and additional pavement required to match the roadway profile. Clearing is proposed to occur in the winter during the Northern Long-eared Bat inactive season (November 1st- March 31st) and the non-breeding season for migratory birds (September 1st - February 28th).

In-water work is limited to control of water (i.e., sandbags, super sacks, etc.) around each bridge abutment during demolition and patching repairs. Dewatering is anticipated to occur to facilitate concrete repairs in the dry. In-water work may occur outside of any required time-of-year restrictions.

Local office

New England Ecological Services Field Office

(603) 223-2541
(603) 223-0104

70 Commercial Street, Suite 300
Concord, NH 03301-5094

http://www.fws.gov/newengland

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME STATUS

Northern Long-eared Bat Myotis septentrionalis Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9045

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo Coccyzus erythropthalmus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink Dolichonyx oryzivorus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Dunlin Calidris alpina arcticola This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Least Tern Sterna antillarum This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Prairie Warbler Dendroica discolor — Breeds May 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Purple Sandpiper Calidris maritima — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-throated Loon Gavia stellata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Ruddy Turnstone Arenaria interpres morinella — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Rusty Blackbird Euphagus carolinus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Seaside Sparrow Ammodramus maritimus — Breeds May 10 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Semipalmated Sandpiper Calidris pusilla — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wood Thrush Hylocichla mustelina — Breeds May 10 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

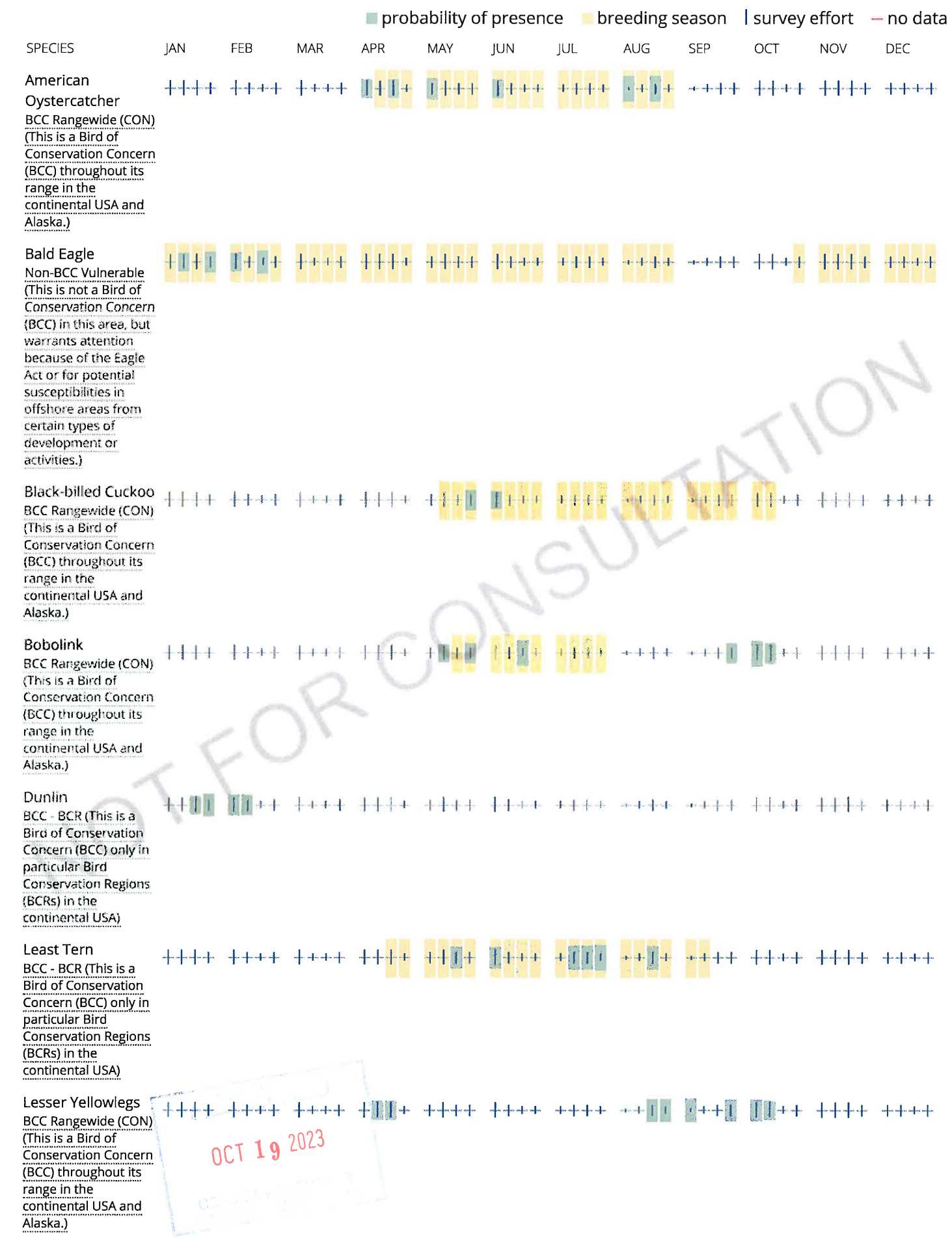
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Prairie Warbler
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Purple Sandpiper
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Red-throated Loon
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Ruddy Turnstone
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Rusty Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

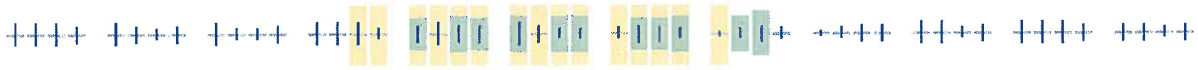
SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Seaside Sparrow
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

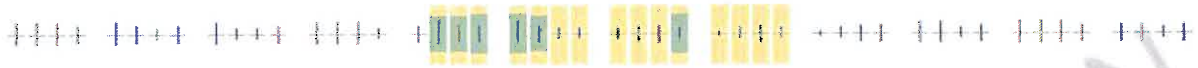
Semipalmated Sandpiper
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Wood Thrush
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal

bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER
E1UBL

LAKE
L1UBHh

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Consultation code: 05E1NE00-2021-I-0810
Event Code: 05E1NE00-2021-E-03509
Project Name: Nonquit Pond Bridge No. 292

January 25, 2021

Subject: Concurrence verification letter for the 'Nonquit Pond Bridge No. 292' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **Nonquit Pond Bridge No. 292** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*).

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

Nonquit Pond Bridge No. 292

Description

Nonquit Pond Bridge No. 292 carries Pond Bridge Road over Almy Creek in the Town of Tiverton, Rhode Island. The existing bridge is a single-span concrete-encased steel beam bridge with a concrete deck supported on concrete abutments. The bridge is approximately 40 feet long, 22½-feet wide out-to out and consists of a 20-foot roadway with concrete parapets. Nonquit Pond Dam is located immediately upstream of the bridge with a fish ladder leading from Nonquit Pond to the downstream tidal channel.

RIDOT proposes to replace the structurally deficient Nonquit Pond Bridge to address ongoing deficiencies. The proposed structure consists of a NEXT D prestressed concrete beam superstructure with a bituminous wearing surface, supported on concrete abutments with steel micropiles drilled into bedrock. The bridge span is 55'-6" long, with a total out-to-out width of 31'-0". The total roadway width is 28'-0" with 6" granite curbs and 12" concrete parapets on both sides of the structure.

The proposed bridge replacement consists of removing and disposing the existing superstructure and the upper portions of the abutments and wingwalls. Shielding will be placed beneath the structure to prevent debris from falling into the channel, and the overhead utilities will be temporarily relocated to the north of their existing locations. After demolition, the remaining portions of the substructure will be repaired for use as scour protection for the proposed abutments which will be placed behind the existing portions. Construction is anticipated to take place Spring-Fall 2022.

The proposed substructure consists of reinforced concrete abutments and wingwalls, supported on steel micropiles. The steel micropiles will be drilled into the bedrock below, and the pile caps will be cast around them, followed by the abutment and wingwall stems cast on top of the pile caps. Once the substructure is cast and cured, the NEXT D prestressed concrete beams will be erected, and closure pours will be placed between each beam to create a composite superstructure.

After the superstructure is constructed, the concrete parapets and granite curbs will be placed on the superstructure and wingwalls, the approach slabs will be placed, and the roadway will be paved with bituminous concrete to the limits of the project. Finally, the roadway will be striped, permanent signing will be placed, guardrails will be installed, and landscaping will be completed.

The project will result in an increase of impervious surface due to widening the bridge by 5-

feet on either side, and additional pavement to taper the existing roadway to the widened bridge. Vegetated filter strips will be installed northeast and northwest of the bridge to mitigate for increased impervious cover and meet the project stormwater treatment goal.

Minimal tree and vegetation clearing are proposed along the southeast embankment to facilitate the widened bridge and additional pavement required to match the roadway profile. Clearing is proposed to occur in the winter during the Northern Long-eared Bat inactive season (November 1st- March 31st) and the non-breeding season for migratory birds (September 1st - February 28th).

In-water work is limited to control of water (i.e., sandbags, super sacks, etc.) around each bridge abutment during demolition and patching repairs. Dewatering is anticipated to occur to facilitate concrete repairs in the dry. In-water work may occur outside of any required time-of-year restrictions.

Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   No

2. Is the project within the range of the Northern long-eared bat[1]?

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

   Yes

9. Will the project remove *any* suitable summer habitat[1] and/or remove/trim any existing trees **within** suitable summer habitat?

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

    No

11. Have presence/probable absence (P/A) summer surveys[1][2] been conducted[3][4] **within** the suitable habitat located within your project action area?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

12. Does the project include activities **within documented NLEB habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

    Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

    B) During the inactive season

15. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

    Yes

16. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

    No

17. Are *all* trees that are being removed clearly demarcated?

    Yes

18. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

    No

19. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

    No

20. Does the project include slash pile burning?

    No

21. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    Yes

22. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    Yes

23. Has a bridge assessment[1] been conducted **within** the last 24 months[2] to determine if the bridge is being used by bats?

    [1] See User Guide Appendix D for bridge/structure assessment guidance

    [2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

    Yes

    SUBMITTED DOCUMENTS

    - *2602V Bridge Assessment.pdf* https://ecos.fws.gov/ipac/project/W5ES2CJDZJG23GC7Z3WWA7LBVU/projectDocuments/98671632

24. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)[1]?

    [1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

    Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

    No

25. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

    No

26. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

27. Will the project involve the use of **temporary** lighting *during* the active season?

    No

28. Will the project install new or replace existing **permanent** lighting?

    No

29. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

30. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

31. Will the project raise the road profile **above the tree canopy**?

    No

32. Are the project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

    Automatically answered
    Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

33. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

34. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

35. **General AMM 1**
    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

36. **Tree Removal AMM 1**
Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word "trees" as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS' current summer survey guidance for our latest definitions of suitable habitat.

Yes

37. **Tree Removal AMM 3**
Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

38. **Tree Removal AMM 4**
Can the project avoid cutting down/removal of *all* (1) **documented**[1] Indiana bat or NLEB roosts[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   N/A

3. How many acres[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.45

4. Please describe the proposed bridge work:

   Nonquit Pond Bridge No. 292 carries Pond Bridge Road over Almy Creek in the Town of Tiverton, Rhode Island. The existing bridge is a single-span concrete-encased steel beam bridge with a concrete deck supported on concrete abutments. The bridge is approximately 40 feet long, 22½-feet wide out-to out and consists of a 20-foot roadway with concrete parapets. Nonquit Pond Dam is located immediately upstream of the bridge with a fish ladder connecting the impoundment to the downstream channel.

   The proposed structure consists of a NEXT D prestressed concrete beam superstructure with a bituminous wearing surface, supported on concrete abutments with steel micropiles drilled into bedrock. The bridge span is 55'-6" long, with a total out-to-out width of 31'-0". The total roadway width is 28'-0" with 6" granite curbs and 12" concrete parapets on both sides of the structure.

   The proposed bridge replacement consists of removing and disposing the existing superstructure and the upper portions of the abutments and wingwalls. Shielding will be placed beneath the structure to prevent debris from falling into the channel, and the overhead utilities will be temporarily relocated to the north of their existing locations. After demolition, the remaining portions of the substructure will be repaired for use as scour protection for the proposed abutments which will be placed behind the existing portions.

   The proposed substructure consists of reinforced concrete abutments and wingwalls, supported on steel micropiles. The steel micropiles will be drilled into the bedrock below, and the pile caps will be cast around them, followed by the abutment and wingwall stems cast on top of the pile caps. Once the substructure is cast and cured, the NEXT D prestressed concrete beams will be erected, and closure pours will be placed between each beam to create a composite superstructure.

   After the superstructure is constructed, the concrete parapets and granite curbs will be placed on the superstructure and wingwalls, the approach slabs will be placed, and the roadway will be paved with bituminous concrete to the limits of the project. Finally, the roadway will be striped, permanent signing will be placed, guardrails will be installed, and landscaping will be completed.

   The project will result in an increase of impervious surface due to widening the bridge by 5-feet on either side, and additional pavement to taper the existing roadway to the widened bridge.

5. Please state the timing of all proposed bridge work:

   Clearing is proposed to occur in the winter during the inactive season. Bridge work is to occur summer/fall of 2021. No night work is anticipated.

6. Please enter the date of the bridge assessment:

   1/15/21

Avoidance And Minimization Measures (AMMs)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on December 29, 2020. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

EFH Data Notice: Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional Fishery Management Councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

Greater Atlantic Regional Office
Atlantic Highly Migratory Species Management Division

Query Results

Degrees, Minutes, Seconds: Latitude = 41°33'11" N, Longitude = 72°48'11" W
Decimal Degrees: Latitude = 41.55, Longitude = -71.20

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

***** WARNING *****

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

EFH

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Winter Flounder	Eggs Juvenile Larvae/Adult	New England	Amendment 14 to the Northeast Multispecies FMP
			Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
			Atlantic Herring	Juvenile Adult Larvae	New England	Amendment 3 to the Atlantic Herring FMP
			Atlantic Cod	Larvae Juvenile Eggs	New England	Amendment 14 to the Northeast Multispecies FMP
			Pollock	Juvenile	New England	Amendment 14 to the Northeast Multispecies

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Red Hake	Adult Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
			Silver Hake	Eggs/Larvae Adult	New England	Amendment 14 to the Northeast Multispecies FMP
			Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
			Winter Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
			Ocean Pout	Eggs	New England	Amendment 14 to the Northeast Multispecies FMP
			Scup	Larvae Eggs Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Longfin Inshore Squid	Juvenile Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Atlantic Mackerel	Eggs Larvae Juvenile Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish

Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Atlantic Butterfish	Eggs Larvae Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
			Summer Flounder	Larvae Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
			Black Sea Bass	Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data. **For links to all EFH text descriptions see the complete data inventory: open data inventory -->
Mid-Atlantic Council HAPCs, No spatial data for summer flounder SAV HAPC.

Appendix B. Verification Form

Federal Highway Administration (FHWA) or the applicable state Department of Transportation (state DOT) will email a signed version of this completed form, together with any project plans, maps, supporting analyses, etc., to NOAA's National Marine Fisheries Service (NMFS), Greater Atlantic Regional Fisheries Office, Habitat Conservation Division (GARFO HCD) at NMFS.GAR.EFH.Consultation@noaa.gov, upon obtaining sufficient information. FHWA/state DOT must receive a response from GARFO HCD or wait at least 30 calendar days to proceed under the programmatic EFH consultation. FHWA will compile the information from the completed Verification Forms for the purposes of tracking and annual monitoring. FHWA/state DOT must include the completed Verification Form as part of a permit application with any other federal agency, such as U.S. Army Corps of Engineers or U.S. Coast Guard, to confirm that EFH consultation is complete.

Project Activity Type

1. ☐ Bridge repair, demolition, and replacement
2. ■ Culvert repair and replacement
3. ☐ Docks, piers, and waterway access projects
4. ☐ Slope stabilization

Transportation Project Information

Project Name:	Nonquit Pond Bridge	Project Number:	PTSID 2602V
Project Sponsor:	RIDOT	Contact Person:	Nicole Lineberry
Email:	nicole.leporacci@dot.ri.gov	Phone:	401-378-2384
Latitude (e.g., 42.625884):		41.553273	
Longitude (e.g., -70.646114):		-71.196997	
City/Town, State:	Tiverton, RI	Waterway:	Almy Creek
Project Description and Purpose:	RIDOT proposes the replacement of the structurally deficient Nonquit Pond Bridge No. 029201. The bridge carries Pond Bridge Road over the tidally influenced Almy Creek, immediately downstream of the Nonquit Pond Dam. The substructure will remain in place and micropiles will be installed behind the existing abutments for the new structure, limiting in-water work to control of water for concrete patching of the existing abutments that will remain as		
Anticipated Project Start Date:	11/1/21	Anticipated Project End Date:	12/16/22
Total area of impact to EFH (in acres): * Include locus map with area of impact.		0.01	
Area of impacts to sensitive habitats (in square feet):		No impacts to submerged aquatic vegetation (SAV) or oyster reefs allowed.	
Natural rocky habitat (e.g., bedrock, boulders, cobble, and/or gravel): **		560	
Salt marsh: ***		10	
Areas containing shellfish (excluding oyster reefs):		560	
Intertidal mudflats:		0	
Area of impact to diadromous fish habitat:		560	

*areas of temporary impacts due to Control of Water measures and dewatering ar shown on the attached Bridge General Plan.

**based on inspection, stone armor is present below the bridge within the channel however there is no record of channel rehabilitation or material size. Outside of the bridge limits, the substrate of Almy Creek is a mix of mucky bottom and scattered rock.

*** temporary impacts due to dewatering. Saltmarsh substrate will be protected from foot traffic by means of a temporary platform placed over the area. Saltmarsh within the area to be dewatered is previously degraded and unvegetated due to apparent foot traffic, however substrate is present.

Potential Stressors Caused by the Activity (Check all that apply based on activity type)

☒ Underwater Noise
☒ Impingement/Entrainment and Entanglement
☒ Water Quality/Turbidity
☒ Habitat Alteration
☐ Vessel Traffic

EFH Conservation Recommendation Checklist

FHWA/state DOT will indicate how the project addresses each of the programmatic EFH conservation recommendations, by selecting the appropriate check box and providing a brief explanation where necessary. If the project is not in compliance with a particular programmatic EFH conservation recommendation and FHWA/state DOT has still determined that the effects of a project on EFH are not substantial and the project is otherwise consistent with the FHWA programmatic EFH consultation, provide justification below under the conservation recommendations that is not included.

Underwater Noise

☐ Check here if the EFH conservation recommendations in this section are not applicable because the project will not create underwater noise as a stressor. Proceed to the next stressor.

1. Use a soft start each day of pile driving, after a break of 30 minutes or more, and if any increase in pile installation or removal intensity is required. Build up power slowly from a low energy start-up over a 20-minute period to warn fish to leave the vicinity. This buildup shall occur in uniform stages to provide a constant increase in output.

☒ Not met:
- ☒ Not applicable, provide reasoning: Micropiles will be drilled, not driven, entirely on land behind the existing bridge substructure, therefore the potential for
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

2. Noise-generating work conducted in diadromous streams within the spring diadromous fish TOY restriction listed in Appendix D must be isolated behind sealed, dewatered cofferdams, to avoid impeding fish migration.

☒ Not met:
- ☒ Not applicable, provide reasoning: No noise generating in-water work is proposed.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

Impingement/Entrainment and Entanglement

☐Check here if the EFH conservation recommendations in this section are not applicable because the project will not lead to impingement/entrainment and entanglement as a stressor. Proceed to the next stressor.

3. Turbidity control measures must be properly secured and monitored to ensure aquatic species are not entangled or trapped in the project area.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

■ Met:
- ■ Shown on project plans
- ■ Included in description, other terms and conditions

Control of Water (COW) measures will be installed around the work ar for abutment repairs prior to construction, and will be lined with filter fabric material to act as a turbidity and sediment control barrier, redu the risk of entanglement from a separate floating turbidity barrier.

4. Temporary intakes related to construction must be equipped with mesh size screening and approach velocity appropriate for the species and life stage anticipated. Per the NMFS Anadromous Salmonid Passage Facility Design manual, screen openings must not exceed 3/32 inch and screen approach velocity must be less than .25 feet per second (ft/sec).
   - In New York, New Jersey, Delaware, Maryland, and Pennsylvania, 2 millimeter (mm) wedge wire screens must be used with a maximum intake velocity of 0.5 feet per second (ft/sec).
   - In Virginia, a 1 mm wedge wire with a maximum intake velocity of 0.25 ft/sec).

■ Not met:
- ■ Not applicable, provide reasoning: No intakes are proposed
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

5. No new permanent surface water withdrawal, water intakes, or water diversions.

■ Not met:
- ■ Not applicable, provide reasoning: No permanent change in surface water regime is proposed
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

Water Quality/Turbidity

☐Check here if the EFH conservation recommendations in this section are not applicable because the project will not negatively affect water quality or create turbidity. Proceed to the next stressor.

6. Install soil erosion, sediment, and turbidity controls and maintain them in effective operating condition during construction. Remove controls upon completion of work, after all exposed soil and other fills, as well as any work waterward of ordinary high water or the high tide line, are permanently stabilized.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

■ Met:
- ■ Shown on project plans
- ■ Included in description, other terms and conditions — Plans and specifications include conditions to remove COW and erosion controls upon stabilization of the site and completion of work

7. Install and remove any in-water soil erosion, sediment, and turbidity controls outside the TOY restrictions in Appendix D.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

■ Met:
- ■ Shown on project plans
- ■ Included in description, other terms and conditions — TOY restrictions will be added to the project plans and specifications as required.

8. Work that produces greater than minimal turbidity or sedimentation in diadromous streams or EFH must not be done during the TOY restriction(s) in Appendix D.

■ Not met:
- ■ Not applicable, provide reasoning: COW measure (i.e. sandbag) installation is not anticipated to produce greater than minimal turbidity or sedimentation
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

9. Prevent construction debris and sediment from entering aquatic areas and remove all construction debris and excess/deteriorated materials and dispose of in an upland area.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

■ Met:
- ■ Shown on project plans
- ■ Included in description, other terms and conditions — Protective shielding will be installed beneath the structure to prevent debris from falling into the channel.

10. Dredged and/or excavated materials, including any fine-grained materials removed from inside culverts, shall either be moved to an upland location and stabilized to prevent reentry into the waterway or disposed of at a previously approved disposal site.

☒ Not met:
- ☒ Not applicable, provide reasoning: No dredging or excavation is proposed within the waterway.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

11. Completely remove and do not reuse existing creosote piles that are affected by project activities and do not install new creosote piles.

☒ Not met:
- ☒ Not applicable, provide reasoning: Creosote piles are not present and are not proposed.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

12. Coat any chemically or pressure treated piles (CCA, ACQ, etc.) with an impact-resistant, biologically inert substance. Coat the piles at the point of manufacture, not on site.

☒ Not met:
- ☒ Not applicable, provide reasoning: Piles are not proposed within the waterway.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

13. Derelict, degraded, or abandoned piles, except for those inside of existing work footprints for piers, must be completely removed or cut and driven three feet below the surface.

☒ Not met:
- ☒ Not applicable, provide reasoning: No existing piles are present within the waterway in the project
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

14. Ensure that raw concrete does not contact the water; wet pours of concrete must be confined within sealed forms until the concrete is set or pre-cast members installed.

☐ Not met:

☐ Not applicable, provide reasoning:
☐ Project is unable to accommodate, provide justification:

■ Met:
■ Shown on project plans
■ Included in description, other terms and conditions

Concrete abutment repairs will be performed in the dry behind COW measures, and mortar will be allowed to dry completely before COW measures are removed.

Habitat Alteration

☐ Check here if the EFH conservation recommendations in this section are not applicable because the project will not cause habitat alteration. Proceed to the next stressor.

15. Remove temporary and/or obsolete structures and fills in their entirety. Use geotextile barriers prior to placement of temporary fill material to ensure complete removal.

☐ Not met:
☐ Not applicable, provide reasoning:
☐ Project is unable to accommodate, provide justification:

■ Met:
☐ Shown on project plans
■ Included in description, other terms and conditions

The top portions of wingwalls and bridge abutments will be cut down to accommodate the new superstructure. The remaining portions of the substructure will be retained for use as scour protection for the proposed abutments which will be placed behind the existing portions.

16. Install a riprap bedding layer (such as a gravel filter blanket or geotextile) prior to riprap placement to prevent underlying soils from washing through the riprap during high water.

■ Not met:
■ Not applicable, provide reasoning: No riprap installation is proposed.
☐ Project is unable to accommodate, provide justification:

☐ Met:
☐ Shown on project plans
☐ Included in description, other terms and conditions

17. Return areas impacted by temporary activities, fills, or structures to pre-construction or better condition, including elevations and substrate, and replant with native species.

☐ Not met:
☐ Not applicable, provide reasoning:
☐ Project is unable to accommodate, provide justification:

■ Met:
■ Shown on project plans
■ Included in description, other terms and conditions

Temporarily disturbed areas will be restored upon completion of the work. Types of plantings to be coordinated with RIDOT.

18. Temporary monitoring devices shall be removed and the substrate restored to preconstruction elevations no later than 24 months from initial installation, or upon completion of data acquisition.

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■ Not met:
■ Not applicable, provide reasoning: No temporary monitoring devices are proposed.
☐ Project is unable to accommodate, provide justification:

☐ Met:
☐ Shown on project plans
☐ Included in description, other terms and conditions

19. Pipelines and cables that cross a waterway must not rest on the substrate. They may be attached to an overwater structure or be buried to allow an area to return to preexisting conditions.

■ Not met:
■ Not applicable, provide reasoning: No pipelines or cables are proposed.
☐ Project is unable to accommodate, provide justification:

☐ Met:
☐ Shown on project plans
☐ Included in description, other terms and conditions

20. Any fill, including planting media and placement of any seed shellfish, spatted-shell, or cultch must be free of all non-native or invasive species and/or contaminants. An invasive species control plan must be part of the project if the transportation agency cannot guarantee this.

☐ Not met:
☐ Not applicable, provide reasoning:
☐ Project is unable to accommodate, provide justification:

■ Met:
☐ Shown on project plans
■ Included in description, other terms and conditions CRMC guidelines for habitat restoration plantings will be followed to prevent the introduction of invasive species and contaminants.

21. Prevent dislodging of coir logs, mats, or native oyster shell.

■ Not met:
■ Not applicable, provide reasoning: No coir logs, mats, or native oyster shell are existing or proposed in the project area
☐ Project is unable to accommodate, provide justification:

☐ Met:
☐ Shown on project plans
☐ Included in description, other terms and conditions

22. Incorporate measures to increase the ambient light transmission under overwater structures.

■ Not met:
■ Not applicable, provide reasoning: No lighting is proposed.

☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

23. The lowermost part of floating docks must be ≥ 18 inches above the substrate at all times, to avoid grounding and propeller scour and to provide adequate circulation and flushing.

■ Not met:
- ■ Not applicable, provide reasoning: No floating docks are proposed.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

24. Conduct and submit pre-dredge benthic biological surveys to determine benthic communities present and conduct post-dredge surveys to ensure targeted depths have been reached and to determine benthic recovery.

■ Not met:
- ■ Not applicable, provide reasoning: Dredging is not proposed.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

25. Grain size of any sediment used as part of habitat restoration must be the same size or larger than the native material at the site.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

■ Met:
- ☐ Shown on project plans
- ■ Included in description, other terms and conditions Fill material will be per RIDOT Specifications and will closely match existing sediment size.

26. If rock relocation is necessary, move them to an area of equivalent depth and substrate.

■ Not met:
- ■ Not applicable, provide reasoning: Rock relocation is not proposed.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans

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☐ Included in description, other terms and conditions

27. Incorporate natural habitats (e.g., living shorelines) and soft approaches (e.g., vegetative plantings and large woody debris) into the stabilization design in addition to or instead of hardened structures. See NOAA's Guidance for Considering the Use of Living Shorelines for more information.

☒ Not met:
- ☒ Not applicable, provide reasoning: Stabilization design is not a proposed element of the project.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

Sensitive Habitats (SAS, natural rocky habitats, intertidal areas, and areas containing shellfish)

28. Locate all temporary structures, construction, access, and dewatering actives outside of sensitive habitats.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☒ Project is unable to accommodate, provide justification:

☐ Met: COW measures are necessary to perform concrete abutment repairs in the dry beneath the bridge. COW measures are

- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

29. Prior to construction, identify and mark in the field any SAV at the project site. An SAV survey is required for activities adjacent to mapped or known SAV if a survey has not been conducted in three years.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

☒ Met:
- ☒ Shown on project plans
- ☒ Included in description, other terms and conditions Areas of low saltmarsh vegetation are located on the project plans. No other SAV is present within the project area.

30. Provide compensatory mitigation for all permanent and temporary impacts to sensitive habitats. This could include a contribution to an existing in-lieu fee program. When impacts are unavoidable:
    - conduct a biological survey to map the coverage of the sensitive habitats;
    - develop a compensatory mitigation plan for biological resource losses, including success criteria, monitoring plan, and long-term maintenance plan;

- submit the results of the biological survey and the mitigation plan to GARFO HCD for review; and
- undertake compensatory mitigation prior to or concurrent with any impacts to sensitive habitat.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

■ Met:
- ■ Shown on project plans
- ■ Included in description, other terms and conditions

Saltmarsh plantings in the 10 sf of temporarily impacted area are proposed to mitigate for temporary impacts to the area due to dewatering. The area is currently unvegetated.

31. Where construction requires heavy equipment operation in or across wetlands or mudflats, the equipment shall have low ground pressure (typically ≤ 3 pounds per square inch); be placed on construction timber mats that are adequate to support the equipment; or be operated on dry or frozen wetlands such that shear pressure does not cause subsidence of the wetlands immediately beneath equipment and upheaval of adjacent wetlands. Construction mats must not be dragged into position.

■ Not met:
- ■ Not applicable, provide reasoning: No construction equipment is proposed within the waterway. COW measures will be installed using a crane from the topside
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

32. Habitat restoration or mitigation projects must not result in a permanent conversion or loss of sensitive habitats.

■ Not met:
- ■ Not applicable, provide reasoning: Landscaping improvements will not permanently convert or create a loss of sensitive habitats
- ☐ Project is unable to accommodate, provide justification:

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☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

33. No dredging shall occur within:
- intertidal areas;
- 100 feet of SAV; or
- 25 feet of SAS, natural rocky habitats, or areas containing shellfish.

■ Not met:
- ■ Not applicable, provide reasoning: Dredging is not proposed.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

34. The height of docks and piers must be at least four feet above salt marsh substrate and must be greater than or equal to the width of the deck, to minimize shading impacts. The height must be measured from the marsh substrate to the bottom of the longitudinal support beam.

☒ Not met:
- ☒ Not applicable, provide reasoning: Docks and piers are not an element of the project scope.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

35. Outlets must not discharge directly into sensitive habitats.

☒ Not met:
- ☒ Not applicable, provide reasoning: No new outlets are proposed and existing drainage patterns will be maintained.
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

Fish Passage/Migration Habitat

36. Design replacement crossings to provide diadromous and resident fish and aquatic organism passage. Structures must:
    - provide sufficient water depth and maintain suitable water velocities during migration periods; and
    - maintain or replicate natural stream channel and flow conditions.

☒ Not met:
- ☒ Not applicable, provide reasoning: No change to channel dimensions is proposed. Existing abutments will remain in place and only be cut down from the
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

37. Incorporate climate change projections into the project design. Use the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP) 8.5/high greenhouse gas emission scenario and RCP 4.5/intermediate greenhouse gas emission scenario (IPCC 2014) and the global mean and regional sea level rise projections for

intermediate-high and extreme scenarios referenced in Sweet *et al.* (2017) in design calculations for replacement structures.

☒ Not met:

☒ Not applicable, provide reasoning: The bridge replacement is an in-kind replacement, and the superstructure will match existing elevations.

☐ Project is unable to accommodate, provide justification:

☐ Met:

☐ Shown on project plans

☐ Included in description, other terms and conditions

38. Replaced or upgraded crossings must be "in kind" or go up in order of preference set out in NMFS' Anadromous Salmonid Passage Facility Design:
    - Road abandonment and reclamation or road realignment to avoid crossing the stream.
    - Bridge or stream simulation spanning the stream flood plain, providing long-term dynamic channel stability, retention of existing spawning areas, maintenance of benthic invertebrate production, and minimized risk of failure. If a stream crossing is proposed in a segment of stream channel that includes a salmonid spawning area, only full-span stream simulation designs are acceptable.
    - Embedded pipe culvert, bottomless arch designs or non-floodplain spanning stream simulation.
    - Hydraulic design method, associated with more traditional culvert design approaches- limited to low stream gradients (0 to 1%) or for retrofits.
    - Culvert designed with an external fishway (including roughened channels) for steeper slopes.
    - Baffled culvert or internal weirs- to be used only for when other alternatives are infeasible.

☒ Not met:

☒ Not applicable, provide reasoning: No new crossings are proposed.

☐ Project is unable to accommodate, provide justification:

☐ Met:

☐ Shown on project plans

☐ Included in description, other terms and conditions

39. For activities that require soil erosion, sediment, and turbidity controls
    - in non-tidal streams containing diadromous fish:
        i. They must not encroach >25% of the stream width measured from ordinary high water during the diadromous TOY restriction; and
        ii. They must maintain safe, timely, and effective downstream fish passage throughout the project.
    - in tidal waters:
        i. They must not encroach >50% of a tidal stream's width as measured from mean high water.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

☒ Met:
- ☒ Shown on project plans
- ☒ Included in description, other terms and conditions

Plans and job specific specifications will include conditions that the channel must remain greater than or equal to 50% open at all time.

Vessel Traffic

☒ Check here if the EFH conservation recommendations in this section are not applicable because the project will not use vessels.

40. Project vessels shall be operated in adequate water depths to avoid propeller scour and grounding at all tides. Shallow draft vessels will be used in shallow areas to maximize the navigational clearance between the vessel and the bottom substrate. Spuds may be used to elevate the vessel.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

41. Project vessels shall not be moored in or use spuds in SAV or be located in such a way that the vessel could shade SAV.

☐ Not met:
- ☐ Not applicable, provide reasoning:
- ☐ Project is unable to accommodate, provide justification:

☐ Met:
- ☐ Shown on project plans
- ☐ Included in description, other terms and conditions

NEW CLAUSE

Other Justification for Use of the Programmatic EFH Consultation

If the project is outside of the covered activities in the programmatic EFH consultation (i.e., is one of the actions described in the Excluded Activities list noted below) and FHWA/state DOT believes the effects are not any more significant and that the project should be eligible for programmatic EFH consultation, provide additional justification in the space below. FHWA/state DOT must provide appropriate rationale and GARFO HCD must review and approve it. The automatic concurrence period does not apply for transportation activities in this section that fall outside of the programmatic EFH consultation as described.

◉ The project is not listed as an excluded activity.

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○ The project is listed as an excluded activity.

Indicate the activity number from the list below (1 through 21):

Provide additional justification on why the activity should be eligible:

Activities that Require Individual Consultation

1. Any work (including anchoring) that results in impacts to:
   - existing or historically mapped submerged aquatic vegetation (SAV) beds or areas within 100 feet of existing or historically mapped SAV beds;
   - ≥ 1,000 square feet of salt marsh, areas containing shellfish, and intertidal areas;
   - ≥ 100 square feet of natural rocky habitat (e.g., bedrock, boulders, cobble, and/or gravel);
2. Stream channelization.
3. Any temporary structures, construction access, and dewatering activities proposed to be in place for ≥ two years.
4. Slip-lining or invert lining existing culverts.
5. Any permanent structures longer than 150 linear feet over salt marsh.
6. Construction of new or expansion of existing boating facilities17 or ferry terminals.
7. Independent pedestrian trails or bridges located directly adjacent to an existing crossing.
8. New or improvement dredging.
9. Any nearshore disposal or beach nourishment activities.
10. New fill/stabilization placed below mean low water in excess of 200 linear feet (lf).
11. Replacement or maintenance of:
    - sloped stabilization structures > 200 lf and waterward of the existing toe, or
    - vertical structures > 18 inches waterward of the existing face and > 200 lf.
12. In-water utility lines ≥ 100 lf installed by trench excavation, or ≥ 200 lf installed by jetplow, fluidization or other direct burial methods.
13. Thin layer deposition as a part of wetland restoration.
14. Placement of any seed shellfish, spatted-shell, or cultch in SAS.
15. Any exploratory trenching or other similar survey activities.
16. Airgun seismic activities.
17. Any new permanent surface water withdrawal, water intakes, or water diversions.
18. Any blasting or use of explosives that affects EFH or diadromous species habitats.
19. Construction of new bridges or culverts, where no crossing existed previously.
20. Any new or replacement causeways (raised roadways across waters or wetlands).
21. Any in-water work on dams, tide gates, or breakwaters.

FHWA's Determination of Effects to Essential Fish Habitat and Signature
After reviewing the programmatic EFH conservation recommendations in Appendix A, FHWA/state DOT will select the appropriate determination:

(●) The activity is in compliance with all programmatic EFH conservation recommendations in the FHWA programmatic EFH consultation and adverse effects to EFH will not be substantial.

( ) The activity is not in compliance with all of the programmatic EFH conservation recommendations in the FHWA programmatic EFH consultation, however, the justification below demonstrates that the adverse effects to EFH are not substantial. This does not apply to EFH conservation recommendations that are not applicable to the project.

Use the electronic fillable fields to include the name and signature of the FHWA/state DOT preparing this Verification Form, along with the date.

Nicole Lineberry, RI Department
FHWA/state DOT Name

Signature

1/25/21
Date

By providing your determination and signature, you are certifying that to the best of your knowledge the information provided in this form is accurate and based upon the best available scientific information. This form must be filled out and signed by FHWA or state DOT staff, as an officially designated non-federal representative. Do not lock the form when saving, as HCD will be unable to sign and finalize. Email this Verification Form as a fillable PDF to NMFS.GAR.EFH.Consultation@noaa.gov.

GARFO HCD Determination and Signature (To be filled out by NMFS)
After receiving the Verification Form, GARFO HCD will contact FHWA/state DOT with any concerns. HCD will email the completed form back to the FHWA/state DOT for record keeping.

(●) GARFO HCD concurs with FHWA's determination that the proposed project is consistent with the programmatic EFH consultation (without the need for justification).

( ) GARFO HCD concurs with FHWA's determination that the proposed project is consistent with the programmatic EFH consultation, with justification described above.

( ) GARFO HCD does not concur with FHWA's determination that the project is consistent with the programmatic EFH consultation. FHWA/state DOT must conduct additional coordination with GARFO HCD and a separate individual EFH consultation may be required.

Lauren M. Sager
GARFO HCD Name

Lauren M. Sager
Signature

3/2/21
Date

Re: [EXTERNAL] : Re: FHWA GARFO EFH Programmatic: RIDOT Replacement of Nonquit Pond Bridge No. 029201

Lauren Sager - NOAA Affiliate <lauren.m.sager@noaa.gov>
Thu 3/4/2021 2:16 PM
To: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>

Hi Nicole,

I needed to verify a few things with this one, but no, you do not need to implement the shellfish TOYR for this project. Thanks for checking on that, though! Have a great afternoon.

Best,
Maggie

On Tue, Mar 2, 2021 at 5:11 PM Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov> wrote:

> Thanks for the quick response! - do you also know if we will need to follow the shellfish TOY restriction? (see previous email)
>
> Thank you!
>
> **Nicole Lineberry (Leporacci)**
> Senior Environmental Scientist
> Natural Resources Unit, RIDOT
> E: nicole.leporacci@dot.ri.gov

From: Lauren Sager - NOAA Affiliate <lauren.m.sager@noaa.gov>
Sent: Tuesday, March 2, 2021 5:03 PM
To: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>
Subject: Re: [EXTERNAL] : Re: FHWA GARFO EFH Programmatic: RIDOT Replacement of Nonquit Pond Bridge No. 029201

Hi Nicole,

If the plans only require 25% stream width encroachment, no TOYR is needed. However, if 50% is a more accurate number, the anadromous TOYR should be added to the contract to ensure the fish have enough space to make their migration. Thanks for letting me know!

Best,
Maggie

On Tue, Mar 2, 2021 at 4:57 PM Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov> wrote:

> My apologies - I meant the project will not encroach greater than 50% of the stream

width! Thanks for your help!

Nicole Lineberry (Leporacci)
Senior Environmental Scientist
Natural Resources Unit, RIDOT
E: nicole.leporacci@dot.ri.gov

From: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>
Sent: Tuesday, March 2, 2021 4:55 PM
To: Lauren Sager - NOAA Affiliate <lauren.m.sager@noaa.gov>
Subject: Re: [EXTERNAL] : Re: FHWA GARFO EFH Programmatic: RIDOT Replacement of Nonquit Pond Bridge No. 029201

Hi Maggie,

Before we include these commitments in the contract book, the designer did have questions regarding TOY restrictions on this project in Appendix D. Regarding the diadromous fish TOY restriction, would this project need the fall TOY restrictions put in place? The water controls will not encroach >25% of the stream width, but we were not sure if this still was seen as a substantial blockage and if we needed to include the fall TOY.

Regarding the shellfish TOY - this area has been closed to shell fishing due to bacterial contamination for years. However, we do know this is shellfish habitat, and shellfish are present in the area. Therefore, we included it as sensitive habitat to be temporarily impacted. We would like to confirm if the shellfish TOY would still need to be followed based on the scope of work. We completed an individual consultation on another RIDOT project awhile back, and this TOY restriction was not put in place despite the potential for shellfish, so I was not quite sure about this location. Thank you!

Best,
Nicole

Nicole Lineberry (Leporacci)
Senior Environmental Scientist
Natural Resources Unit, RIDOT
E: nicole.leporacci@dot.ri.gov

From: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>
Sent: Tuesday, March 2, 2021 2:52 PM
To: Lauren Sager - NOAA Affiliate <lauren.m.sager@noaa.gov>
Subject: Re: [EXTERNAL] : Re: FHWA GARFO EFH Programmatic: RIDOT Replacement of Nonquit Pond Bridge No. 029201

Thanks Maggie!

Best,
Nicole

Nicole Lineberry (Leporacci)
Senior Environmental Scientist
Natural Resources Unit, RIDOT
E: nicole.leporacci@dot.ri.gov

From: Lauren Sager - NOAA Affiliate <lauren.m.sager@noaa.gov>
Sent: Tuesday, March 2, 2021 10:03 AM
To: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>
Subject: [EXTERNAL] : Re: FHWA GARFO EFH Programmatic: RIDOT Replacement of Nonquit Pond Bridge No. 029201

Hi Nicole,

Attached is the signed EFH Appendix B- No additional comments or recommendations needed!

Best,
Maggie Sager

On Mon, Jan 25, 2021 at 12:25 PM Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov> wrote:

> Hi Maggie,
>
> I hope you had a good weekend. Please find attached RIDOT's cover letter and the documentation regarding the Essential Fish Habitat (EFH) under the Federal Highway Administration (FHWA) Greater Atlantic Fisheries Office (GARFO) Programmatic Essential Fish Habitat Consultation program for the replacement of Nonquit Pond Bridge No. 029201 over Almy Creek in Tiverton, RI.
>
> Please let us know if you have any questions or need more information. We look forward to your response. Thank you!
>
> Best,
>
> Nicole
>
> **Nicole Lineberry (Leporacci)**
>
> Senior Environmental Scientist
>
> Natural Resources Unit, RIDOT

E: nicole.leporacci@dot.ri.gov

--

Lauren M. "Maggie" Sager (she/her/hers)
Environmental Specialist, Habitat Conservation
Habitat and Ecosystem Services Division
Greater Atlantic Region
James J. Howard Marine Sciences Laboratory - Sandy Hook, NJ
NOAA Fisheries | U.S. Department of Commerce

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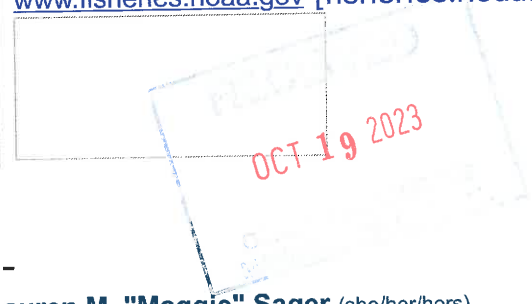

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Drawn Action Area & Overlapping S7 Consultation Areas

Area of Interest (AOI) Information

Area : 2,041.76 acres

May 6 2021 11:36:06 Eastern Daylight Time

Summary

Name	Count	Area(acres)	Length(mi)
Atlantic Sturgeon	2	173.36	N/A
Shortnose Sturgeon	1	86.68	N/A
Atlantic Salmon	0	0	N/A
Sea Turtles	4	346.75	N/A
Atlantic Large Whales	4	346.72	N/A
In or Near Critical Habitat	0	0	N/A

Atlantic Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	ANS_NRB_SUB_MAF	Atlantic sturgeon	Subadult	Migrating & Foraging	Narragansett Bay	01/01	12/31	N/A	N/A	86.68
2	ANS_NRB_ADU_MAF	Atlantic sturgeon	Adult	Migrating & Foraging	Narragansett Bay	01/01	12/31	N/A	N/A	86.68

Shortnose Sturgeon

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	SNS_NRB_ADU_MAF	Shortnose sturgeon	Adult	Migrating & Foraging	Narragansett Bay	04/01	11/30	N/A	N/A	86.68

Sea Turtles

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	LTR_STS_AJV_MAF	Leatherback sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	86.69
2	GRN_STS_AJV_MAF	Green sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	86.69
3	KMP_STS_AJV_MAF	Kemp's ridley sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	86.69
4	LOG_STS_AJV_MAF	Loggerhead sea turtle	Adults and juveniles	Migrating & Foraging	Massachusetts (S of Cape Cod) through Virginia	5/1	11/30	*No Data*	*No Data*	86.69

Atlantic Large Whales

#	Feature ID	Species	Life Stage	Behavior	Zone	From	Until	From (2)	Until (2)	Area(acres)
1	RIT_WRN_AJV_FOR	North Atlantic right whale	Adults and juveniles	Foraging	Northeast (ME to Cape Cod, MA)	1/1	12/31	*No Data*	*No Data*	86.68
2	RIT_WRN_AJV_WIN	North Atlantic right whale	Adults and juveniles	Overwintering	Northeast (ME to Cape Cod, MA)	11/1	1/31	*No Data*	*No Data*	86.68
3	FIN_WFN_AJV_WIN	Fin whale	Adults and juveniles	Overwintering	Northeast (ME to Cape Cod, MA)	11/1	3/31	*No Data*	*No Data*	86.68
4	FIN_WFN_AJV_FOR	Fin whale	Adults and juveniles	Foraging	Northeast (ME to Cape Cod, MA)	1/1	12/31	*No Data*	*No Data*	86.68

DISCLAIMER: Use of this App does NOT replace the Endangered Species Act (ESA) Section 7 consultation process; it is a first step in determining if a proposed Federal action overlaps with listed species or critical habitat presence. Because the data provided through this App are updated regularly, reporting results must include the date they were generated. The report outputs (map/tables) depend on the options picked by the user, including the shape and size of the action area drawn, the layers marked as visible or selectable, and the buffer distance specified when using the "Draw your Action Area" function. Area calculations represent the size of overlap between the user-drawn Area of Interest (with buffer) and the specified S7 Consultation Area. Summary table areas represent the sum of these overlapping areas for each species group.

Appendix A. Verification Form (updated December 10, 2020)

Federal Highway Administration (FHWA) or the applicable state Department of Transportation (DOT) shall submit a signed version of this completed form, together with any project plans, maps, supporting analyses, etc., to NOAA's National Marine Fisheries Service (NMFS), Greater Atlantic Regional Fisheries Office, Protected Resources Division (GARFO PRD) at nmfs.gar.esa.section7@noaa.gov with "FHWA GARFO NLAA Program: [Project Title or Number]" in the subject line. **Note:** project design contractors and/or consultants may assist in preparing the form, but only FHWA/DOT staff shall sign off on it on the final page.

Project Activity Type (check all that apply to the entire action):

- [x] 1. Bridge repair, demolition, or replacement project
- [ ] 2. Culvert repair or replacement project
- [ ] 3. Dock, pier, or waterway access project (includes construction, demolition, and repairs)
- [ ] 4. Slope stabilization project

Transportation Project Information

Name of Project:	Nonquit Pond Bridge No. 029201		
Reinitiation (Yes/No):	no		
State DOT/Program:	RI Department of Transportation		
DOT ID Code:	PTSID 2602V		
Contact Person:	Nicole Lineberry		
Phone:	401-378-2384	Email:	nicole.leporacci@dot.ri.gov
Project Latitude (e.g., 42.625884):	41.553273		
Project Longitude (e.g., -70.646114):	-71.196997		
Maximum Water Depth (m)	1.2		
Anticipated Project Start Date:	11/1/21	Anticipated Project End Date:	12/16/22
City/Town:	Tiverton, RI	Water body:	Almy Creek
Project/Action Description and Purpose:	RIDOT proposes the replacement of the structurally deficient Nonquit Pond Bridge No. 029201. The bridge carries Pond Bridge Road over the tidally influenced Almy Creek, immediately downstream of the Nonquit Pond Dam. The proposed substructure consists of reinforced concrete abutments and wingwalls, supported on steel micropiles. The substructure will remain in place and micropiles will be installed behind the existing abutments for the new structure outside of the waterbody. Therefore, noise effects were not evaluated because drilling of the micropiles will occur outside of the waterbody and impacts from noise are not anticipated. In water work is limited to control of water for concrete patching of the existing abutments that will remain as scour protection. In-water work is limited to approximately 1 month of the total construction time, and work may be performed around time of year restrictions as required.		

ESA-listed species and/or critical habitats in the action area (Check all that apply)

☑	Atlantic sturgeon (all DPSs)	☐	Kemp's ridley sea turtle
☐	Atlantic sturgeon critical habitat Indicate which DPS (GOM, NYB, Chesapeake Bay DPSs): Select DPS	☐	Loggerhead sea turtle (Northwest Atlantic DPS)
☑	Shortnose sturgeon	☐	Leatherback sea turtle
☐	Atlantic salmon (GOM DPS)	☐	North Atlantic right whale
☐	Atlantic salmon critical habitat (GOM DPS)	☐	North Atlantic right whale critical habitat
☐	Green sea turtle (North Atlantic DPS)	☐	Fin whale

* Please consult GARFO PRD's ESA Section 7 Mapper for ESA-listed species and critical habitat information for your action area at: https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-species-critical-habitat-information-maps-greater.

The following stressors are applicable to the action:

- ☐ Underwater Noise
- ■ Impingement/Entrainment and Entanglement
- ■ Water Quality/Turbidity
- ■ Habitat Alteration
- ☐ Vessel Traffic

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Impacts Table

Habitat Alteration		
	Permanent (acres)	Temporary (acres)
Sand (saline)	0.00	0.00
Silt/Mud/Clay (saline)	0.00	0.01
Hard bottom (saline)	0.00	0.01
Submerged Aquatic Vegetation (SAV) (saline)	0.00	0.00
Sand (freshwater)	0.00	0.00
Silt/Mud/Clay (freshwater)	0.00	0.00
Hard bottom (freshwater)	0.00	0.00
Submerged Aquatic Vegetation (SAV) (freshwater)	0.00	0.00
Total amount of habitat alteration	0.01	

In-water Construction Impacts	
	Amount in meters
Width of water body in action area (m)	21.0
Stressor category that extends furthest distance into water body (e.g.; underwater noise, turbidity plume)	water quality/turbidity
Maximum extent of stressor into the water body (m)	10.5

Project Design Criteria (PDC) Checklist

FHWA/DOT shall incorporate all general PDCs and all applicable PDCs in the appropriate stressor categories. For any PDCs that are not incorporated, additional justification is required for a project to be eligible for the NLAA Program. FHWA/DOT shall check the corresponding box for each PDC that is, or will be, incorporated into the project or indicate if not applicable.

GENERAL PDCs			
Yes	N/A	PDC #	PDC Description
☑	☐	1.	Ensure all operators, employees, and contractors are aware of all FHWA environmental commitments, including these PDC, when working in areas where ESA-listed species may be present or in critical habitat.
☑	☐	2.	No portion of the proposed action will individually or cumulatively have an adverse effect on ESA-listed species or critical habitat.
☐	☑	3.	No portion of the proposed action that may affect the GOM DPS of Atlantic salmon will occur in the tidally influenced portion of rivers/streams where their presence is possible from April 10 through November 7. The range of the GOM DPS only occurs in Maine. **Note**: If the project will occur within the geographic range of the GOM DPS Atlantic salmon but their presence is not expected following the best available commercial scientific data, the work window does not need to be applied. Please attach best available information (i.e. local fisheries biologist correspondence).
☑	☐	4.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as spawning grounds as follows: i. Gulf of Maine: Apr 1-Aug 31 ii. Southern New England/New York Bight: Mar 15-Aug 31 iii. Chesapeake Bay: Mar 15-Jul 1 and Sep 15-Nov 1 **Note**: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval.
☑	☐	5.	No portion of the proposed action that may affect shortnose or Atlantic sturgeon will occur in areas identified as overwintering grounds where dense aggregations are known to occur as follows: i. Gulf of Maine: Oct 15-Apr 30 ii. Southern New England/New York Bight: Nov 1-Mar 15 iii. Chesapeake Bay: Nov 1-Mar 15 **Note**: If river specific information exists that provides better or more refined time of year information, those dates may be substituted with NMFS approval.
☐	☑	6.	Within designated critical habitat for Atlantic sturgeon, no work will affect hard bottom substrate (e.g., rock, cobble, gravel, limestone, boulder, etc.) in low salinity waters (i.e., 0.0-0.5 parts per thousand) (PBF 1).
☑	☐	7.	Work will result in no or only temporary/short-term changes in water temperature, water flow, salinity, or dissolved oxygen levels.

Yes	N/A	PDC #	PDC Description
☑	☐	8.	If ESA-listed species are (a) likely to pass through the action area at the time of year when project activities occur; and/or (b) the project will create an obstruction to passage when in-water work is completed, then a zone of passage (~50% of water body) with appropriate habitat for ESA-listed species (e.g., depth, water velocity, etc.) must be maintained (i.e., physical or biological stressors such as turbidity and sound pressure must not create barrier to passage).
☑	☐	9.	The project will not adversely impact any submerged aquatic vegetation (SAV) or oyster reefs.
☑	☐	10.	No blasting or use of explosives will occur.
☑	☐	11.	No in-water work on large dams or tide gates (small dam and tide gate repairs may be permitted with prior review and approval from NMFS).

UNDERWATER NOISE PDCs			
Yes	N/A	PDC #	PDC Description
☐	☑	12.	If pile driving is occurring during a time of year when ESA-listed species may be present, and the anticipated noise is above the behavioral noise threshold, a "soft start" is required to allow animals an opportunity to leave the project vicinity before sound pressure levels increase. *In addition to using a soft start at the beginning of the work day for pile driving, one must also be used at any time following cessation of pile driving for a period of 30 minutes or longer.* For impact pile driving: pile driving will commence with an initial set of three strikes by the hammer at 40% energy, followed by a one minute wait period, then two subsequent three-strike sets at 40% energy, with one-minute waiting periods, before initiating continuous impact driving. For vibratory pile installation: pile driving will be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This sequence of 15 seconds of reduced energy driving, one-minute waiting period will be repeated two additional times, followed immediately by pile-driving at full rate and energy.

Yes	N/A	PDC #	PDC Description
☐	☑	13.	If the project includes non-timber piles*, please attach your calculation to this verification form showing that the noise is below the injury thresholds of ESA-listed species in the action area. The GARFO Acoustic Tool can be used as a source, should you not have other information: https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-consultation-technical-guidance-greater-atlantic. *Effects from timber and steel sheet piles were analyzed in the NLAA programmatic consultation, so no additional information is necessary.
☐	☑	14.	Any new pile-supported structure must involve the installation of no more than 50 piles (below MHW).

Pile material (e.g., steel pipe, concrete)	Pile diameter/ width (inches)	Number of piles	Installation method (e.g., impact hammer, vibratory start and then impact hammer to depth, drilling)

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IMPINGEMENT/ENTRAINMENT AND ENTANGLEMENT PDCs			
Yes	N/A	PDC #	PDC Description
☐	☑	15.	If excavating or dredging, only mechanical buckets, hydraulic cutterheads, or low volume hopper dredges (e.g., CURRITUCK, ≤300 cubic yard maximum bin capacity) may be used. **Note**: We consider excavating a smaller scale form of mechanical dredging.
☐	☑	16.	No new excavation or dredging in Atlantic sturgeon or salmon critical habitat (excavation in a prior construction footprint or maintenance dredging is permitted, but still must meet all other PDCs). New excavation or dredging outside Atlantic sturgeon or salmon critical habitat is limited to one-time events (e.g., burying a cable or utility line) and minor (≤2 acres) expansions of areas already subject to prior excavation or maintenance dredging. Locating a replacement bridge within 250 feet (centerline to centerline) of an existing bridge and excavation of sediment around bridge piers are considered work in a previous construction footprint. **Note**: We consider excavating a smaller scale form of mechanical dredging.

Yes	N/A	PDC #	PDC Description
☐	☑	17.	Temporary intakes related to construction are prohibited in sturgeon and salmon spawning, rearing, or overwintering habitat during the time of year windows identified in General PDCs 3-5. If utilized outside those areas and times of year and in an area with anticipated sturgeon and salmon presence, temporary intakes must be equipped with 2-millimeter wedge wire mesh screening and must not have greater than 0.5 feet per second intake velocities, to prevent impingement or entrainment of juvenile and early life stages of these species.
☑	☐	18.	Work behind cofferdams, turbidity curtains, or other instruments that prevent access of animals to the project area is required when ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, access control measures are not necessary). Once constructed, work inside a cofferdam at any time of year may be permitted with NMFS approval, provided the cofferdam is installed/removed outside the time-restricted period.
☑	☐	19.	No new permanent surface water withdrawal, water intakes, or water diversions.
☑	☐	20.	Turbidity control measures, including cofferdams, must be designed to not entangle or entrap ESA-listed species.
☐	☑	21.	Any in-water lines, ropes, or chains must be made of materials and installed in a manner to minimize or avoid the risk of entanglement by using thick, heavy, and taut lines that do not loop or entangle. Lines can be enclosed in a rigid sleeve.

WATER QUALITY/TURBIDITY PDCs			
Yes	N/A	PDC #	PDC Description
☐	☑	22.	In-water offshore disposal may only occur at designated disposal sites that have already been the subject of ESA section 7 consultation with NMFS and where a valid consultation is in place.
☑	☐	23.	Any temporary discharges must meet state water quality standards (e.g., no discharges of substances in concentrations that may cause acute or chronic adverse reactions, as defined by EPA water quality standards criteria).
☐	☑	24.	Only repair, upgrades, relocations, and improvements of existing discharge pipes or replacement in-kind are allowed; no new construction of untreated discharges.
☑	☐	25.	Work behind cofferdams, turbidity curtains, or other instruments to control turbidity is required when operationally feasible and ESA-listed species are likely to be present (if presence is limited to rare, transient individuals, turbidity control methods are not necessary).

HABITAT ALTERATION PDCs			
Yes	N/A	PDC #	PDC Description
☑	☐	26.	Minimize all new waterward encroachment and permanent fill.
☐	☑	27.	In Atlantic salmon critical habitat, stream simulation design with a minimum span of 1.2 bankfull width will be used in areas with minimal tidal influence. In tidal areas, a design that allows for unimpeded flow will be used (no delay in water entering or exiting the area upstream of the crossing).
☐	☑	28.	In Atlantic salmon critical habitat, no culvert end extensions, invert line culvert rehabilitation, or slipline culvert rehabilitation may occur.

VESSEL TRAFFIC PDCs			
Yes	N/A	PDC #	PDC Description
☐	☑	29.	Maintain project (i.e., construction) vessels operating within the action area to speed limits below 10 knots and dredge vessels to speeds of 4 knots maximum, while dredging.
☐	☑	30.	Maintain a 1,500-foot buffer between project (i.e., construction) vessels and ESA-listed whales and a 300-foot buffer between project vessels and sea turtles. This also applies to dredge vessels.
☐	☑	31.	The number of project (construction) vessels must be limited to the greatest extent possible, as appropriate to size and scale of project.
☐	☑	32.	The project must not result in the permanent net increase of commercial vessels.

Justification for NLAA Determination if not Incorporating All PDC
If the project is not in compliance with all of the general and stressor-based PDCs, but you can provide justification and/or special conditions to demonstrate why the project still meets the NLAA determination and is consistent with the aggregate effects considered in the programmatic consultation, you may still certify your project through the NLAA program using this verification form. Please identify which PDCs your project does not meet (e.g., PDC 9, PDC 15, PDC 22, etc.) and provide your rationale and justification for why the project is still eligible for the verification form. Project modifications must not result in different effects not already considered.

To demonstrate that the project is still NLAA, you must explain why the effects on ESA-listed species or critical habitat are **insignificant** (i.e., too small to be meaningfully measured or detected) or **discountable** (i.e., extremely unlikely to occur). **Please use this language in your justification.**

PDC#	Justification

FHWA/DOT Verification of Determination (To be filled out by FHWA/DOT staff only)
By submitting this Verification Form, FHWA, or the state DOT as FHWA's designated non-federal representative, indicates that they determined that the proposed activity described above is not likely to adversely affect (NLAA) ESA-listed species or designated critical habitat under NMFS jurisdiction in accordance with the Program, and all effects (direct, indirect, interrelated, and interdependent) are either insignificant (so small they cannot meaningfully be measured, detected, or evaluated) or discountable (extremely unlikely to occur).

☑	In accordance with the FHWA GARFO NLAA Program, we have determined that the action complies with all applicable PDCs and is not likely to adversely affect listed species.
☐	In accordance with the FHWA GARFO NLAA Program, we have determined that the action is not likely to adversely affect listed species per the justifications and/or special conditions provided above.

FHWA/DOT Signature:	Date:
	03/08/2021

By providing your determination and signature, you are certifying that to the best of your knowledge the information provided in this form is accurate and based upon the best available scientific information. This form must be filled out and signed by FHWA or state DOT staff, as an officially designated non-federal representative.

GARFO PRD Concurrence (To be filled out by GARFO PRD)
After receiving the Verification Form, GARFO PRD will contact FHWA/DOT with any concerns and indicate whether GARFO PRD concurs with FHWA/DOT's determination.

☑	In accordance with the FHWA GARFO NLAA Program, GARFO PRD concurs with FHWA/DOT's determination that the action complies with all applicable PDCs and is not likely to adversely affect listed species or critical habitat.
☐	In accordance with the FHWA GARFO NLAA Program, GARFO PRD concurs with FHWA/DOT's determination that the action is not likely to adversely affect listed species or critical habitat per the justifications and/or special conditions provided above.
☐	GARFO PRD does not concur with FHWA/DOT's determination that the action complies with the applicable PDCs (with or without justifications), and recommends an individual Section 7 consultation to be completed independent from the FHWA GARFO NLAA Program.

GARFO PRD Signature:	Date:
	03/16/2021

From: Leporacci, Nicole (DOT)
To: Erika Klinkhammer
Cc: Johnstone, Erik (DOT); Richardson, Alisa (DOT)
Subject: Fw: RIDOT Nonquit Pond Bridge No. 292
Date: Wednesday, March 31, 2021 11:17:26 AM

[EXTERNAL]
Hi Erika,

Just a heads up - we talked with Eric Schneider this morning (DEM marine fisheries) who followed up with us on behalf of Phil regarding the email below. They did agree with the TOY restrictions the NMFS and ACOE have implemented, but they do ask that even outside of the TOY restrictions (July and August) that the water controls do not encroach on more than 25%. So overall - the project should aim to have the water controls encroach on around 25% or less of the waterbody. We did ask that he send us this in writing.

To check in - has RIDOT heard from the fire department yet? Curious on how that is progressing. Thanks!

Best,
Nicole

Nicole Lineberry (Leporacci)
Senior Environmental Scientist
Natural Resources Unit, RIDOT
E: nicole.leporacci@dot.ri.gov

From: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>
Sent: Monday, March 15, 2021 1:34 PM
To: Edwards, Phillip (DEM) <phillip.edwards@dem.ri.gov>
Cc: Johnstone, Erik (DOT) <erik.johnstone@dot.ri.gov>; Richardson, Alisa (DOT) <Alisa.Richardson@dot.ri.gov>; Erika Klinkhammer <EKlinkhammer@parecorp.com>
Subject: Re: RIDOT Nonquit Pond Bridge No. 292
Hi Phil,

I hope you enjoyed your weekend! As a follow up to your comments below, we have also completed coordination with NMFS on this project and were given TOY restrictions regarding anadromous fish passage from both the NMFS and Army Corp which are dependent on anticipated encroachment into the waterbody. They are as follows:

- Spring Diadromous NMFS/ACOE TOY: If controls encroach greater than 25% of the waterway width measured from MHW, then the project must follow the Spring TOY restriction of February 1st -June 30th (ACOE PGP APPENDIX B - GENERAL CONDITIONS

#19/NMFS Programmatic).

- Fall Diadromous NMFS TOY: If controls encroach greater than 25% of the waterway width measured from MHW, then the project must follow the Fall TOY restriction of September 1st - November 30th (NMFS Programmatic Appendix D).
- NMFS: At no time should water controls encroach on greater than 50% of the waterbody (NMFS Programmatic)
- NMFS/ACOE: Controls should be installed and removed outside of the Spring and Fall TOY restrictions. If controls encroach 25% or less of the waterway width measured from MHW, work can take place during the TOY restrictions in the dry behind the water controls.

The project will follow these TOY restrictions for in water work. Please let us know if there are any additional TOYs that RIDEM would like to propose in addition to those administered by the NMFS and ACOE. Thank you!

Best,
Nicole

Nicole Lineberry (Leporacci)
Senior Environmental Scientist
Natural Resources Unit, RIDOT
E: nicole.leporacci@dot.ri.gov

OCT 19 2023

From: Edwards, Phillip (DEM) <phillip.edwards@dem.ri.gov>
Sent: Thursday, January 28, 2021 4:20 PM
To: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>; Kalb, David (DEM) <David.Kalb@dem.ri.gov>; Freitas, Amanda (DEM) <Amanda.Freitas@dem.ri.gov>; Buchanan, Scott (DEM) <Scott.Buchanan@dem.ri.gov>; Pelletier, Corey (DEM) <Corey.Pelletier@dem.ri.gov>; Brown, Charles (DEM) <charles.brown@dem.ri.gov>; Schneider, Eric (DEM) <eric.schneider@dem.ri.gov>
Cc: Johnstone, Erik (DOT) <erik.johnstone@dot.ri.gov>; Richardson, Alisa (DOT) <Alisa.Richardson@dot.ri.gov>; Erika Klinkhammer <EKlinkhammer@parecorp.com>
Subject: RE: RIDOT Nonquit Pond Bridge No. 292
+Pat McGee (RIFW, anadromous fisheries biologist)
Hi Nicole
Thanks for the update. Yes this is a strong migratory fish run. You mention the TOY restrictions and I added a few additional comments below regarding the Nonquit fish run for the RIDOT/F&W team.
- Several hundred yards below the fishway is Pachet Brook which leads to Watson Reservoir. Watson dam is a dead end, but each year many herring spawn in the brook and at the base of the dam. There is an existing fish run above (Nonquit and Borden Brook) and below (Pachet Brook) the proposed project location.
-Juveniles (herring) and spent adults exit Nonquit Pond from the fishway and through the hurricane barrier boards along the entire dam (both sides).
-Since 1999, F&W has operated an electronic fish counter at the exit of the fishway and will require

daily access to the fishway March 1st to June 1st
-F&W also conducts a juvenile abundance index (JAI) at the fishway exit when water conditions allow from June 1st to Nov 1st and will require weekly access.
-This section of river has thousands of juvenile menhaden at certain times of the year, and they will be observed under the bridge and at the base of the dam.
-Is there anything that can be done to secure the old fence from the bridge that surrounds the fishway during construction. Vandals and unauthorized individuals climb on the bridge and enter the closed fishway area. This may be a project for F&W when construction is complete.
-Lastly this area (the bridge and surrounding area) is a fish viewing area during the migration season and summer for the public. A lot of people stop by to look for fish.
Best Phil
Phil Edwards
Fisheries Biologist
RIDEM/Fish & Wildlife
401-789-0281 ext 33

From: Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>
Sent: Tuesday, January 26, 2021 1:00 PM
To: Kalb, David (DEM) <David.Kalb@dem.ri.gov>; Freitas, Amanda (DEM) <Amanda.Freitas@dem.ri.gov>; Buchanan, Scott (DEM) <Scott.Buchanan@dem.ri.gov>; Pelletier, Corey (DEM) <Corey.Pelletier@dem.ri.gov>; Edwards, Phillip (DEM) <phillip.edwards@dem.ri.gov>; Brown, Charles (DEM) <charles.brown@dem.ri.gov>; Schneider, Eric (DEM) <eric.schneider@dem.ri.gov>
Cc: Johnstone, Erik (DOT) <erik.johnstone@dot.ri.gov>; Richardson, Alisa (DOT) <Alisa.Richardson@dot.ri.gov>; Erika Klinkhammer <EKlinkhammer@parecorp.com>
Subject: RIDOT Nonquit Pond Bridge No. 292

Good afternoon,

I hope everyone enjoyed the holidays and the new year!

RIDOT has a new project for the replacement of Nonquit Pond Bridge that we would like to share with you for comment, particularly because the bridge is located immediately downstream of a fish ladder connecting the impoundment to the downstream channel. Nonquit Pond Bridge No. 292 carries Pond Bridge Road over Almy Creek in the Town of Tiverton, Rhode Island.

Minimal tree and vegetation clearing are proposed along the southeast embankment to facilitate the widened bridge and additional pavement required to match the roadway profile. Clearing is proposed to occur in the winter during the Northern Long-eared Bat inactive season (November 1st- March 31st) and the non-breeding season for migratory birds (September 1st - February 28th). There is no night work anticipated.

In-water work is limited to control of water (most likely sandbags) around each bridge abutment during demolition and patching repairs. Dewatering is anticipated to occur to facilitate concrete repairs in the dry. In-water work may occur outside of any required time-of-

year restrictions.

The project does include impact to a small sliver of saltmarsh that is within the area to be dewatered (~10 sq. ft.). We plan on calling for this area to be planted upon removal of the Control of Water (COW) measures (most likely sand bags). The area of saltmarsh within the COW is previously degraded and unvegetated due to assumed foot traffic. We plan on placing a platform to go over the substrate during construction activities so it won't get tramped further, and if the NMFS agrees, could propose the 10 s.f. get planted with Spartina upon completion of construction. RIDOT has initiated consultation with the NMFS, and is waiting on comments regarding this mitigation.

I have attached a longer scope of work description, design plans, and location maps. Please let us know if there are any comments, and if the project requires further coordination regarding the fish ladder. We do plan on following TOY restrictions and recommendations given by the NMFS through our essential fish habitat consultation. Thank you!

Best,

Nicole

Nicole Lineberry (Leporacci)
Senior Environmental Scientist
Natural Resources Unit, RIDOT
E: nicole.leporacci@dot.ri.gov

USFWS CBRA PROJECT INFORMATION
(per INTERAGENCY CBRA CONSULTATION template)

January 11, 2021

Alisa Richardson
Managing Engineer
RIDOT Environmental Division
360 Lincoln Ave
Warwick, RI 02888

The Rhode Island Department of Transportation on behalf of the Federal Highway Administration (FHWA) requests a consultation with the U.S. Fish and Wildlife Service (Service) under the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 *et seq.*) for the proposed replacement of Nonquit Pond Bridge No. 292.

Project Location
Nonquit Pond Bridge No. 292 carries Pond Bridge Road over Almy Creek, just south of Nonquit Pond, and Nonquit Pond Dam. The project is located in Tiverton, RI partially within Unit D02 of the Coastal Barrier Resources System (CBRS).

Description of the Proposed Action or Project
The project is a bridge replacement of the existing structurally deficient bridge involving removal of the superstructure, partial removal of the substructure (upper portions of abutments and wingwalls), and construction of a new superstructure supported by micropiles to be installed behind the existing abutments (entirely upland of the coastline and coastal barrier). The lower portions of abutments and wingwalls will remain in place to act as scour protection for the new bridge. The bridge will be widened by approximately 8.5-feet for safety purposes, to increase safe passage for pedestrians/bicyclists and vehicles simultaneously, however the superstructure will remain within the footprint of the existing abutments and wingwalls. Currently, the bridge is 20' wide with no shoulders for pedestrians and bicyclists. The proposed bridge width will accommodate two 11-foot travel lanes with 3-foot shoulders. The project will receive federal funding from FHWA.

Applicable Exception(s) under 16 U.S.C. 3505(a)
Identify the appropriate exception(s) for the action or project under the CBRA (16 U.S.C. 3505(a)).

General Exceptions

☐ 16 U.S.C. 3505(a)(1): Any use or facility necessary for the **exploration, extraction, or transportation of energy resources** which can be carried out only on, in, or adjacent to a coastal water area because the use or facility requires access to the coastal water body.

☐ 16 U.S.C. 3505(a)(2): The **maintenance or construction of improvements of existing Federal navigation channels** (including the Intracoastal Waterway) and related structures

(such as jetties), including the disposal of dredge materials related to such maintenance or construction. A Federal navigation channel or a related structure is an existing channel or structure, respectively, if it was authorized before the date on which the relevant System unit or portion of the System Unit was included within the CBRS.

☐ 16 U.S.C. 3505(a)(3): The maintenance, replacement, reconstruction, or repair, but not the expansion, of **publicly owned or publicly operated roads, structures, or facilities that are essential links** in a larger network or system.

☐ 16 U.S.C. 3505(a)(4): **Military activities** essential to national security.

☐ 16 U.S.C. 3505(a)(5): The construction, operation, maintenance, and rehabilitation of **Coast Guard facilities** and access thereto.

Specific Exceptions

These exceptions must also be consistent with all three purposes of the CBRA (see "Justification" section below).

☐ 16 U.S.C. 3505(a)(6)(A): **Projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats**, including acquisition of fish and wildlife habitats, and related lands, stabilization projects for fish and wildlife habitats, and recreational projects.

☐ 16 U.S.C. 3505(a)(6)(B): Establishment, operation, and maintenance of **air and water navigation aids** and devices, and for access thereto.

☐ 16 U.S.C. 3505(a)(6)(C): Projects under the **Land and Water Conservation Fund Act** of 1965 (16 U.S.C. 4601-4 through 11) and the **Coastal Zone Management Act** of 1972 (16 U.S.C. 1451 et seq.).

☐ 16 U.S.C. 3505(a)(6)(D): **Scientific research**, including aeronautical, atmospheric, space, geologic, marine, fish and wildlife, and other research, development, andapplications.

☐ 16 U.S.C. 3505(a)(6)(E): Assistance for **emergency actions essential to the saving of lives and the protection of property and the public health and safety**, if such actions are performed pursuant to sections 5170a, 5170b, and 5192 of title 42 **and are limited to actions that are necessary to alleviate the emergency.**

☒ 16 U.S.C. 3505(a)(6)(F): Maintenance, replacement, reconstruction, or repair, but not the expansion (except with respect to United States route 1 in the Florida Keys), of **publicly owned or publicly operated roads, structures, and facilities.**

☐ 16 U.S.C. 3505(a)(6)(G): **Nonstructural projects for shoreline stabilization** that are designed to mimic, enhance, or restore a natural stabilization system.

Justification for Exception(s)

The proposed bridge superstructure will not result in an expansion of the existing substructure footprint. The proposed bridge will remain within the footprint of the existing abutments and wingwalls. No changes will be made to the width of the tidal channel beneath the bridge. The roadway will be tapered to match the existing width of the roadway outside the bridge limits.

The purpose of widening the bridge is to improve pedestrian and vehicular safety, to minimize the risk to loss of human life, and to remove the current vehicular weight limits. Currently the bridge does not have lane markings, and there are no shoulders for safe pedestrian passage while vehicles are travelling over the bridge. The vehicular weight limits prevent some emergency vehicles and large trucks from using the route which creates a threat to public safety, and disruptions to local businesses, including agricultural businesses adjacent to the structure. The proposed widening is limited to the bridge and the portions of roadway that will be tapered to match the existing roadway width outside of the bridge footprint.

The project is federally funded by FHWA and will not result in a wasteful expenditure of federal revenues. Most of the project is located within the state right-of-way and the proposed bridge and roadway improvements will not encourage development of the surrounding areas or increase vehicular capacity or access. Work is limited to the bridge and roadway, and no development will occur along the coastal barriers. Project plans and specifications include measures to preserve the surrounding natural areas to the extent practicable and prevent to damage to the coastal environment.

Contact Information
RIDOT Environmental Division
360 Lincoln Ave.
Warwick, RI 02888
alisa.richardson@dot.ri.gov

Alisa Richardson, PE
Managing Engineer
Natural Resources Unit
Environmental Division

U.S. Fish and Wildlife Service Response

Below is the Service's response to the RIDOT's request for a consultation under the CBRA for the replacement of Nonquit Pond Bridge No. 292. This response represents the Service's opinion. **The final decision regarding the expenditure of funds for this action or project rests with the Federal funding agency.** RIDOT has fulfilled its obligation to consult with the Service under the CBRA for this particular action or project within the CBRS. Please note that any new commitment of Federal funds associated with this action or project or change in the

project design and/or scope, is subject to the CBRA's consultation requirement.

The Service has reviewed the information provided by the RIDOT, and believes the referenced action/project is:

- ☐ Not located within a System Unit of the CBRS and the CBRA does not apply (except with respect to the restrictions on Federal flood insurance)
- ☐ Located within a System Unit of the CBRS and meets the exception(s) to the CBRA selected above
- ☐ Located within a System Unit of the CBRS and meets different exception(s) than the one(s) selected above (see additional information/comments below)
- ☐ Located within a System Unit of the CBRS and does not meet an exception to the CBRA (see additional information/comments below)
- ☒ Due to many competing priorities, the Service is unable to provide an opinion on the applicability of the CBRA's exceptions to this action/project at this time. The RIDOT may elect to proceed with the action/project if it has determined that the action/project is allowable under the CBRA. Please note that any new commitment of Federal funds associated with this action/project or a related future project is subject to the CBRA's consultation requirement.

Additional Information/Comments
Include any additional information/comments.

This response does not constitute consultation for any project pursuant to section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) or comments afforded by the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*); nor does it preclude comment on any forthcoming environmental documents pursuant to the National Environmental Policy Act (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

SERVICE FIELD OFFICE SIGNATORY AND TITLE DATE

David Simmons
Acting Field Supervisor
New England Field Office

From: Stieb, Jeffrey D CIV
To: Eric Silva
Cc: Martins, Jeffry (DOT); Desimone, Peter (DOT); alisa.richardson@dot.ri.gov; Leporacci, Nicole (DOT); David Elwell; Erika Klinkhammer; Fisher, Donna A CIV; Aaronson, Benjamin LT
Subject: RE: USCG Exception Letter - Nonquit Pond Bridge - Tiverton, RI
Date: Thursday, February 11, 2021 4:12:43 PM
Attachments: NonquitCGException.pdf
Photo Document.pdf

[EXTERNAL]

Eric,

Thank you for your request to determine Coast Guard interest in the Nonquit Pond Bridge No. 292 project. We have reviewed Brian Moore's letter dated February 2, 2021, and accompanying plans and photographs. The Coast Guard concurs that project qualifies as a repair under 33 CFR 115.40. A Coast Guard Permit is not required. No additional Coast Guard Bridge Program requirements apply.

Please call if you have any questions.

Regards,

Jeffrey Stieb
Bridge Management Specialist
First Coast Guard District
781-901-0348

§ 115.40 Bridge repairs.

Repairs to a bridge which do not alter the clearances, type of structure, or any integral part of the substructure or superstructure or navigation conditions, but which consist only in the replacement of worn or obsolete parts, may, if the bridge is a legally approved structure, be made as routine maintenance without a formal permit action from the U.S. Coast Guard.

From: Eric Silva <ESilva@parecorp.com>
Sent: Tuesday, February 2, 2021 3:17 PM
To: Stieb, Jeffrey D CIV <Jeffrey.D.Stieb@uscg.mil>
Cc: Martins, Jeffry (DOT) <jeffry.martins@dot.ri.gov>; Desimone, Peter (DOT) <peter.desimone@dot.ri.gov>; alisa.richardson@dot.ri.gov; Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>; David Elwell <delwell@parecorp.com>; Erika Klinkhammer <EKlinkhammer@parecorp.com>
Subject: [Non-DoD Source] FW: USCG Exception Letter - Nonquit Pond Bridge - Tiverton, RI

Good afternoon Jeffrey,

On behalf of RIDOT, please find the attached request for an exception for the U.S. Coast Guard permit for the Nonquit Pond Bridge, located in Tiverton, RI, and supporting documentation. Please let us know if you have any questions, or require further information.

Thank you,
Eric T. Silva, P.E.
Pare Corporation
Main: (401) 334-4100
Direct: (401) 889-3281
www.parecorp.com

From: Martins, Jeffry (DOT) <jeffry.martins@dot.ri.gov>
Sent: Tuesday, February 2, 2021 3:03 PM
To: Eric Silva <ESilva@parecorp.com>
Cc: Desimone, Peter (DOT) <peter.desimone@dot.ri.gov>; Richardson, Alisa (DOT) <Alisa.Richardson@dot.ri.gov>; Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>; David Elwell <delwell@parecorp.com>; Erika Klinkhammer <EKlinkhammer@parecorp.com>
Subject: RE: [EXTERNAL] : USCG Exception Letter

[EXTERNAL]

Hello Eric,

Attached please find the approved letter.

As instructed, would you mind sending it over to Jeffrey Stieb along with the supporting documents.

Regards,
Jeff Martins

From: Eric Silva <ESilva@parecorp.com>
Sent: Monday, January 11, 2021 4:23 PM
To: Martins, Jeffry (DOT) <jeffry.martins@dot.ri.gov>
Cc: Desimone, Peter (DOT) <peter.desimone@dot.ri.gov>; Richardson, Alisa (DOT) <Alisa.Richardson@dot.ri.gov>; Leporacci, Nicole (DOT) <Nicole.Leporacci@dot.ri.gov>; David Elwell <delwell@parecorp.com>; Erika Klinkhammer <EKlinkhammer@parecorp.com>
Subject: [EXTERNAL] : USCG Exception Letter

Hi Jeff,

Attached is a zip file containing the USCG exception letter and enclosures to be included with the letter. Based on previous discussions regarding this, RIDOT will be coordinating directly with USCG

regarding the permit exception, so we have prepared the letter with RIDOT letterhead. It is in a word document format so that it can be edited by whoever is sending it as required.

During our coordination with USCG, we we're instructed by Jeffrey Stieb to have the letter sent directly to him via email at Jeffrey.d.stieb@uscg.mil, as he is familiar with the project.

Please let me know if you have any questions or need more information from us.

Thank you,

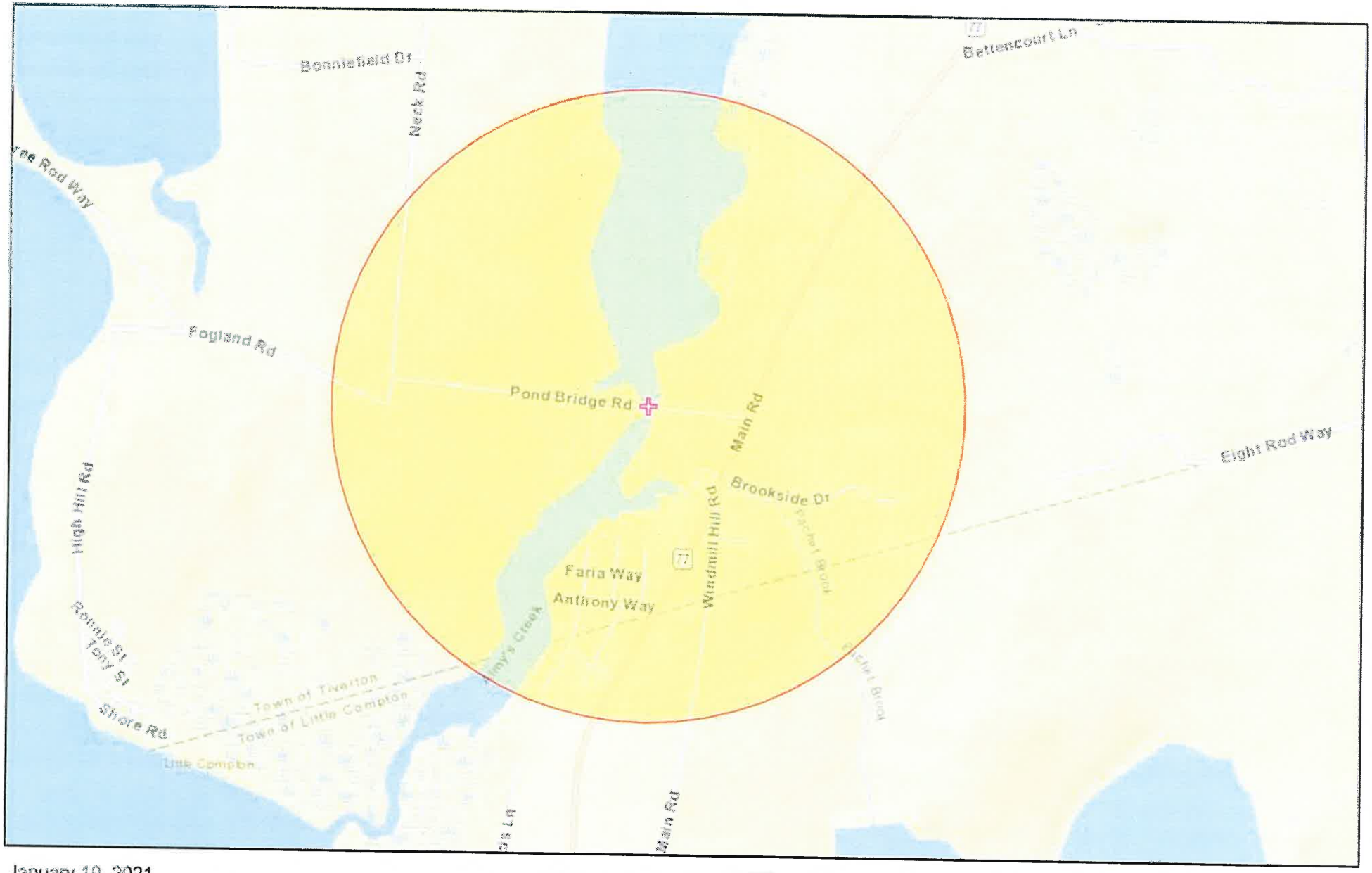
Eric T. Silva, P.E.
Project Engineer
Transportation Division

Pare Corporation
Main: (401) 334-4100
Direct: (401) 889-3281
www.parecorp.com [parecorp.com]

PLACEHOLDER FOR
SECTION 4F CHECKLIST FORM

PLACEHOLDER FOR
SECTION 106 REVIEW LETTER

Project Location Map



January 19, 2021

Nonquit Pond Bridge No. 292

OCT 19 2023

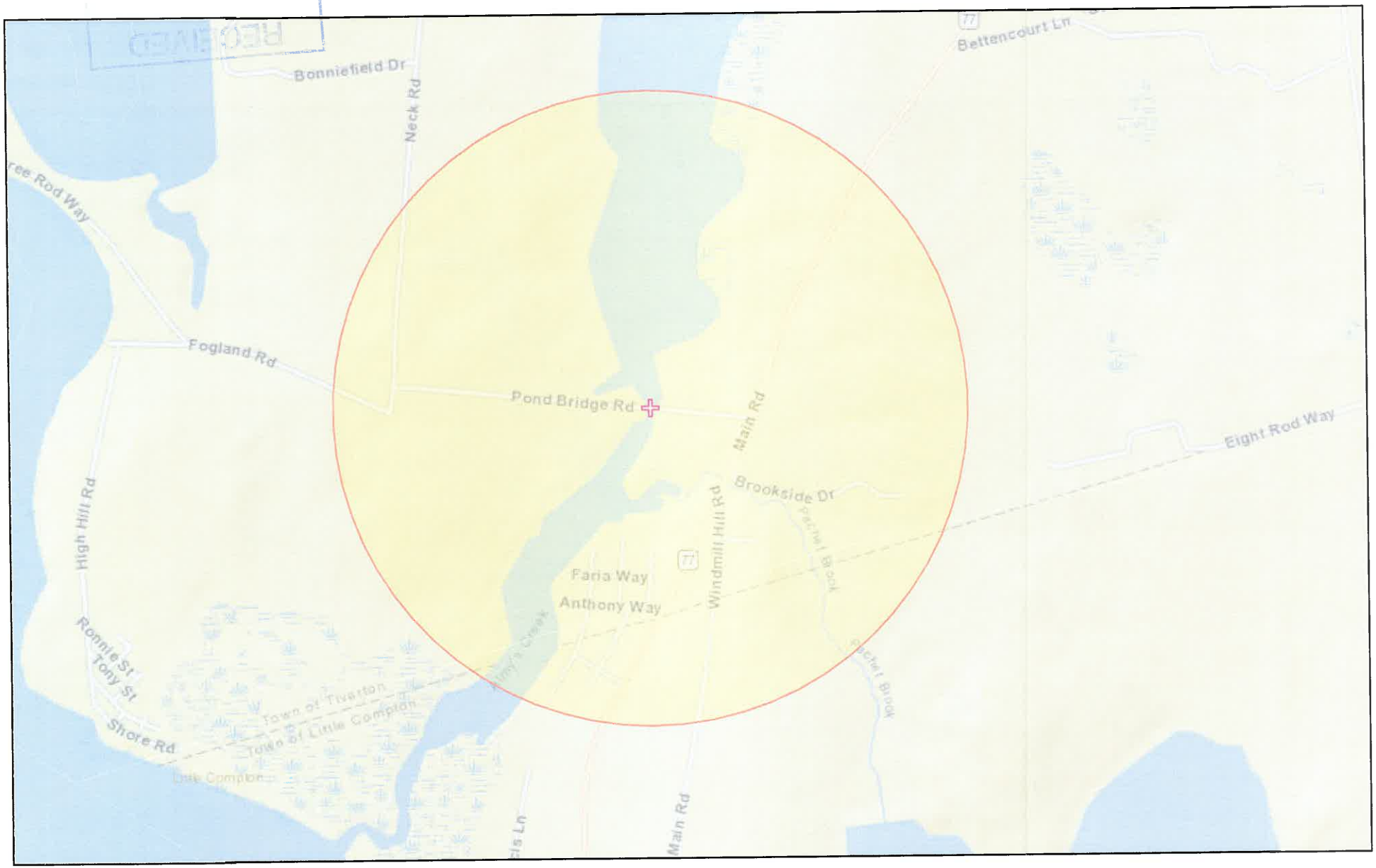
1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Demographic Index Map



January 19, 2021

Demographic Index (State Percentiles)

- Data not available
- Less than 50 percentile
- 50 -60 percentile
- 60 -70 percentile
- 70 -80 percentile
- 80 - 90 percentile
- 90 - 95 percentile
- 95 - 100 percentile

Nonquit Pond Bridge No. 292

1:18,056

0 0.1 0.2 0.4 mi

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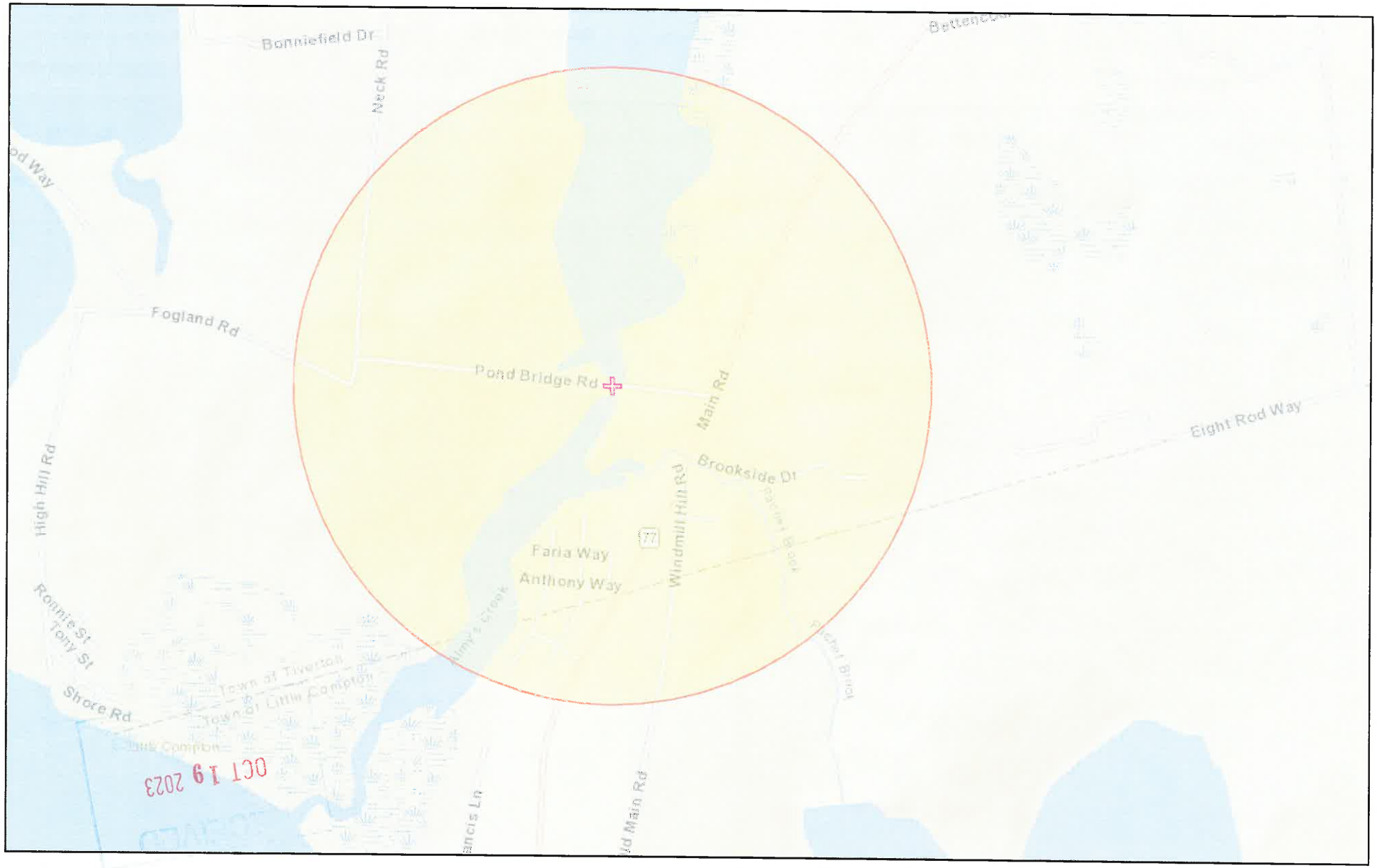
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Minority Population Map



January 19, 2021

Minority Population (State Percentiles)

- Data not available
- Less than 50 percentile
- 50 -60 percentile
- 60 -70 percentile
- 70 -80 percentile
- 80 - 90 percentile
- 90 - 95 percentile
- 95 - 100 percentile

Nonquit Pond Bridge No. 292

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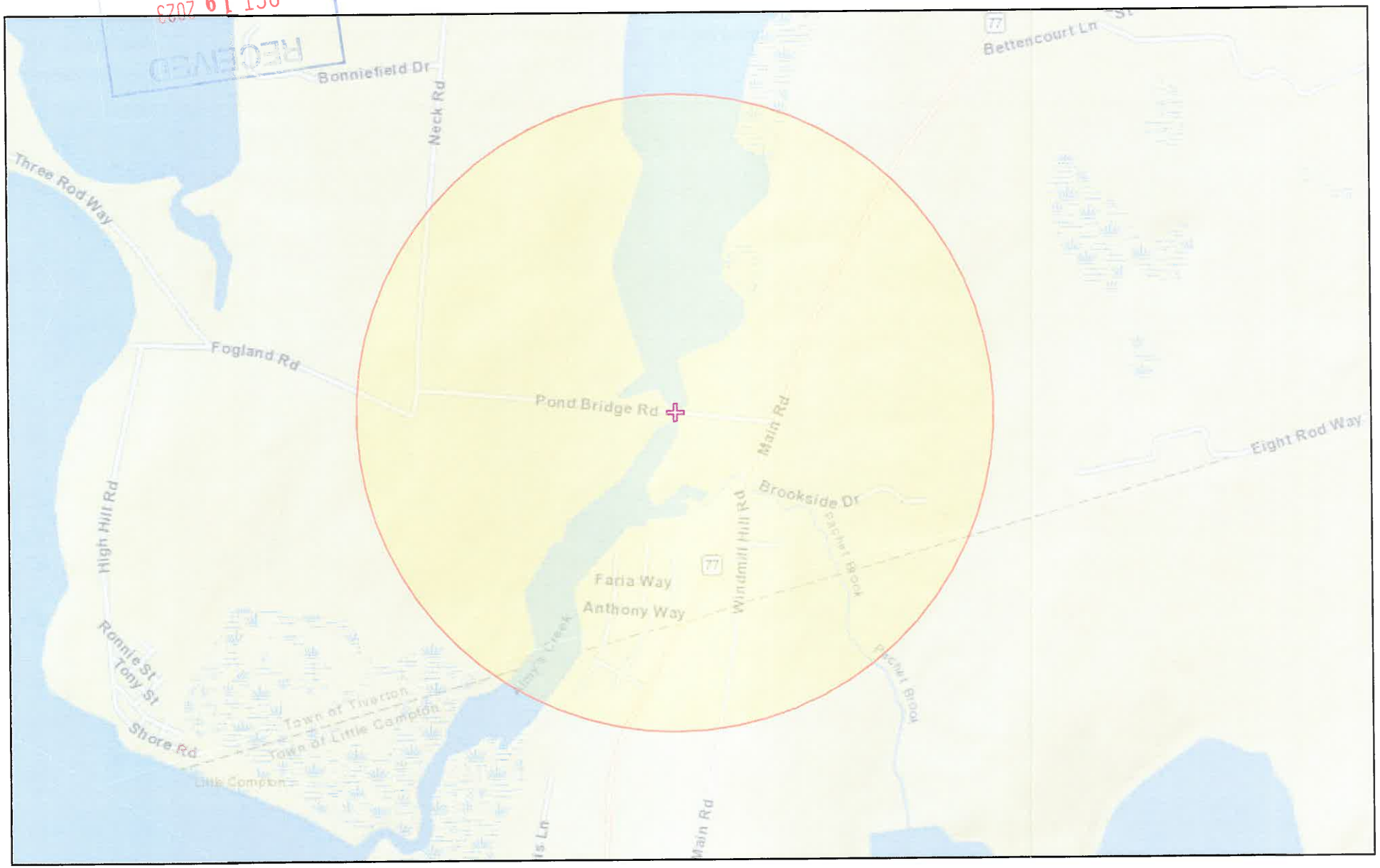
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Low Income Population Map



January 19, 2021

Low Income Population (State Percentiles)

- Data not available
- Less than 50 percentile
- 50 -60 percentile
- 60 -70 percentile
- 70 -80 percentile
- 80 - 90 percentile
- 90 - 95 percentile
- 95 - 100 percentile

Nonquit Pond Bridge No. 292

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0 0.1 0.2 0.4 mi

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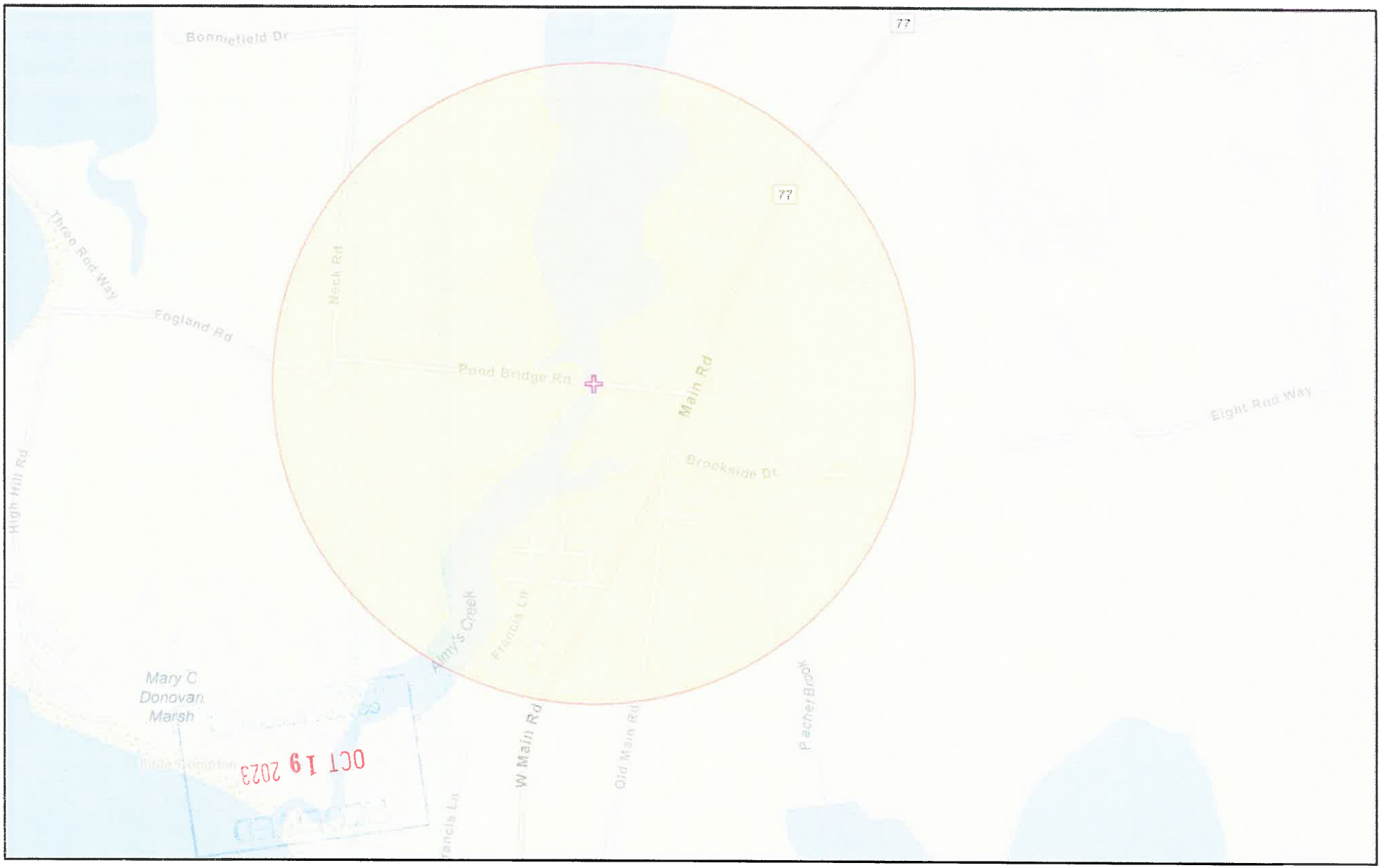
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Linguistically Isolated Map



January 19, 2021

Linguistically Isolated (State Percentiles)

- Data not available
- Less than 50 percentile
- 50 -60 percentile
- 60 -70 percentile
- 70 -80 percentile
- 80 - 90 percentile
- 90 - 95 percentile
- 95 - 100 percentile

Nonquit Pond Bridge No. 292

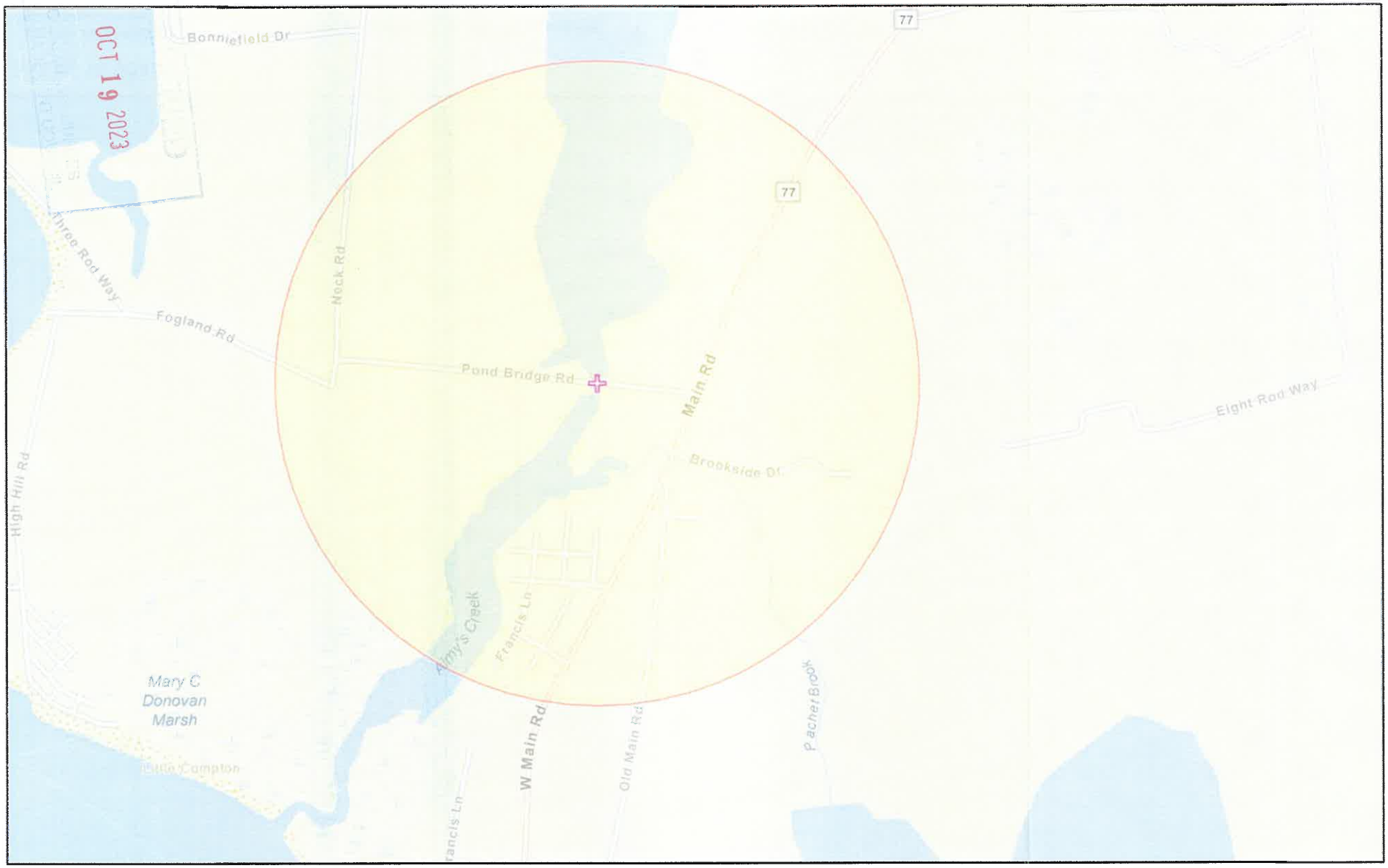
1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Less than HS Education Map



January 19, 2021

Less Than HS Education (State Percentiles)

Data not available

Less than 50 percentile

50 -60 percentile

60 -70 percentile

70 -80 percentile

80 - 90 percentile

90 - 95 percentile

95 - 100 percentile

Nonquit Pond Bridge No. 292

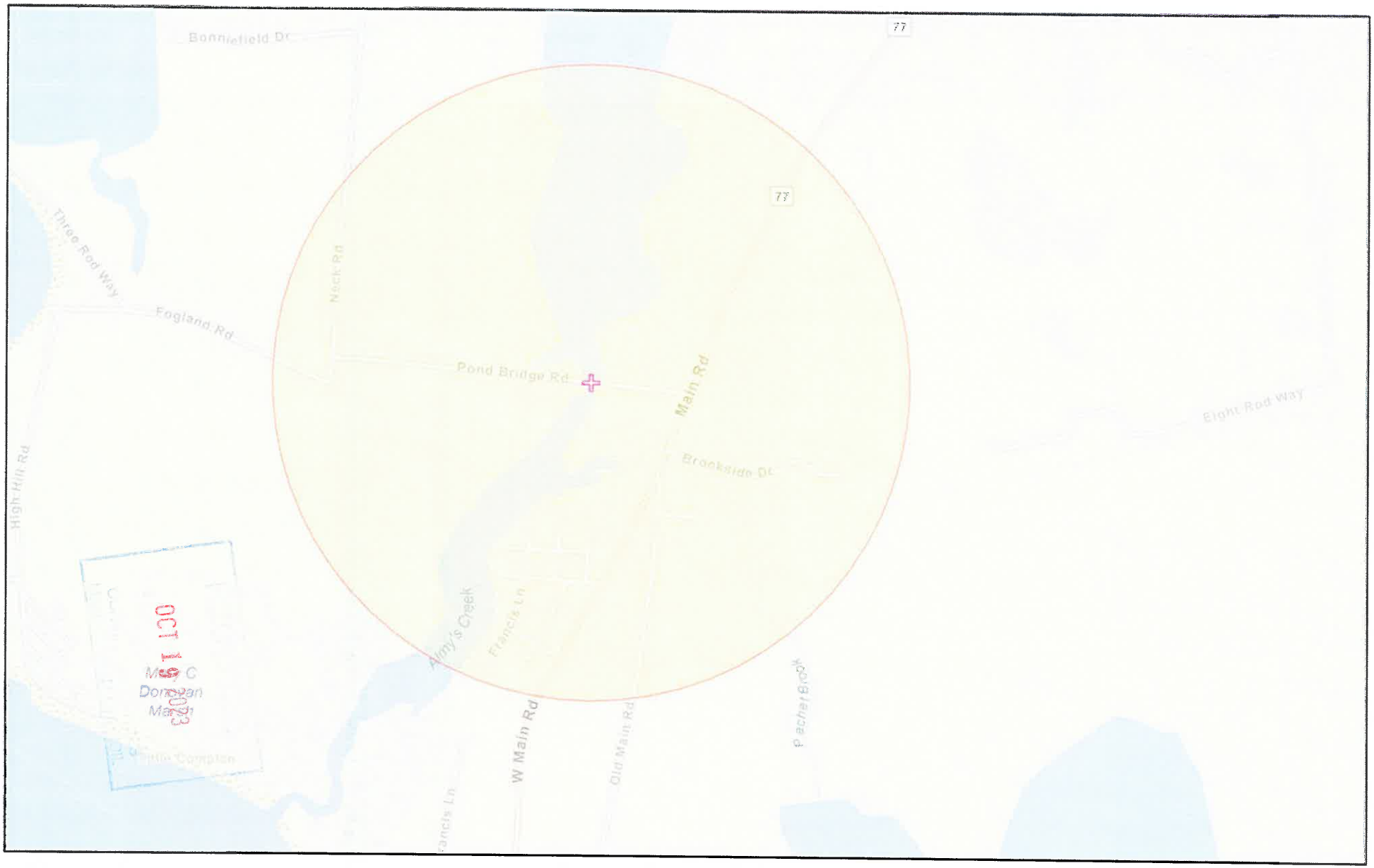
1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Under Age 5 Map



January 19, 2021

Under Age 5
(State Percentiles)

Data not available

Less than 50 percentile

50 -60 percentile

60 -70 percentile

70 -80 percentile

80 - 90 percentile

90 - 95 percentile

95 - 100 percentile

Nonquit Pond Bridge No. 292

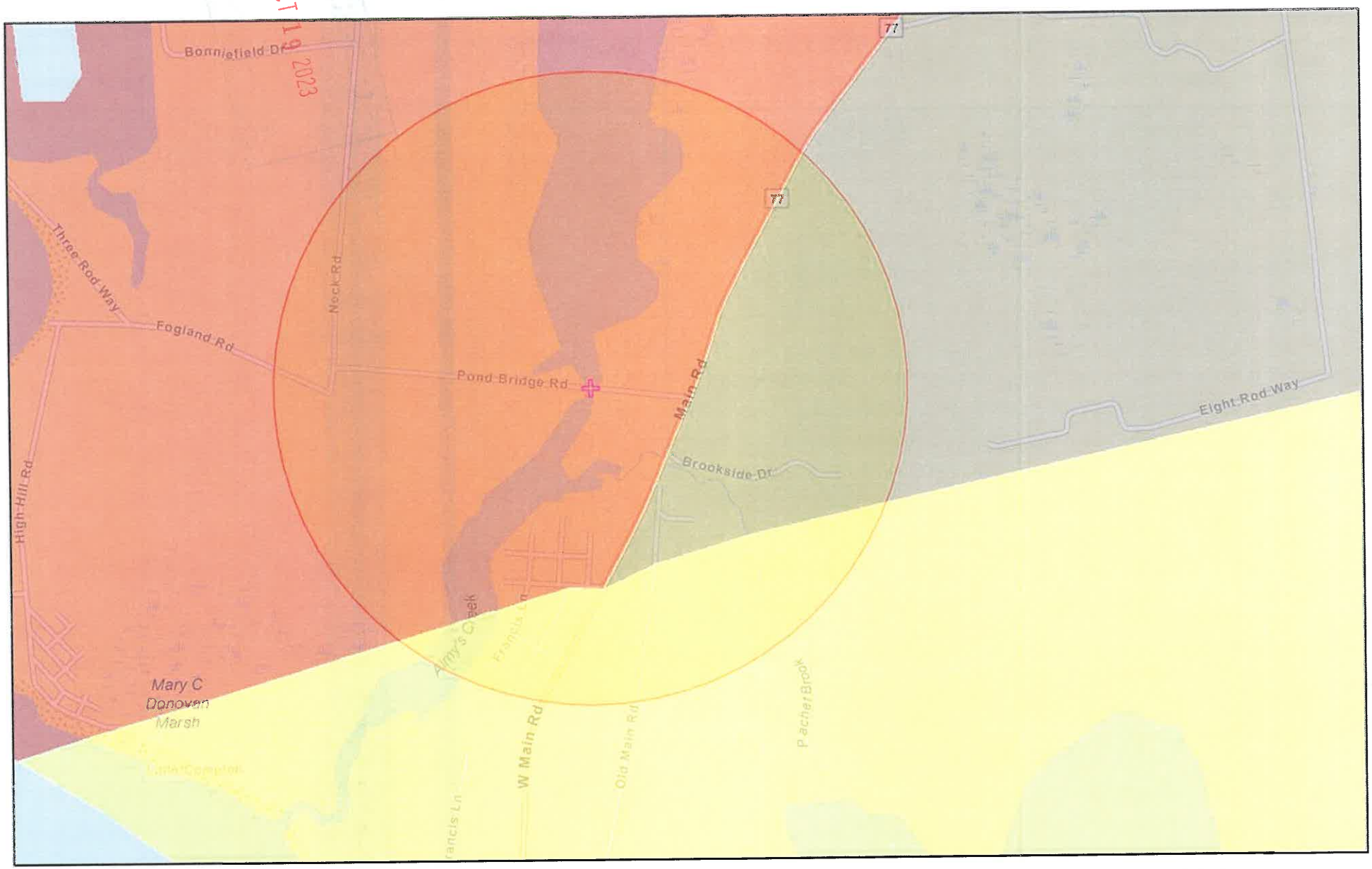
1:18,056

0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Over Age 64 Map



January 19, 2021

Over Age 64
(State Percentiles)

- Data not available
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- 70 -80 percentile
- 80 - 90 percentile
- 90 - 95 percentile
- 95 - 100 percentile

Nonquit Pond Bridge No. 292

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0 0.1 0.2 0.4 mi

0 0.17 0.35 0.7 km

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

EJSCREEN ACS Summary Report

Location: User-specified point center at 41.553281, -71.197050
Ring (buffer): 0.5-miles radius
Description: Nonquit Pond Bridge No. 292

Summary of ACS Estimates	2013 - 2017
Population	161
Population Density (per sq. mile)	624
Minority Population	1
% Minority	1%
Households	65
Housing Units	84
Housing Units Built Before 1950	25
Per Capita Income	47,881
Land Area (sq. miles) (Source: SF1)	0.26
% Land Area	70%
Water Area (sq. miles) (Source: SF1)	0.11
% Water Area	30%

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	161	100%	395
Population Reporting One Race	161	100%	472
White	161	100%	394
Black	0	0%	21
American Indian	0	0%	12
Asian	0	0%	21
Pacific Islander	0	0%	12
Some Other Race	0	0%	12
Population Reporting Two or More Races	0	0%	27
Total Hispanic Population	0	0%	50
Total Non-Hispanic Population	161		
White Alone	160	99%	396
Black Alone	0	0%	21
American Indian Alone	0	0%	12
Non-Hispanic Asian Alone	0	0%	21
Pacific Islander Alone	0	0%	12
Other Race Alone	0	0%	12
Two or More Races Alone	0	0%	27
Population by Sex			
Male	87	54%	194
Female	74	46%	210
Population by Age			
Age 0-4	1	1%	50
Age 0-17	23	14%	138
Age 18+	138	86%	287
Age 65+	50	31%	155

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017

EJSCREEN ACS Summary Report

Location: User-specified point center at 41.553281, -71.197050
Ring (buffer): 0.5-miles radius
Description: Nonquit Pond Bridge No. 292

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	130	100%	298
Less than 9th Grade	2	2%	68
9th - 12th Grade, No Diploma	4	3%	48
High School Graduate	24	18%	190
Some College, No Degree	35	27%	143
Associate Degree	10	8%	87
Bachelor's Degree or more	66	50%	170
Population Age 5+ Years by Ability to Speak English			
Total	160	100%	385
Speak only English	157	98%	349
Non-English at Home[1+2+3+4]	3	2%	71
[1]Speak English "very well"	3	2%	70
[2]Speak English "well"	0	0%	12
[3]Speak English "not well"	0	0%	23
[4]Speak English "not at all"	0	0%	12
[3+4]Speak English "less than well"	0	0%	23
[2+3+4]Speak English "less than very well"	0	0%	23
Linguistically Isolated Households*			
Total	0	100%	18
Speak Spanish	0	0%	12
Speak Other Indo-European Languages	0	100%	14
Speak Asian-Pacific Island Languages	0	0%	12
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	65	100%	159
< $15,000	6	9%	61
$15,000 - $25,000	1	2%	53
$25,000 - $50,000	4	7%	117
$50,000 - $75,000	6	10%	96
$75,000 +	47	73%	170
Occupied Housing Units by Tenure			
Total	65	100%	159
Owner Occupied	59	91%	139
Renter Occupied	6	9%	111
Employed Population Age 16+ Years			
Total	142	100%	304
In Labor Force	86	61%	291
Civilian Unemployed in Labor Force	6	4%	53
Not In Labor Force	55	39%	157

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)
*Households in which no one 14 and over speaks English "very well" or speaks English only.

EJSCREEN ACS Summary Report

Location: User-specified point center at 41.553281, -71.197050
Ring (buffer): 0.5-miles radius
Description: Nonquit Pond Bridge No. 292

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	N/A	N/A	N/A
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/A
French	N/A	N/A	N/A
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	N/A	N/A	N/A
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	N/A	N/A	N/A
Chinese	N/A	N/A	N/A
Japanese	N/A	N/A	N/A
Korean	N/A	N/A	N/A
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	N/A	N/A	N/A
Other Asian	N/A	N/A	N/A
Tagalog	N/A	N/A	N/A
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	N/A	N/A	N/A
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	N/A	N/A	N/A
Total Non-English	N/A	N/A	N/A

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.
N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017.
*Population by Language Spoken at Home is available at the census tract summary level and up.

Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 7
RIDOT STORMWATER MANAGEMENT PLAN CHECKLIST

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Water Resources
235 Promenade Street, Providence, RI 02908-5767
Telephone: 401-222-6820; Rhode Island Relay: 711; FAX: 401-222-6177

OCT 19 2023
Received by RIDEM
[DATE STAMP HERE]

Application for Stormwater Construction Permit and Water Quality Certification

Use this form to request a Stormwater Construction Permit or Water Quality Certification (WQC). [This form replaces the formerly used WQC Program Application; Applications for a Stormwater Discharge System Registration and to Modify a Groundwater or Stormwater Discharge System (GWD/UIC Program); and the RIPDES Notice of Intent (NOI) Stormwater General Permit for Construction Activity (CGP).] **If a Freshwater Wetlands (FWW) Application is required, this form must be submitted in addition to the FWW Application form.**

Please complete this form online before printing. Submit the completed form with all required documentation and fee to:
(Check or money order must be made payable to the Rhode Island General Treasurer.)
Stormwater Construction Permit Fee will be waived for applications submitted concurrently with a Freshwater Wetlands Application.

Permit Application Center (PAC)
RIDEM
235 Promenade Street, Room 260
Providence, RI 02908-5767

Provide all applicable information by completing the **shaded** areas.

Double-click to select:	☐ **New Permit**	☐ **Permit Modification**	

Site & Project

City/Town:	Street Address:		Water Body Class:
Tiverton	Pond Bridge Road		AA
Plat(s):	Lot(s):	Project Name:	
N/A	N/A	Bridge Group 44 H Nonquit	
Location:		Water Body Name(s):	
Pond Bridge Rd. 1610' West of Main St.		Nonquit Pond	
Latitude:	Longitude:	Utility Pole #:	Total Site Area:	Site Area to be Disturbed:
41.553994 N	(-71.1962 W)	5	0.25 acres	0.21 acres
RI Federal Aid Project #:	RI Contract #:	Was there a Pre-Application Meeting? ☐ Yes ☒ No		

Owner / Applicant

Organization/Company Name:		Contact Name of Owner's Representative for Questions:		
RIDOT		Keith MacDonald, P.E.		
First Name:	Last Name:	Email:		Phone:
Brian	Moore, P.E.	brian.moore@ridot.com		401-734-4829
Address:		City/Town:	State:	Zip:
360 Lincoln Avenue		Warwick	RI	02888

I certify under penalty of law that I've requested and authorized the investigation, compilation, and submission of all the information, in whatever form, contained in this Application; I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I'm aware that it's the owner's responsibility to implement or hire a qualified contractor responsible to implement any required Soil Erosion and Sediment Control Plan, so as to effectively control stormwater discharges leaving the site during the construction period. I authorize RIDEM personnel access to the property for purposes of observing conditions pertinent to this application and assessing compliance with any permit or determination resulting from this application.

Applicant's Signature:	Title:	Date:
		05/25/21

Professional

Professional's Name:	Professional's License Type(s) and Number(s):	
Keith MacDonald, P.E.	RI PE # 7859	
Company Name:	Email:	Phone:
Pare Corporation	kmacdonald@parecorp.com	(401) 334-4100

I certify under penalty of law that the project described in this application and associated materials is in compliance with the RI Stormwater Design and Installation Standards Manual (as amended) and the Rhode Island Soil Erosion and Sediment Control Handbook (as amended) [if required] and I believe all information presented in this application and the accompanying materials are true, accurate and complete. All engineering designs, plans and specifications [if required] included in this application were done by me or by someone working directly for me. The Natural Heritage Area Information [if required] and the site specific Soil Erosion and Sediment Control Plan [if required] were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering or developing the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete at the time this application is made. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Professional's Signature:	Title:	Date:
		05/25/21

PERMIT HISTORY AND APPLICABILITY - **Double-click** to check all boxes that apply to the proposed project.

nit ory	**Provide all other application or file numbers associated with this site.**	**RIDEM USE ONLY**

Perm Hist	RI CRMC Assent:	US Army Corps of Engineers:	RIDEM Program Name & File Number:	

Stormwater Construction Activity

Select all that apply. [Stormwater submissions must comply with all requirements of the RI Stormwater Design and Installation Standards Manual (RISDISM). Click links below to refer to other applicable Rules.]

There are Freshwater Wetlands on the subject or adjacent property, AND the project proposes:

- ☒ New or increased impervious cover for property other than a single family home; or
- ☐ Disturbance of more than 10,000 sq. ft. of existing impervious cover; or
- ☐ To fill in any amount of floodplain or alter storm flowage to a river, stream or wetland on any lot.

Refer to Freshwater Wetland: *Rules*

The project requires an application to RI CRMC, AND proposes:

- ☐ A residential development of 6 units or more; or
- ☐ A project that results in the creation of 10,000 sq. ft. or more of impervious area.

Refer to Water Quality: *Rules*

The project proposes an infiltration system listed in Section 5.3 of the RISDISM (i.e. infiltration trench, infiltration basin, UIC chamber or drywell) that receives stormwater from:

- ☐ A residential impervious area that is more than 10,000 sq.ft.; or
- ☐ A non-residential roof area greater than 10,000 sq.ft.; or
- ☐ A non-residential (commercial, industrial, institutional...) road or parking area of any size.

Indicate if the treatment system discharges:

- ☐ **Below** the ground (UIC); or
- ☐ **Above** the ground and infiltrates (not UIC), but must be reviewed for compliance with the RISDISM to be protective of groundwater.

Refer to Groundwater Discharge: *Rules*

The project proposes **discharge of stormwater** to waters of the State [including a Separate Storm Sewer System (MS4)], AND :

- ☐ Disturbs less than 1 acre, but the activity is part of a larger common plan resulting in more than 1 acre of disturbance.
- ☐ Disturbs more than 1 acre of property.

Refer to RI Pollutant Discharge Elimination System: *General Permit*

Water Quality Certification (WQC)

Select all project type(s):

- ☒ Discharge that requires a Federal Permit
  - ☐ Federal Energy Regulatory Commission (FERC)
  - ☒ US Army Corps of Engineers (ACOE)
- ☐ Harbor Management Plan
- ☐ Flow Alteration
- ☐ Stormwater Master Plan

Refer to Water Quality: *Rules* *Guidance*

Submission Requirements

Please submit separately bound documents, as required. Additional copies are required when submitting concurrently with a Freshwater Wetlands Application.

1	Site Plan(s)
1	RISDISM Appendix A Checklist and LID Planning Assessment
1	Stormwater Analysis and Drainage Report
1	Soil Erosion and Sediment Control (SESC) Plan
1	Post-Construction Operation and Maintenance (O&M) Plan

Appropriate Fee: New Permit = $400; Permit Modification = $200.

Amt Paid:

Check No:

Date Received:

Updated: July 22, 2019

APPENDIX A: STORMWATER MANAGEMENT PLAN CHECKLIST & LID PLANNING REPORT

(RIDOT Redevelopment Projects Only)

PROJECT NAME:	Bridge Group 44 H Nonquit	RIDEM USE ONLY
PROJECT ID:	2602V	
PROJECT LOCATION *Include a vicinity map/locus map in the site construction plans.*	STREET & HIGHWAY ROUTE NUMBER: Pond Bridge Rd MUNICIPALITY: Town of Tiverton, RI	
BRIEF PROJECT DESCRIPTION	Nonquit Pond Bridge No. 292 carries Pond Bridge Road over Nonquit Pond in the Town of Tiverton, RI. Project is a full replacement with an anticipated detour.	DATE RECEIVED PROJECT FIID

ENGINEER	FIRM:	Pare Corporation
	CONTACT:	David J. Elwell, P.E.
	PHONE:	401-334-4100 Ext. 4117
	EMAIL :	delwell@parecorp.com

STORMWATER MANAGEMENT PLAN ELEMENTS

APPENDIX A: STORMWATER MANAGEMENT CHECKLIST	STORMWATER ANALYSIS AND DRAINAGE REPORT	SOIL EROSION AND SEDIMENT CONTROL PLAN	OPERATIONS AND MAINTENANCE PLAN
PART 1: PROJECT AND SITE INFORMATION	ADDRESSES	ADDRESSES	ADDRESSES
MINIMUM STANDARDS:	MINIMUM STANDARDS:	MINIMUM STANDARDS:	MINIMUM STANDARDS:
6. REDEVELOPMENT			
8. LUHHPL IDENTIFICATION	2. GROUNDWATER RECHARGE	7. POLLUTION PREVENTION	7. POLLUTION PREVENTION
PART 2.	3. WATER QUALITY VOLUME	DURING CONSTRUCTION	AFTER CONSTRUCTION
MINIMUM STANDARD:	9. ILLICIT DISCHARGE DETECTION	10. CONSTRUCTION EROSION	11. OPERATIONS AND
1. LID SITE PLANNING	**AND ELIMINATION**	**AND SEDIMENTATION CONTROL**	**MAINTENANCE**
PART 3.		OCT 19 2023	
SUMMARY OF REMAINING STANDARDS			
PART 4.			
SUBWATERSHED MAPPING			
SITE PLAN DETAILS			

PART 1: PROJECT & SITE INFORMATION

Enter project type:	Reconstruction

STOP *If the project type is new construction, do not continue with this checklist. Complete the Appendix A Checklist of the Rhode Island Stormwater Design & Installation Standards Manual.*

Answer the following questions:

No	Has a pre-application meeting with RIDEM/CRMC been conducted? If yes, when? Enter Here
N/A	Are minutes from the RIDEM or CRMC meeting available? If yes, attach to this checklist.
No	Is RIDEM grant funding involved? If yes, what is the grant? Enter Here
No	Has the RIDOT Office of SW Management (OSM) been consulted? If yes, when? Enter Here
No	Is correspondence with the RIDOT OSM available? If yes, attach documentation to this checklist.

Where does the project discharge (select all that apply)?

X	Surface Water		Groundwater - GAA		Groundwater - GB
	Combined Sewer (CSO)		Groundwater - GA		

PART 1: PROJECT & SITE INFORMATION - CONT'D

If the project discharges to a surface water, complete the following table.

	#1	#2	#3
Waterbody Name	Nonquit Pond	Enter Here	Enter Here
Waterbody ID	RI0007035L-08	Enter Here	Enter Here
Is there a known history of repetitive flooding? If so, peak flow control may be required.	No		
Is the surface water a public beach and/or shellfish grounds?	Yes		

Freshwater Wetlands Jurisdiction

Yes	Has FEMA mapping been reviewed for floodplain and floodway information?
Yes	Does any activity extend within a 100-year floodplain? If yes, provide the following information: Cut (cy): 80 Fill (cy): 40
Yes	Is the floodplain storage capacity impacted by the proposed activity?
No	Any there any restrictions or modifications proposed to floodway?

CRMC Jurisdiction

Yes	Has the CRMC jurisdictional map been reviewed?
Yes	If the project is within CRMC jurisdiction, does it require a CRMC permit?
No	Is the property subject to a Special Area Management Plan (SAMP)?
No	Is sea level rise mitigation designed into this project?

RIDEM Office of Waste Management

No	Is the site on the list of CERCLA and State Sites in RI? If yes, what is the Site ID? Enter Here
No	Has the RIDEM Office of Waste Management been contacted? If yes, attach documentation. If yes, indicate the contact person. Enter Here

Worksheet A: Stormwater Treatment Goal

Date: 12/22/20 **Prepared By:** Hamid A. Akinfolarin

Project ID: 2602V **Location:** Nonquit Pond Bridge **Municipality:** Tiverton, RI

Instructions: Enter data in unshaded boxes.

		Project Information	Stormwater Treatment Information		
Input receiving waterbody information. *1) Steps correlate to those in Section 1.1.2 of the Linear Stormwater Manual.*	A	Step 3.1(b): Enter Waterbody ID (WBID) per the RIDEM GIS Map Room.	RI0007035L-08		
	B	Step 3.1(b): Enter waterbody name per the RIDEM GIS Map Room.	Nonquit Pond		
	C	Step 3.1(c): Is the WBID impaired per the RIDEM 303(d) List of Impaired Waters?	Yes		
	D	Step 3.1(c): Enter stormwater impairments/ pollutants of concern. Enter N/A if none.	Total Phosphorus, Total Organic Carbon		
	E	Step 3.1(d) Is there an SCP for the WBID?	Yes		
Input pre- & post-construction impervious areas. *Note: Correlates to Step 2.1 of Section 1.2.2 of the Linear Stormwater Manual.*	F	Total Pre-Construction[A] Impervious Area Contributing to the Waterbody (ft^2)	9,416		
	G	Total Disturbed[B] Existing Impervious Area Contributing to the Waterbody (ft^2)	9,416		
		└ Total Portion of (G) that comprises Mill & Overlay and/or Reclamation Area (ft^2)	7,790		
	H	Total Post-Construction[A] Impervious Area Contributing to the Waterbody (ft^2)	10,869		
Calculate treatment goal.	I	Post-Construction Net Increase[C] in Pervious Surface Area (ft^2) = (F) - (H)	-1,453	0	0
	J	Post-Construction Impervious Surface Requiring Treatment (ft^2) = (G)*0.5 - (I)	6,161	0	0
	K	Total Stormwater Treatment Goal (ft^3) = (J)*($^1/_{12}$ ft.)	513	0	0

[A] *Independent of project phasing.*

[B] *Includes all disturbed impervious area with the exception of impervious area disturbed during pavement marking, installing traffic induction loops, installing wheelchair ramps, crack sealing, bridge washing, and limited scale maintenance activities. Impervious surface converted to pervious surface is considered disturbed.*

[C] *Negative value represents a loss of pervious surface.*

PART 2: MINIMUM STANDARD 1

Relates to Study & Development of Stormwater Management (WBS 1.14)

Low Impact Development (LID) Assessment

Preservation of Undisturbed Area, Buffers & Floodplains *Relates to Step 3.1 of Study & Development of Stormwater Management*		*If not implemented - explain here:* Enter here.
Yes	Are sensitive resource areas within the project LOD? Refer to the: Environmental Resource Map of the RIDEM Map Room	
Yes	If answering yes to the question above: have resource area boundaries been field verified?	
Yes	If answering yes to the question above: Will all vegetated buffers and coastal and freshwater wetlands be protected during and after construction?	
Locate Development in Less Sensitive Areas and Work with the Natural Landscape, Hydrology & Soils *Relates to Steps 3 & 4 of Study & Development of Stormwater Management*		*If not implemented - explain here:* Enter here. *Although it will be attemped to minmize compaction during construction, due to limited provided area on site it will be unavoidable between staging and storing of materials on site.*
N/A	Have areas with greatest infiltration capacity (e.g., Hydrologic Soil Groups A and B) been prioritized for locating STUs?	
No	Have infiltration measures been identified in areas that have minimal potential for compaction during construction?	
No	Have QPAs/Filter Strips been identified in areas that have minimal potential for being disturbed during construction?	
Minimize Clearing & Grading		*If not implemented - explain here:* Enter here.
Yes	Is site clearing restricted to minimum area needed for laydown areas, development activities, construction access and safety?	
Reduce Impervious Cover *Relates to Step 1 of Study & Development of Stormwater Management*		*If not implemented - explain here:* Impervious cover is being increased with the expansion of the bridge.
No	Were alternatives to reduce impervious cover evaluated during the Develop Alternatives tasks of WBS 1.08.04?	
Disconnect Impervious Area *Relates to Step 1 of Study & Development of Stormwater Management*		*If not implemented - explain here:* Enter here.
Yes	Has runoff from an impervious surface been (1) captured and infiltrated by a pervious surface, which is separated from a drainage system; (2) discharged to a drainage system, but the drainage system does not discharge to a waterbody per Section IV.6(cc) of the Consent Decree; or (3) treated by a Qualified Pervious Area (QPA) per the RI Stormwater Rules.	
Provide Low-Maintenance Vegetation		*If not implemented - explain here:* Enter here.
Yes	Has vegetation been selected from the Vegetation Palettes of Section 2.1.4 of the RIDOT Linear Stormwater Manual?	
Please select one:		
	RIDOT will maintain vegetation.	
X	A third party will maintain vegetation on behalf of RIDOT. Name of third party: Road is maintained by the Town.	
Yes	If a third party will be maintaining the vegetation, has an agreement been executed by RIDOT and the third party?	

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PART 2: MINIMUM STANDARD 1 - CONT'D

Relates to Study & Development of Stormwater Management (WBS 1.14)

Low Impact Development (LID) Assessment - CONT'D

Restore Streams/Wetlands		*If not implemented - explain here:*
N/A	Have opportunities been identified that convert existing closed conveyance infrastructure (e.g., culverted or piped streams) to open channel infrastructure (e.g., swale)?	Enter here.

Complete RIDOT Worksheet A

Relates to RIDOT Step 2 of Study & Development of Stormwater

No	Has more than one Waterbody ID (WBID) been identified within the project LOD?
	If answering yes to the question above: have separate treatment goals been identified for each WBID?

Complete Table 5-3 of this Checklist

	Is Table 5-3 updated with soils data? Relates to Step 3.3 of Section 1.2.2 of the Linear Stormwater Manual.

STOP *After completing Parts 1 & 2 of this checklist, submit the following deliverables to the RIDOT Office of Stormwater Management (OSM) for review: Parts 1 & 2 of this checklist, Worksheets A & B, existing condition drainage plans, watershed maps, and soils data. Relates to Step 5 of Sec. 1.2.1 of the RIDOT Linear SW Manual.*

PART 3: SUMMARY OF REMAINING STANDARDS

Relates to Final Design of Stormwater Management (WBS 2.04)

Minimum Standard 2: Groundwater Discharge

Groundwater recharge is inherently satisfied by the process outlined in Step 4 of Section 1.2.2 of the Linear Stormwater Manual; no additional steps are required with the exception of the following questions:

	Are infiltrating STUs proposed in any CERCLA or contaminated sites?
	If answering yes to the question above: has the area been approved for infiltration by the Office of Waste Management? Refer to the RIDEM Subsurface Contamination Guidance document.

Minimum Standard 3: Water Quality

The water quality standard is inherently satisfied by the process outlined in Step 4 of Section 1.2.2 of the RIDOT Linear Stormwater Manual; no additional steps are required with the exception of the following questions:

	Is an STU from the approved technology list proposed for the project? If yes, please attach the design worksheets from the manufacturer.
	If answering yes to the question above: has RIDOT Office of Stormwater Management been consulted, and does the OSM approve of the proposed STU?
	Have the design worksheets from the manufacturer been used to size and select the STU? If yes, attach worksheets.
	Does the project request a waiver for certain setback requirements? If yes, please explain: Enter here.

Select the techniques used to size the STUs and flow control structures:

	Split Pervious/Impervious method in HydroCAD
	TR-55 or TR-20
	Other: Enter here.

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Minimum Standard 4: Conveyance and Natural Channel Protection

This standard is waived in accordance with Section 3.2.6 of the RISDISM.

Minimum Standard 5: Overbank Flood Protection & Other Potential High Flows

This standard is waived in accordance with Section 3.2.6 of the RISDISM, unless RIDEM and/or RIDOT OSM has identified the discharge locations to have a known history of repetitive flooding.

	Has RIDEM and/or RIDOT OSM identified that the discharge location(s) have a known history of repetitive flooding?
	If answering yes to the question above: coordinate with the regulatory agency and describe any requirements: Enter here.

PART 3: SUMMARY OF REMAINING STANDARDS - CONT'D

Relates to Final Design of Stormwater Management (WBS 2.04)

Minimum Standard 5: Overbank Flood Protection & Other Potential High Flows - CONT'D

The following questions shall be answered despite Minimum Standard 5 being waived:

	Has infrastructure been provided (i.e., flow diversion weirs) to safely convey flow to a new or upgraded STU for the 100-
	Has infrastructure been provided to safely and non-erosively convey overflow from the STU for the 100-year event?
	Are off-site areas that contribute runoff to the project limits included in the pre- and post-development modeling analyses? It is necessary to include these contributions to appropriately size stormwater infrastructure.
	If answering yes to the question above: are the off-site areas modeled as "present condition" for both the pre- and post-development modeling analyses?
	Are the areas outside the LOD (i.e., off-site areas) that contribute runoff to the site shown on the subwatershed maps?
	Does the hydrologic model confirm safe and non-erosive passage of off-site runoff through the site for the 100-year flow?
	Has Table 5-1 of this checklist been updated with pre- and post-construction peak flow rates?

Minimum Standard 7: Pollution Prevention

Refer to Minimum Standards 10 and 11.

Minimum Standard 8: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

Roadways, bridges, sidewalks, parking lots are not LUHPPLs; this standard is automatically waived.

Minimum Standard 9: Illicit Discharges

	Has the site been investigated for illicit discharges?
	Have any illicit discharges been found? If yes, please notify RIDOT OSM.
	Have corrective actions been taken to address illicit discharges?

Minimum Standard 7 & 10: Soil Erosion and Sediment Control

	Has the RIDOT SWPPP template been utilized? Refer to the following link: RIDOT Stormwater Page

If answering no to the question above: include the following elements on the Soil Erosion and Sediment Control Plan (SESC Plan) as part of the Construction Plan Set (select the data that has been included):

	Provide Natural Buffers and Maintain Existing Vegetation;
	Minimize Area of Disturbance;
	Minimize the Disturbance of Steep Slopes;
	Preserve Topsoil;
	Stabilize Soils;
	Protect Storm Drain Inlets;
	Protect Storm Drain Outlets;
	Establish Temporary Controls for the Protection of Post-Construction Stormwater Control Measures;
	Establish Perimeter Controls and Sediment Barriers;
	Divert or Manage Run-On from Up-Gradient Areas;
	Properly Design Constructed Stormwater Conveyance Channels;
	Retain Sediment On-Site;
	Control Temporary Increases in Stormwater Velocity, Volume, and Peak Flows;
	Apply Construction Activity Pollution Prevention Control Measures;
	Install, Inspect, and Maintain Control Measures and Take Corrective Actions.
	Qualified SESC Plan Preparer's Information and Certification;
	Operator's Information and Certification; if not known at the time of application the operator must certify the SESC Plan upon selection and prior to initiating site activities;
	Description of Control Measures (e.g., temporary sediment trapping and conveyance practices); include design calculations and supporting documentation, as required.

Table 5-1 Hydrologic Analysis Summary

Relates to Minimum Standard 5: Overbank Flood Protection & Other Potential High Flows

Runoff Method Applied for 1.2" Water Quality Event:

STU ID	1.2" Peak Flow		1-yr. Peak Flow		10-yr. Peak Flow		100-yr. Peak Flow	
	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)

Table 5-2 Summary of Best Management Practices (i.e., STUs)

Relates to Step 4 of Section 1.2.2 of the RIDOT Linear Stormwater Manual

STU ID	WBID	DP No.	BMP Type	Impervious Area (ft^2)	Pervious Area (ft^2)	Provided Pretreat-ment Vol. (ft^3)	Provided WQV (ft^3)	Treatment Depth (in.) (e.g., 0.5", 1", etc.)

Table 5-3 Summary of Soils to Evaluate STUs

Relates to Step 3.3 of Section 1.2.2 of the RIDOT Linear Stormwater Manual

Enter the following information (as applicable):

Name of DEM-licensed Class IV Soil Evaluator: Enter here.

Name of RI-registered Professional Engineer: Enter here.

Is a geotechnical report attached to this checklist?

STU ID	Test Pit ID*		Depth of Boring/Test Pit (ft.)	Top of Filter Elev. (ft.)	SHGT Elev. (ft.)	Separation Distance (ft.)	Hydrologic Soil Group A, B, C or D	Exfiltration Rate Applied (in./hr.)
	Primary	Secondary						

** Provide supporting soil field test data.*

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Worksheet B: Treatment Provided by STUs

Date: 12/22/20 **Prepared By:** Hamid A. Akinfolarin

Project ID: 2602V **Location:** Nonquit Pond Bridge **Municipality:** Tiverton, RI

Instructions: Enter data in unshaded boxes.

PART 1		**Project Information**	**Stormwater Treatment Information**		
Information from Worksheet A.	A	Waterbody ID (WBID)	RI0007035L-08		
	B	Total Stormwater Treatment Goal (ft^3)	513	0	0
Input STU Treatment Volumes. *Notes: 1) Steps correlate to those in Section 1.2.2 of the Linear Stormwater Manual. 2) Items F & G apply only to waterbodies that are impaired by stormwater.*	C	Step 4.1: Total Volume to Filter Strips (ft^3)	158		
	D	Step 4.2: Total Volume of Stormwater Treated by Upgrading Existing STUs (ft^3)	0		
	E	Step 4.3: Total Volume of Stormwater Treated by Tier 1 STUs Inside the Project Limits (ft^3)	0		
	F	Step 4.4: Total Volume of Stormwater Treated by Tier 2 STUs Inside the Project Limits (ft^3)	0		
	G	Step 4.4: Total Volume of Stormwater Treated by Tier 1 STUs Outside the Project Limits (ft^3)	0		
Calculate Total Treatment Provided.	H	Total Volume of Stormwater Treated (ft^3) = Sum of Items in Step 2	158	0	0
Calculate Treatment Surplus/Deficit.	I	Total Volume[A] of Remaining Stormwater Requiring Treatment (ft^3) = (B) - (H)	355	0	0

[A] *Negative value indicates a surplus of treatment.*

PART 2 (treatment deficit only)

Attach justification to this worksheet for treatment deficit. Utilize the STU Selection Tool as a basis for this justification. This tool is available on the RIDOT Stormwater Page.

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PART 3: SUBWATERSHED MAPPING AND SITE PLAN DETAILS

Relates to Final Design of Stormwater Management (WBS 2.04)

Existing & Proposed Subwatershed Mapping

Include the following elements on the existing and proposed subwatershed plans (select all that have been provided):

- [ ] **Plans:** 24-inch by 36-inch with a usable scale
- [ ] **Drainage area boundaries:** based on delineations; incorporate off-site areas that contribute to the project site (labels shall include area of drainage boundary and curve number)
- [ ] **Streams & drainage swales:** location, elevation data, cross sections, profiles, method of stabilization
- [ ] **Drainage flow paths:** mapped according to Appendix K of the RISDISM; include time of concentration values
- [ ] **Design points:** locations, type (e.g., property boundary, drainage system, etc.)
- [ ] **STUs**: type, location, dimensions, grading, elevation data; STU labels must correspond to other submittals
- [ ] **Borings & test pit information:** boring/test pit locations, soil types, bedrock & SHGT elevations (not only depths)

Site Construction Plans

Include the following elements on the site construction plans (select all that have been provided)

General (Existing & Proposed)

- [ ] **Vicinity Map/Locus Map**
- [ ] **Plans:** at a scale not greater than 1-inch = 40 feet (1"=40') and include a north arrow
- [ ] **Topography:** 1 or 2-foot contours; 10-foot contours accepted for areas outside the LOD
- [ ] **Structures** (e.g., buildings, driveways, sidewalks): location, dimensions
- [ ] **Utilities** (e.g., water, sewer, gas, electric): location, dimensions, materials, easements
- [ ] **Roadways**: cross-sections with edge details such as curbs, sidewalks, edge of pavement, etc.
- [ ] **Predominant vegetation:** type, location, boundaries, protection measures during construction
- [ ] **Limit of disturbance/clearing:** boundary

Resource Protection Areas

- [ ] **Freshwater & coastal wetlands:** type, location, field-verified boundaries
- [ ] **Lakes & ponds:** type, location, field-verified boundaries
- [ ] **Coastal shoreline features:** type, location, field-verified boundaries
- [ ] **Perennial & intermittent streams:** type, location, field-verified boundaries
- [ ] **Areas subject to storm flowage (ASSFs):** location, boundaries
- [ ] **Floodplain & floodway limits:** location, boundary, FEMA zone designation, 100-year elevation (i.e., Base Flood Elevation, or BFE)
- [ ] **Channel modifications** (e.g., bridge crossings or culverts): location, dimensions
- [ ] **Proposed stream or wetland crossings:** locations, cross sections, profiles, and method of stabilization
- [ ] **Required resource area setbacks** (e.g., buffers): type, location

Drainage Infrastructure (Existing & Proposed)

- [ ] **Drainage structures** (e.g., manholes, catch basins): location, size, rim & invert elevations
- [ ] **Conveyance structures** (e.g., grass channels, swales, storm drains): location, dimensions, material, invert elevations, representative cross-sections and profiles, notes and details
- [ ] **STUs**: type, location, dimensions, grading, notes and details; STU labels must correspond to other submittals
- [ ] **STU planting plans:** type, size, species, planting methods, maintenance requirements
- [ ] **Required setbacks** (e.g., infiltration, water supply wells, septic systems): type, location
- [ ] **Outlet control structures** (e.g., embankments, spillways): location, dimensions, elevations, notes and details
- [ ] **Stabilization measures** (e.g., riprap, turf reinforcement matting): type, location, notes and details
- [ ] **Final discharge point** (e.g., wetlands, waterbodies): type, location

Soils

- [ ] **Borings & test pit information:** boring/test pit locations, soil types, SHGT elevations (not only depths)
- [ ] **RIDEM Office of Waste Management approved activities:** as they relate to current/former site use areas for any known contamination and/or remedial clean-up efforts

FOR OFFICIAL USE ONLY

Double Click to Populate Available Project Information (Rows 1-8)

Office of Stormwater Management (OSM) Review Checklist - RIDOT USE ONLY

Project Title:	Enter Here		
FAP #		Area of Disturbance: (circle)	<1 acre
RIDOT PM:			
OSM Reviewer:		Review Type:	
OSM Signoff:		Status:	
WBIDs:	Enter Here, Enter Here, Enter Here	SCP:	
State Road:	Enter Here		

Y/N/NA	Item	Docs.	Description	Stormwater Review Comment	Comment Addressed
		Plans	**Infrastructure Maintenance and Repair**	**Per Consent Decree (CD)**	
	1		Clean and Flush Drainage System (CFP)	per CD VI.D.46	
	2		Repair Vertical Structures	per CD VI.D.47	
	3		Repair Manholes and Catch Basins	per CD VI.D.47	
	4		Properly Identified Limits of Disturbance	Per RIPDES CGP Applicability	
	5		Located Outfalls - Field Verified	per CD VI.D.47a	
		SESC Plan/SWPPP	**Soil Erosion and Sediment / Pollution Control**	**Per MS4 GP and RIPDES CGP**	
	6		CFS (not haybales) or other Perimeter Controls	Per RIPDES CGP J.1.f. and "new" Spec. Section 206 (not approved yet)	
	7		Outfall Protection Stormwater Discharge	Per RIPDES CGP J.1.e.	
	8		Inlet Protection	Per RIPDES CGP J.1.d.	
	9		**Designate Washout Practices (locations or areas where not to washout)**	**Per RIPDES CGP J.2.j.**	
	10		Construction Accesses Provided	Per RIPDES CGP J.2.b.	
	11		Laydown Areas Provided with Cover (as appropriate)	Per RIPDES CGP J.2.g.	
	12		Dewatering Practices Addressed	Per RIPDES CGP J.2.f.	
	13		**Stabilization Plans/Steep Slopes - Erosion Control Mats**	**Per RIPDES CGP J.1.c.**	
	14		Stockpile Containment	Per RIPDES CGP J.2.h.	
	15		Wildflower/Pollinator Seed Mix (as appropriate)	?	
	16		Timelines, Gaps in Schedule Coverage	? Not sure what you mean.	
		Appendix A Checklist	**11 Minimum Stormwater Standards**	**(for more complex projects, a drainage report may be requested by OSM)**	
	17		Appendix A Checklist Overall		
	18		Pavement Reduction		
	19		Disconnection of Stormwater		
	20		Test Pits Completed by 90% Design		
	21	**Worksheet A**	Stormwater Goal is Correct		
	22	**Worksheet B**	Stormwater Proposed is Sufficient		
	23	**MEP Worksheet**	Did Project Perform to MEP?		
	24	**Item List**	**Items and Quantities**		
	25		Erosion Control Maintenance		
	26		Qty for Excavation & Repair of Blocked Outfalls		
	27		Qty for CB & MH Reconstruction - VLF?		
	28		Qty for Construction Accesses		
	29		Qty for CFP		
	30		Qty for Inlet Protection		
	31		Qty - Other		
	32	**Other**	**Other Issues**		
	33		C&M Agreement Required		
	34		Contaminated Soils or Dewatering		
	35		STUs are Accessable and Maintainable		
	36		Any New Mitigation Techniques		
	37		Permitting is Required		
	38		Submittal of Drainage Reports to OSM is Required		
	39		Submittal of Construction Report/As-Builts for STU to OSM is Required	Per EPA Consent Decree	
	40		Submittal of O&M Plan for STU to OSM is Required	Per EPA Consent Decree	
	41		High Risk Issues		
	42		Other Issues		

Updated: July 22, 2019

RIDOT STU History - RIDOT USE ONLY

STU Name	Legacy ID	TIP ID	Waterbody ID	STU Progress	Progress Date	Consultant	STU Type

Updated: July 22, 2019

RIDOT TP Removal (lb/year)	TN Load (lb/year)	RIDOT TN Load (lb/year)	TN Removal (%)	TN Removal (lb/year)

RIDOT TN Removal (lb/year)	TSS Load (lb/year)	RIDOT TSS Load (lb/year)	TSS Removal (%)	TSS Removal (lb/year)

RIDOT TSS Removal (lb/year)	Zinc Load (lb/year)	RIDOT ZN Load (lb/year)	Zinc Removal (%)	Zinc Removal (lb/year)

RIDOT ZN Removal (lb/year)	Effective IC Reduction (acres)	RIDOT Effective IC Reduction (acres)	IC Removal (%)	Runoff Reduction (acft)

Runoff Factor	Flow Factor	TP Factor	TSS Factor	Cost	Cost per Acre IC	Cost per Lb Phosphorus	SCP Priority	Latitude	Longitude	Notes

Version Notes - RIDOT USE ONLY

Date	Updated By	Update
7/22/2019	VHB	-added tab for the OSM review checklist (Review Checklist). Adjusted formatting (i.e., merged cells) on other tabs to allow this tab to auto-populate upfront project information. -added tab for RIDOT STU History (pulls information from the Tables tab in the format matching the STU GIS layer so that the data can be easily loaded from this spreadsheet into GIS). -updated pick list for BMP Type to match the STU GIS layer domain. -added WBID to Table 5-2 (Tables tab).

Eric Silva

From: Martins, Jeffry (DOT) <jeffry.martins@dot.ri.gov>
Sent: Tuesday, January 19, 2021 11:21 AM
To: Eric Silva
Cc: Desimone, Peter (DOT); David Elwell; Keith MacDonald; Sam Lopes
Subject: RE: [EXTERNAL] : RE: Nonquit Pond Bridge - Stormwater Checklist

[EXTERNAL]

Hello Eric,

I have received additional comments from Stormwater.

The Stormwater Checklist is acceptable to NRU. Pare is correct that the goal is under 800CF and therefore, Stormwater Treatment is not required. Smartly, Pare has tried to implement some crediting for filter strips, however, please do not remove any vegetation for the filter strips purely for stormwater. Removal is only allowed here if it is required for construction of the project.
FYI removal of vegetation on this project will require strict revegetation because the area is exposed to the coast. The worst thing would be to remove established vegetation for stormwater and then have it gully and rut into the waterway because of the harsh exposure.
Finally, please remember that any woody vegetation removal must be done during the winter in order to comply with your CE. That includes any clearing for staging or construction activities.

Please let me know if you have any questions.

Regards,
Jeff martins

From: Eric Silva <ESilva@parecorp.com>
Sent: Wednesday, January 13, 2021 3:42 PM
To: Martins, Jeffry (DOT) <jeffry.martins@dot.ri.gov>
Cc: Desimone, Peter (DOT) <peter.desimone@dot.ri.gov>; David Elwell <delwell@parecorp.com>; Keith MacDonald <kmacdonald@parecorp.com>; Sam Lopes <SLopes@parecorp.com>
Subject: [EXTERNAL] : RE: Nonquit Pond Bridge - Stormwater Checklist

Hi Jeff,

Do you have an update on the status of the Stormwater Checklist? We are getting to a point in our design and the permitting process where we need to know if we are moving forward with the filter strips for treatment to prevent delays with the design schedule. We want to avoid making an assumption to complete the design and permits because if that assumption is incorrect we would need to redo parts of the design and permits, which our scope did not account for. If you would prefer, we could make an assumption to complete the design and permits, but Pare would need a supplemental agreement if revisions to the Contract Documents and permits are required based on that assumption. Please let us know how you would like us to proceed, and feel free to reach out if you would like to further discuss our options moving forward.

Thank you,
Eric T. Silva, P.E.
Pare Corporation

Main: (401) 334-4100
Direct: (401) 889-3281
www.parecorp.com [parecorp.com]

From: Eric Silva
Sent: Wednesday, December 23, 2020 4:50 PM
To: Martins, Jeffry (DOT) <jeffry.martins@dot.ri.gov>
Cc: Desimone, Peter (DOT) <peter.desimone@dot.ri.gov>; David Elwell <delwell@parecorp.com>; Keith MacDonald <kmacdonald@parecorp.com>; Sam Lopes <slopes@parecorp.com>; Bobby Sykes <bsykes@parecorp.com>; Hamid A. Akinfolarin <HAkinfolarin@parecorp.com>
Subject: Nonquit Pond Bridge - Stormwater Checklist

Good afternoon Jeff,

Attached is the Stormwater Application for Nonquit Pond Bridge. We are proposing two filter strips to the northwest and northeast of the bridge. While there is a still a deficit for treating the total impervious area, we are within the threshold hold that RIDEM requires. However, these areas do present ROW, access, and possible conservation land impacts that we would recommend be discussed with the Town of Tiverton, the City of Newport, and the RIDOT CRU.

The proposed treatment areas would require that parts of the land that Newport owns around the pond and dam, including a gravel parking lot. It is unclear if this parking lot was created by the Town for public use to access the pond for recreation, access for Newport to the dam, or a combination of these. The treatment areas can not be parked or driven on and would likely need a permanent easement for its construction and maintenance. Typically a Class I survey is required for permanent easements, but our scope included a Class III survey, so additional survey would be likely be required.

The treatment areas also appear to interfere with local conservation lands, as shown on the attached aerial map delineating the parcels around the bridge. We recommend coordination with the CRU to determine if there will be further permitting impacts, such as 4f, due to the treatment areas.

There are areas to the south that we have looked into but there would still be similar issues with ROW, access, and conservation lands, and would provide less treatment due to the proximity of wetlands and saltmarsh.

If you would like to discuss this further please let me know. I am unavailable tomorrow but will be available next week with the exception of Friday. To avoid impacts to the schedule, we hope the required coordination can be completed relatively quickly and Pare is ready to assist in that coordination, either directly or in support.

Thank you and Happy Holidays,
Eric T. Silva, P.E.
Project Engineer
Transportation Division

Pare Corporation
Main: (401) 334-4100
Direct: (401) 889-3281
www.parecorp.com [parecorp.com]

Rhode Island Department of Transportation

REPLACEMENT OF NONQUIT POND BRIDGE NO.292

SECTION 8

RIDOT SMALL SITE STORMWATER POLLUTION PREVENTION PLAN

Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

RIDOT Small-Site SWPPP TEMPLATE Instructions

*For all projects with less than 1.0 acres of disturbance, a **Storm Water Pollution Prevention Plan** (SWPPP) is required to be developed as part of compliance with RIDOT's Stormwater Management Program Plan.*

This document is being provided as an aid in the preparation of a small-site SWPPP. It is a comprehensive list of issues a SWPPP preparer must consider during the development of the document. The items in the template are derived from the General Permit of the Rhode Island Pollutant Discharge Elimination System Storm Water Discharge Associated with Construction Activity (General Permit), the RIDEM RI Model SWPPP Template, and the Environmental Protection Agency's model SWPPP template.

Instructions for SWPPP Preparers:

When converting this model SWPPP into your site-specific SWPPP, please keep in mind the following:

1) Items in black should remain in the final site specific SWPPP and do not need to be modified.
2) Items highlighted in gray indicate where information must be inserted. Click on the highlighted text and type response – the gray highlighting will be over-written.
3) *Items in blue-italics are included to provide guidance to you, the SWPPP preparer, during the development of the site specific SWPPP, these items may be deleted in the final site specific SWPPP document.*
4) The control measures in Section 2 and Section 3 are meant to be 'checked', if they are relevant to the specific construction project. *If an item is not relevant, the item may remain unchecked, but an explanation should be provided why that item is not applicable.*
5) The RIDOT Small Site SWPPP Inspection Report, Inspection Report Instructions, and Amendment Log should be modified as necessary and included with the SWPPP as attachments.

If there are any questions, please contact the RIDOT Office of Stormwater Management at 401-734-4892.

SMALL-SITE
Stormwater Pollution Prevention Plan

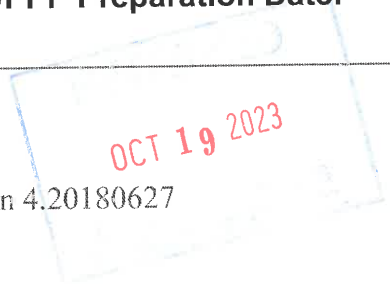
For:

Replacement of Nonquit Bridge No. 292

Pond Bridge Road from 1000' W of Main Rd (Rte. 77) to 600' W of Main Rd (Rte. 77)

Tiverton, Rhode Island 02878

Owner:	**RI DEPARTMENT OF TRANSPORTATION** Alisa Diaz Richardson, P.E. 2 Capitol Hill Providence, RI 02903 401-479-1327
Operator: *TO BE DETERMINED UPON CONTRACT AWARD*	Company Name Name Address City, State, Zip Code Telephone Number
Estimated Project Dates:	Start Date: January 2022 Completion Date: December 2022
SWPPP Prepared By:	Pare Corporation 8 Blackstone Valley Place Lincoln, Rhode Island 02865 **(401)-334-4100**
SWPPP Preparation Date:	5/21/2021



OWNER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Owner Signature: _____ Date Click or tap to enter a date.

Owner Name: Alisa Diaz Richardson, P.E.

Owner Title: Managing Engineer Environmental Division

Company Name: Rhode Island Department of Transportation

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OPERATOR CERTIFICATION

Upon contract award, the OPERATOR must sign this certification statement before construction may begin.

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Operator Signature: Date Click or tap to enter a date.

Contractor Representative: Name

Contractor Title: Title

Contractor Company Name: Company

Table of Contents

This Table of Contents is structured to be automatically populated by Microsoft Word. Upon completion of this template, "right-click" anywhere in the Table of Contents, select "Update Field", and then "Update entire table". Page numbers will automatically be synced with the changed document.

INTRODUCTION

This Small-Site Storm Water Pollution Prevention Plan (SWPPP) has been prepared for the State of Rhode Island Department of Transportation (RIDOT) for a construction project that has less than one (1) acre of soil disturbance. This document provides general guidance for the installation and maintenance of erosion and sediment controls on small projects.

The purpose of erosion and sedimentation best management practices (BMPs) is to prevent pollutants from leaving the construction site and entering waterways or environmentally sensitive areas during and after construction. This SWPPP has been prepared prior to the initiation of construction activities to address anticipated worksite conditions. The best management practices (BMPs) depicted on the site plan and described in this narrative should be considered the minimum measures required to control erosion, sedimentation, and stormwater runoff at the site. Since construction is a dynamic process with changing site conditions, it is the operator's responsibility to manage the site during the construction phases so as to prevent pollutants from leaving the site. This may require the operator to revise and amend the SWPPP during construction to address varying site and/or weather conditions, such as by adding or realigning erosion or sediment controls.

It is the responsibility of the RIDOT Resident Engineer to maintain the SWPPP, including all attachments, amendments, and inspection records, at the project field office and to make all records available for inspection by RIDEM during construction.

The RIDOT Resident Engineer and designated Inspector are required to review the SWPPP and sign the Party Certification pages (Section 8). The prime contractor and all subcontractors involved in earthwork or exterior construction activities are also required to review the SWPPP and sign the certification pages before construction begins.

Any questions regarding the SWPPP, BMPs, inspection requirements, or any other facet of this document may be addressed to the RIDOT Office of Stormwater Management at 401-734-4892.

Please note: Even if practices are correctly installed on a site according to the approved plan, the site is only in compliance when erosion and sedimentation are effectively controlled throughout the entire site.

SECTION 1: SITE DESCRIPTION

1.1 Project/Site Information

This project for the Rehabilitation of Nonquit Bridge No. 292, Pond Bridge Road over Nonquit Pond, in the Town of Tiverton, Newport County, Rhode Island. The project is located within the Pond Bridge Road Right-of-Way which crosses over Almy Creek immediately downstream of Nonquit Pond Dam. The roadway project limits stretch from approximately 1000' W of Main Rd (Rte. 77) to 600' W of Main Rd (Rte. 77) and is approximately 0.09 miles in length.

1.2 Nature and Sequence of Construction Activity

The work associated with the Replacement of Nonquit Pond Bridge No. 292 generally consists of, but is not limited to installing a new bridge, including but not limited to concrete abutments and pile caps, steel micropiles, approach slabs, rehabilitation of existing reinforced concrete abutments and wingwalls, elastomeric bearings, prestressed concrete NEXT D beams, an asphaltic wearing surface, granite curb, and relocation of existing utilities. The work will be conducted in a single phase with the bridge closed to traffic during construction. A detour will be posted when the bridge is closed to traffic.

Roadway work associated with the project generally consists of, but is not limited to: a) full depth reconstruction of the bridge approaches and roadway within the project limits, b) micro-milling and overlay, c) removal, resetting and installation of new curbing at the specified locations within the project limits, d) installation of MASH compliant approach guardrail, and e) replacement of signs and new pavement markings.

Overhead utilities and a water main are present at Bridge No. 292. The overhead utilities will be temporarily relocated during construction, and relocated permanently after construction. The water main is located south of the bridge and will remain in place. A currently unknown utility is attached to the north fascia of the bridge, which will be temporarily relocated during construction.

The project wide installation of erosion controls and maintenance and protection of traffic will be required during the construction period along with all other incidentals complete-in-place and accepted by the Resident Engineer.

Estimated Project Start Date:	January 2022
Estimated Project Completion Date:	December 2022
Estimated Number of Months:	12

1.3 Construction Site Estimates

The following are estimates of the construction site:

Total Project Area	0.61 acres
Construction Site Area to be disturbed	0.55 acres
Percentage impervious area before construction	35 %
Percentage impervious area after construction	41 %

1.4 *Potential Discharges*

Environmentally Sensitive Areas	Construction Site Discharges to: (Yes / No)	List discharge points & indicate how determination was made
Waters of the State	Yes	Stormwater from roadway discharges into the Nonquit Pond and Almy Creek via overland flow. Site survey
Wetlands (Coastal or Upland)	Yes	Freshwater Scrub-Shrub Swamp to the northwest and Shrub Wetland northeast edge closest to the roadway. Coastal Wetlands to the southeast and southwest. Field investigation
Separate Storm Sewer System	No	Under existing conditions, the roadway has no closed drainage system and sheet flow directs to the low point in the roadway outside of the bridge limits, then flows to either side of the roadway and into roadside drainage trenches or adjacent vegetated road shoulders. Site mapping
303(d) Impaired Waters	Yes	Nonquit Pond and Almy Creek (Sakonnet River). RIDEM Mapping
TMDL Waters	Yes	Nonquit Pond (Total Phosphorus and Total Organic Carbon TMDL scheduled for 2020). RIDEM Mapping, State of Rhode Island 2018-2020 Impaired Waters Report
Special Resource Protection Waters (SRPWs)	Yes	Nonquit Pond: Ecological Habitat, Drinking Water Supply. Almy Creek (Sakonnet River): Recreation, Ecological Habitat, Federal Park, Critical Habitat (Rare and Endangered Species) RIDEM Mapping
Cold Water Fisheries	No	RIDEM Mapping
Natural Heritage Areas	No	Bridge No. 292 is located outside a Natural Heritage Area. RIDEM Mapping

Historic/Cultural Areas	Yes	Nonquit Pond Bridge (Historic Eligible). Historic consultant
Permanent Stormwater Structures (swales, outfalls, treatment units, etc.)	No	Existing swale to be relocated to accommodate roadway widening.

1.5 Allowable Non-Storm Water Discharges

RIPDES Construction General Permit – IV.E.1.g
Discharges not comprised of stormwater are allowed under the RIPDES Construction General Permit but are limited to the following: discharges which result from the washdown of vehicles where no detergents are used; external building washdown where no detergents are used; the use of water to control dust; firefighting activities; fire hydrant flushings; natural springs; uncontaminated groundwater; lawn watering; potable water sources including waterline flushings; irrigation drainage; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents are not used; and foundation or footing drains where flows are not contaminated with process materials such as solvents, or contaminated by contact with soils where spills or leaks of toxic or hazardous materials has occurred. If any of these discharges may reasonably be expected to be present and to be mixed with stormwater discharges, they must be specifically listed here.

Are there allowable non-stormwater discharges on or near the project area?

☒ Yes ☐ No

If yes, list the sources of allowable non-Stormwater discharge (be sure to include all dewatering activity discharges). If applicable, control measures must be documented in Section 2.12 &/or Section 3.4.

List of allowable non-stormwater discharges:

- Water for Dust Control

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If any existing or proposed discharges consist of contaminated groundwater, such discharges are not authorized under the RIPDES Construction General Permit. These discharges must be permitted separately by seeking coverage to treat and discharge under a separate RIPDES individual permit or under the RIPDES Remediation General Permit. Contact the RIDOT Natural Resources Unit at 401-222-2023 for application requirements and additional information.

Are there any known or contaminated discharges, including dewatering operations, on or near the project area?

☐ Yes ☒ No

If yes, list the discharges and the RIPDES individual permit number(s) or RIPDES Remediation General Permit Authorization number(s) associated with these discharges.

- RIPDES individual permit number:
- RIPDES Remediation General Permit Authorization number:

1.6 *Potential Sources of Pollution*

Anticipated on this Project (Y/N)	Operation/ Location	Stormwater Pollutants
Y	Clearing, grading, excavating, and unstabilized areas	Sediment; Trash/Debris
Y	Construction Entrance	Sediment
Y	Soil Stockpiles	Sediment
Y	Paving operations	Sediment; Trash/Debris
Y	Concrete washout and waste	Heavy metals; pH; Trash/Debris
Y	Structure construction/ painting/ cleaning	Nutrients; pH; Trash/Debris; Toxic chemicals
Y	Demolition and debris disposal	Sediment; Trash/Debris
Y	Dewatering operations	Sediment; Nutrients
Y	Drilling and blasting operations	Sediment; pH; Trash/Debris
Y	Material delivery and storage	Sediment; Nutrients; Heavy metals; pH; Pesticides/Herbicides; Oil/Grease; Trash/Debris; Toxic chemicals
Y	Material use during building process	Nutrients; heavy metals; pH; pesticides/herbicides; oil/grease; trash/debris; toxic chemicals
Y	Solid waste/ trash/ debris	trash/debris; toxic chemicals
N	Hazardous waste	heavy metals; pH; pesticides/herbicides; oil/grease; toxic chemicals
N	Contaminated spills	Nutrients; heavy metals; pH; pesticides/herbicides; oil/grease; toxic chemicals
N	Sanitary/septic waste	Nutrients; pH; Bacteria/Viruses; toxic chemicals
Y	Vehicle/equipment fueling and maintenance	Oil/Grease; Toxic chemicals; fuel
Y	Vehicle/equipment use and storage	Oil/Grease; Toxic chemicals
Y	Landscaping operations	Sediment; Nutrients; Trash/Debris
N	Off-site LUHPPL run-on	Industrial toxins; oil/grease; heavy metals; fuel; salt; hazardous materials
N	Other:	

1.7 Site Plans

TITLE & DATE OF PLAN SET(S): Nonquit Pond Bridge No. 292, 90% - 06/04/2021

- ☒ Total area of development
- ☒ Total area of soil disturbance
- ☒ Areas that will not be disturbed
- ☒ The location of all erosion and sediment controls
- ☒ Locations of storm drain inlets and outfalls
- ☒The location and name of the receiving waters or separate storm sewer system and the ultimate receiving waters
- ☒Location and name of all waters of the State, including wetlands
- ☒Location of environmentally sensitive features/areas to be protected (Section 1.4)
- ☒ Constraint locations of material storage areas, equipment storage areas, concrete washouts, dumpsters, stockpiles, fueling locations etc. (i.e. locations where these activities will not occur)

Notes:

SECTION 2: EROSION AND SEDIMENTATION CONTROLS

What is a BMP?

Erosion and Sedimentation controls are Best Management Practice (BMP) devices, practices, or methods for preventing storm water pollutants from leaving the construction site and reaching environmentally sensitive areas. The most common BMPs are silt fence, hay bales, and filter socks, but a BMP can also be a policy or procedure like construction sequencing and street sweeping. The objectives of erosion and sediment controls are to minimize the potential for erosion and sedimentation during construction activities.

If BMPs are not depicted on the approved plan set, but erosion or sedimentation is occurring, appropriate BMPs must be installed as directed by the RIDOT Resident Engineer.

☒ *2.1 Minimize Disturbed Area and Protect Natural Features*

As far as is practicable, existing vegetation will be protected and left in place, in accordance with the clearing limits shown on the approved Plans. Prior to any land disturbance activities commencing on the site, the Contractor will physically mark limits of disturbance (LOD) on the site and any areas to be protected within the site, so that workers can see the areas to be protected. Topsoil will be preserved where possible, in accordance with stock pile management specifications

☒ 2.2 Phase Construction Activity

At a minimum, construction sequencing and timing of construction activities will include:

1. Before any earthwork begins, erosion and sediment controls will be installed as depicted on the Approved Plans, and in accordance with all applicable sections of the RIDOT Standard Specifications. Upon acceptable completion of site preparation and installation of erosion and sediment controls, site construction activities may commence.

2. While earthwork is being done, routine inspection and maintenance and/or modification of erosion and sediment controls will be performed.

3. Final stabilization of any disturbed areas after earthwork has been completed.

☒ 2.3 Control Stormwater Flowing Onto & Through Project

Structural BMPs will be used to divert flows from exposed soils, retain or detain flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.

BMPs will be installed as depicted on the approved plan set and in accordance with applicable RIDOT Standard Specifications.

Control measures that may be used, upon approval, include hay bales/silt fencing, compost filter socks, fiber rolls, gravel bag berms, slope drains, check dams, and riprap.

☒ 2.4 Stabilizing Soils

Phased Clearing & Grubbing:

Only areas that can be reasonably expected to have active construction work being performed within 21-days of disturbance will be cleared/grubbed at any one time. It is NOT acceptable to clear and grub the entire construction site if disturbed portions will not be active within the 21-day time-frame.

Clearing/Grubbing will not take place during a rain event if erosion is likely to occur; nor will it occur if a rain event is forecasted and appropriate erosion controls cannot be installed prior to the storm and in accordance with section 201, 206 through 211 of the RIDOT standard specifications.

No undisturbed areas will be cleared of existing vegetation after October 15th of any calendar year or during any period of full or limited winter shutdown. All disturbed soils exposed prior to October 15 of any calendar year will be seeded or protected by that date. Any such areas that do not have adequate vegetative stabilization, as determined by the resident engineer or environmental inspector, by November 15 of any calendar year, must be stabilized by erosion control matting or mulch, in accordance with specifications contained within the RI Soil Erosion and Sediment Control Handbook (as amended). If work continues within any of these areas during the period from October 15 through April 15, care must be taken to ensure that only the area required for that Day's work is exposed, and all erodible soil must be restabilized within 5 working days.

As per RIDOT Standard Specification 201.03.1 – Clearing and Grubbing: After clearing, and by the end of each day's grubbing operation, the Contractor will install erosion control measures that are indicated on the Plans or as directed by the Engineer. Such erosion control measures will be installed in strict accordance with the requirements of **SECTIONS 206, 207,** and **208** of these Specifications, **PERIMETER EROSION CONTROLS, CHECK DAMS**, and **TEMPORARY DEWATERING BASINS**, respectively.

Initiating Stabilization Practices

Upon completion and acceptance of site preparation and initial installation of erosion and sediment controls the operator will initiate appropriate stabilization practices during all phases of construction on all disturbed areas as soon as possible but not more than fourteen (14) days after the construction activity in that area has temporarily or permanently ceased, unless the activity is to resume within twenty-one (21) days.

Any disturbed areas that will not have active construction activity occurring within twenty-one (21) days must be stabilized using the BMPs depicted on the approved plan set and in accordance with RIDOT Standard Specifications Section L.02 – Seeding, Section L.05 - Seed Stabilizers and Section M.18 – Landscape Materials (M.18.08 – Mulch and M.18.09 – Seed Stabilizer Materials).

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Maintaining Stabilization

Controls and methods that may be used to maintain soil stabilization include the placement of geotextiles, erosion control blankets/mats, and temporary seeding. If the stabilization BMPs fail and erosion occurs, then alternative control measures &/or methods may need to be substituted.

☒ 2.5 Protect Slopes.

Structural BMPs will be used to temporarily conduct concentrated stormwater runoff safely down the face of a cut or fill slope without causing erosion on or below the slope.

BMPs will be installed as depicted on the approved plan set and in accordance with applicable RIDOT Standard Specifications.

Control measures that may be used, upon approval, include temporary slope drains, compost filter socks, fiber rolls, gravel bag berms, erosion control mats/blankets, and temporary vegetative cover.

☐ 2.6 Protect Storm Drain Inlets

Structural BMPs will be used to protect ALL stormwater inlets &/or catch basins that may receive sediment-laden stormwater flow.

BMPs will be installed as depicted on the approved plan set and in accordance with applicable RIDOT Standard Specifications.

Control measures that may be used, upon approval, include catch basin inserts, compost filter socks, fiber rolls, and gravel bag berms.

☒ 2.7 Protect Storm Drain Outfalls

Structural BMPs will be used to protect ALL stormwater outfalls that may discharge sediment-laden stormwater flow.

BMPs will be installed as depicted on the approved plan set and in accordance with applicable RIDOT Standard Specifications.

Control measures that may be used, upon approval, include compost filter socks, fiber rolls, gravel bag berms, and rip-rap.

☒ 2.8 Establish Perimeter Controls and Sediment Barriers

Structural BMPs will be used to establish perimeter barriers that will stop sediment-laden stormwater flow from leaving the construction site.

BMPs will be installed as depicted on the approved plan set and in accordance with applicable RIDOT Standard Specifications.

Control measures that may be used, upon approval, include baled hay &/or silt fence, compost filter socks, fiber rolls, and gravel bag berms.

☒ *2.9 Retain Sediment On-Site and Control Dewatering Practices*

Sediment traps, basins, and barriers are used to retain sediment on the site to protect streams, lakes, drainage systems, and adjacent property. These devices are used at the outlets of channels, diversions, and other runoff conveyance measures to allow sediment-filled water to pool and sediment to settle. These measures are often used as the last line of defense to stop sediment from leaving the site.

The dewatering of non-contaminated non-stormwater (i.e. groundwater) or accumulated precipitation

discharge of sediment-laden water into storm drains, streams, lakes or wetlands prior to sediment removal is prohibited.

The dewatering of contaminated non-stormwater cannot be discharged without prior notice and approval from either the Rhode Island Department of Environmental Management (RIDEM) or the Coastal Resources Management Council (CRMC). Should dewatering of contaminated water be occurring on this construction project, appropriate permits will have been obtained, and will be included as part of the Contract Documents.

- Compost Filter Socks will be installed throughout the project limits of Nonquit Pond Bridge No. 292
- Compost Filter Socks will be installed at all drainage outfalls for cleaning and flushing of pipe operations
- Sandbags lined with filter fabric will be installed as Control of Water measures within the channel for repairs to the abutment.

☒ 2.10 Monitoring Weather Conditions

Care will be taken to avoid having unstabilized areas exposed during precipitation events. Weather forecasts will be routinely checked, and in the case of an expected precipitation event of over 0.25-inches over a 24-hour period, all BMPs will be inspected, and maintained as necessary, prior to the weather event.

In the case of an extreme weather forecast (greater than one-inch of rain over a 24-hour period), additional erosion/sediment controls will be installed where appropriate.

- Tiverton, RI (KRITIVER23) https://www.wunderground.com/weather/us/ri/tiverton/KRITIVER23

SECTION 3: GOOD HOUSEKEEPING BMPS

The purpose of good housekeeping is to prevent daily construction operations and activities from causing pollution.

☒ 3.1 Off-site Tracking of Sediments

Any construction site access point must employ the BMPs depicted on the approved plan set and in accordance with RIDOT Standard Specifications Section 211 – Construction Accesses, or any method approved of by the RIDOT Resident Engineer and the RIDOT Office of Stormwater Management. Construction accesses will be used in conjunction with the stabilization of construction roads to reduce the amount of mud picked up by construction vehicles. All RI STD 9.9.0 Construction Access roads will be constructed prior to any roadway accepting construction traffic

If a Construction Access BMP is not designated on the plans, it is still the responsibility of the Operator to ensure that no sediment is tracked off the construction site by any vehicles leaving the site. Additional control measures that may be used, upon approval, include a vehicle washing station and/or daily street sweeping.

The Operator will remain responsible for the clean-up of any mud or dirt that is tracked onto streets or paved areas, even with the installation of gravel construction entrances. Inspect access for excessive sediment build up. Remove sediment and rebuild the exit as necessary to retain effectiveness and prevent off-site tracking. Additional street cleaning may be required if unable to retain sediment on site.

☒ 3.2 Waste Disposal

Building materials and other construction site wastes will be properly managed and disposed of to prevent the discharge of solid materials from wind and precipitation. All types of waste generated at the site will be disposed of in a manner consistent with State Law and/or regulations.

- The waste collection area will not be within any of the constraint areas located on the "Constraint Map" (Section 1.7) and will be approved by the RIDOT Resident Engineer.
- All waste containers will be covered to avoid contact with wind and precipitation.
- Waste collection will be scheduled frequently enough to prevent containers from overfilling.
- All construction site wastes will be collected, removed, and disposed of in accordance with applicable regulatory requirements and only at authorized disposal sites.
- Equipment and containers will be checked for leaks, corrosion, support or foundation failure, or other signs of deterioration. Those that are found to be defective will be immediately repaired or replaced.

☒ 3.3 Spill Prevention and Control Plan

Spills and leaks will be avoided through frequent inspection of equipment and material storage areas. Heavy equipment and other vehicles will be routinely inspected for leaks and repaired as necessary. Material storage areas will be routinely inspected for leaky containers, open containers, or improper storage techniques that may lead to spills or leaks. Appropriate cleanup procedures and supplies will be available on-site.

Spills will be cleaned up immediately and following proper response procedures and in accordance with any applicable regulatory requirements. At no time will spills be cleaned and flushed down storm drains or in to any environmentally sensitive area (i.e. stream, pond, wetland).

Equipment/vehicle fueling and repair/maintenance operations or hazardous material storage will not take place within any of the constraint areas located on the "Constraint Map" (Section 1.7) and will be approved by the RIDOT Resident Engineer.

☒ 3.4 Control of Allowable Non-Storm Water Discharges

Non-storm water discharges will be controlled to reduce the likelihood of contamination. Allowable discharges will be kept separate from stormwater flow with BMPs.

For contaminated non-stormwater discharge(s), the requirements and regulations of the associated RIPDES individual permit or RIPDES Remediation General Permit will be adhered to at all times.

☒ 3.5 Establish Proper Building Material Staging Areas

Stock piles will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.7) and will be approved by the RIDOT Resident Engineer. They will have side slopes no greater than 30% and stockpiles of erodible material will be seeded and ringed with RI STD 9.1.0 to stabilize (or RIDOT approved equivalent: berms, dikes, fiber rolls, compost socks, sandbag, gravel bags).

If soil stockpiles are not stabilized with vegetation, then they will be securely covered at the end of each workday.

All chemicals and/or hazardous waste material must be stored properly and legally in covered areas, with containment systems constructed in or around the storage areas. Areas must be designated for materials delivery and storage. Designated areas will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Resident Engineer.

☒ 3.6 Designate Washout Areas

Concrete mixer trucks and chutes will be washed in a designated area or concrete wastes will be properly disposed of off-site. Washout areas for concrete, paint or any other material will not be within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Resident Engineer.

Temporary concrete washout areas must be constructed and maintained to contain all water and concrete waste generated by washout operations. A sign should be placed at the washout site to inform concrete equipment operators of the facility location. Facilities must be cleaned or replaced when they reach 75% capacity.

At no time will any material (concrete, paint, chemicals) be washed into storm drains, open ditches, streets, streams, wetlands, or any environmentally sensitive area. The site operator must ensure that construction waste is properly and legally disposed of, to avoid exposure to precipitation, at the end of each working day. Designated areas will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Resident Engineer.

☒ 3.7 Establish proper equipment/vehicle fueling & maintenance practices

Vehicle fueling, maintenance and/or washing will occur off-site, or in designated areas. Designated areas will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.7) and will be approved by the RIDOT Resident Engineer.

Areas will be clearly designated, and berms, sandbags, or other barriers will be used around the perimeter of the maintenance area to prevent storm water contamination.

Construction vehicles will be inspected frequently for leaks. Repairs will take place immediately. Disposal of all used oil, antifreeze, solvents and other automotive-related chemicals will be according to applicable regulations; at no time will any material be washed down the storm drain or in to any environmentally sensitive area.

☒ 3.8 Dust Control

Dust control procedures and practices will be used to suppress dust on a construction site during the construction process, as applicable. Precipitation, temperature, humidity, wind velocity and direction will determine amount and frequency of applications. However, the best method of controlling dust is to prevent dust production. This can best be accomplished by limiting the amount of bare soil exposed at one time. RIDOT Standard Specifications Section 907 – Dust Control – will be followed.

Dust Control methods may include watering, surface roughening, wind barriers, walls, and covers.

☒ 3.9 Sweeping

Sweeping of streets, roads, highways, and parking lots that have accumulated significant amounts of pollutants (construction site sediment, trash, debris) will be done as necessary, or as directed by the RIDOT Resident Engineer. When construction exits are not keeping construction site sediment from the roadway, sweeping will be done daily. Disposal of collected sweeping material will follow RIDOT Standard Specifications Section 931 – Cleaning and Sweeping Pavement.

SECTION 4: POST-CONSTRUCTION BMPs

Post-Construction Best Management Practices are BMPs that are installed during the Construction Phase of a project to manage storm water flow after the construction is completed.

Measures must be used during the construction project to protect permanent or long term BMPs as they are installed so that they will function properly when they are brought online at the end of the construction phase.

Such long-term BMPs may include: infiltration basins, open vegetated swales and natural depressions, vegetated buffer strips, and detention/ retention structures. Controls may also be needed to prevent or minimize erosion at outfall locations or along the length of vegetated channels to reduce velocity flow from the structure to the receiving waters.

Control measures that may need to be implemented during the construction phase typically include measures to ensure proper installation and/or long term functioning of the long-term BMPs. Examples include: ensuring proper material staging areas and equipment routing to avoid compaction of soil in areas meant for permanent BMPs, and final cleaning of structural BMPs before construction finalization.

4.1 Post-Construction BMPs

Location	Post-Construction BMP	Protective Measures
N/A	Maximum Extent Practicable	N/A

SECTION 5: MAINTENANCE and INSPECTIONS

RIPDES Construction General Permit – Section IV.E.2.d

5.1 Maintenance

Maintenance procedures for erosion and sedimentation controls and stormwater management structures/facilities are described on the approved plan set and in Section 212 of the RHODE ISLAND DEPARTMENT OF TRANSPORTATION Standard Specifications for Road and Bridge Construction 2004 EDITION (and Amendments).

The Contractor will maintain erosion and pollution controls to the satisfaction of the Engineer. Erosion and pollution controls must be able to prevent, under normal weather conditions, both the movement of soil materials and the intrusion of sediment-laden discharges into environmentally sensitive areas.

Construction will not commence or continue until all specified erosion and pollution controls are in place, properly installed and accepted by the Engineer.

Erosion and pollution controls will be cleaned when sediment deposits reach the heights indicated in the table provided in Section 212.03.1 of the RIDOT Standard Specifications, after a rainstorm as necessary; and/or when directed by the RIDOT Resident Engineer.

Erosion control structures will remain in place until all disturbed earth has been securely stabilized and accepted by RIDOT. Before final removal, all accumulated sediment on the upstream side will be removed and legally disposed of. After removal of structures, disturbed areas will be regraded and stabilized as necessary.

BMPs will be maintained in effective operating condition by appropriate means. Upon identification of BMPs that are not operating effectively, maintenance and/or appropriate means will be performed as soon as practicable.

Timely maintenance of the control measures identified in this SWPPP will be ensured by weekly and post-storm event site inspections. These site inspections are a condition and requirement of the RIDOT Stormwater Management Program Plan.

Please Note: The contractor is required to have a full-time, on-site designated contact person responsible for working with the RIDOT Resident Engineer and the RIDOT designated Environmental Compliance Manager (EMC) to resolve SWPPP-related issues.

5.2 Inspections

Minimum Monitoring and Reporting Requirements

The construction site must be inspected at least once every seven (7) calendar days and within twenty-four (24) hours after any storm event which generates at least 0.25-inches of precipitation per twenty-four (24) hour period and/or after a significant amount of runoff or snowmelt. An appropriate rain gauge (as may be found on www.wunderground.com or www.nws.noaa.gov (or similar sites)) must be identified and utilized for the determination of the storm events.

General Notes

- The RIDOT Designated Inspector will prepare a separate inspection report for each inspection.
- The Inspection Reference Number will be a combination of the Construction Contract Number - consecutively numbered inspections.
  ex. Inspection reference number for the 4th inspection of a project would be:
  2011-AA-BBB-4
- Each report will be signed and dated by the Inspector and forwarded to the Engineer within 24 hours of the inspection.
- Each report will be signed and dated by the Engineer and forwarded to the Contractor's designated representative.
- Each report will be signed and dated by the Contractor upon receipt.
- If Corrective Actions are required, the Contractor will initiate appropriate measures within 24 hours of receiving of the inspection report.
- It is the responsibility of the RIDOT Resident Engineer to maintain a copy of the SWPPP, copies of all completed inspection reports, and amendments as part of the SWPPP documentation at the project field office during construction.

ATTACHMENT A: Inspection Report Instructions and Template

5.3 Corrective Actions

If, in the opinion of the Resident Engineer, corrective action is required, the Resident Engineer will note it on the inspection report and will notify and direct the Contractor to take corrective action and make all necessary repairs whenever maintenance of the erosion and pollution controls is required.

In accordance with Section 212 of the RIDOT Standard Specifications, the Contractor will commence with the requisite cleaning and maintenance measures no later than the next consecutive calendar day after receiving such a directive from the Engineer, and will aggressively and expeditiously perform such cleaning and maintenance work until the original problem is remedied to the complete satisfaction of the Engineer.

If the Engineer decides on any given day that those erosion and pollution controls specified in the Contract are not in place or have not been adequately maintained as specified in this Section, the daily charge set forth in Special Provision Code 212.1000 will be deducted from monies due the Contractor as a charge for failure to comply with this Specification. Moreover, the stated daily charge will continue each consecutive calendar day thereafter until the deficiencies noted have been corrected to the complete satisfaction of the Engineer.

ATTACHMENT A: Inspection Report Instructions and Template including Corrective Action Log

SECTION 6: Amendments

This SWPPP is intended to be a working document.

It is expected that amendments will be required throughout the construction of the project.

Even if practices are installed on a site per the approved plan, the site is only in compliance when erosion and sedimentation are effectively controlled throughout the entire site.

The SWPPP will be amended whenever there is a change in design, construction, operation, maintenance, or other procedure which has a significant effect on the potential for the discharge of pollutants, or if the SWPPP proves to be ineffective in achieving its objectives (i.e. the selected BMPs are not effective in controlling erosion or sedimentation).

All revisions must be recorded in the Record of Amendments Log Sheet within the SWPPP, and dated red-line drawings and/or a detailed written description must be appended to the SWPPP. Inspection Forms must be revised to reflect all amendments. Update the Revision Date and the Version # in the footer of the Report to reflect amendments made.

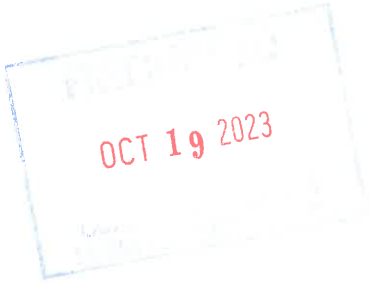
All SWPPP Amendments, except minor non-technical revisions, must be approved by the Resident Engineer.

SECTION 7: Recordkeeping

7.1 Requirements

It is the RIDOT Resident Engineer's responsibility to have the following documents at the Field Office and immediately available for review upon request:

- A copy of the fully signed and dated SWPPP
- Copies of all signed and dated Inspection Reports
- Corrective Action Log
- Amendment Log
- Any Regulatory permits obtained as part of the Project



SECTION 8: Party Certifications

All parties working for the Rhode Island Department of Transportation are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that is performed on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. Contractors and Sub-Contractors are encouraged to advise all employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the RIDOT Field Office, or may be obtained from the RIDOT Office of Stormwater Management by calling (401) 734-4892.

The prime contractor and each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement.

OCT 19 2023

I acknowledge that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

RIDOT Resident Engineer:
Insert Company or Organization Name
Insert Name & Title
Insert Address
Insert City, State, Zip Code
Insert Telephone Number, Insert Fax/Email

_____
signature/Click or tap to enter a date.

RIDOT SWPPP Inspector:
Insert Company or Organization Name
Insert Name & Title
Insert Address
Insert City, State, Zip Code
Insert Telephone Number, Insert Fax/Email

_____
signature/Click or tap to enter a date.

Contractor SWPPP Contact:
Insert Company or Organization Name
Insert Name & Title
Insert Address
Insert City, State, Zip Code
Insert Telephone Number, Insert Fax/Email

_____
signature/Click or tap to enter a date.

Subcontractor SWPPP Contact:
Insert Company or Organization Name
Insert Name & Title
Insert Address
Insert City, State, Zip Code
Insert Telephone Number, Insert Fax/Email

_____
signature/Click or tap to enter a date.

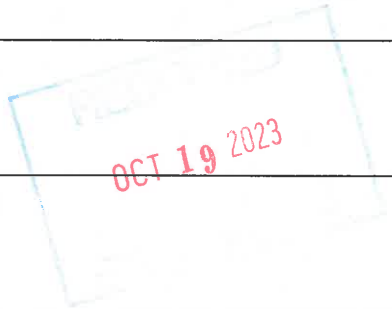
Insert more contact/signature lines as necessary

Amendment Log

ALL AMENDMENTS MUST BE APPROVED BY RIDOT RESIDENT ENGINEER

Describe amendment to be made to SWPPP, the date, and the person/title making the amendment. The RIDOT Resident Engineer must approve ALL amendments.

	Date	Description of Amendment	R.E. initials
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			



Add more lines/pages as necessary

SWPPP APPENDICES

Attachment A

Small-Site SWPPP Inspection Report -- Instructions

Small-Site SWPPP Inspection Report

Small-Site SWPPP Corrective Action Log

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	–	2024	1	24

INDEX OF DRAWINGS

STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED

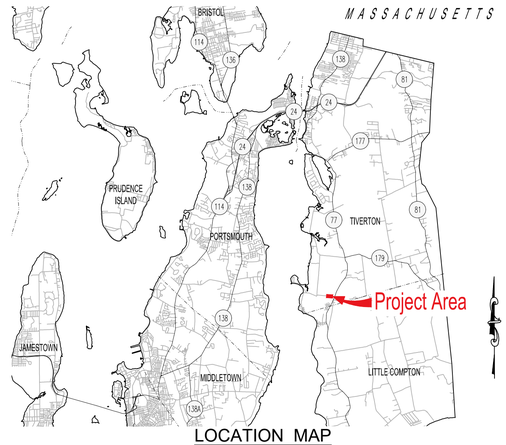
NONQUIT POND BRIDGE NO. 292

POND BRIDGE ROAD

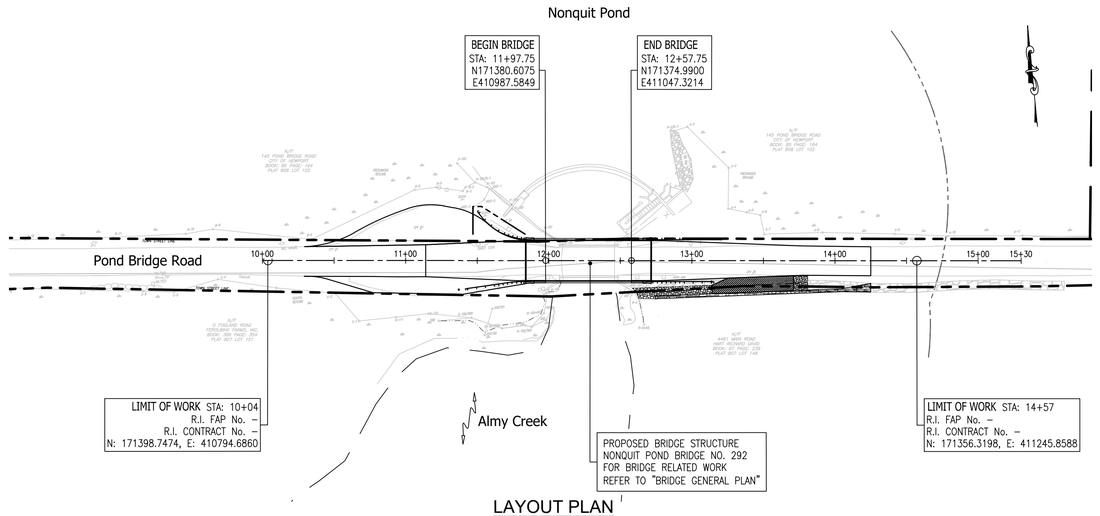
TIVERTON, RHODE ISLAND
NEWPORT COUNTY

R.I. CONTRACT NO. - F.A. PROJECT NO. -

0.05 MILES



LOCATION MAP
SCALE: N.T.S.



LAYOUT PLAN
SCALE: 1" = 50'

DESIGN DESIGNATION

AADT (2021)	=	1,000 VEH
AADT (2041)	=	1,100 VEH
DHV (2041)	=	99 VEH
D	=	55/45
T	=	1%
DESIGN SPEED	=	30 MPH

PROPOSED PAVEMENT STRUCTURE

POND BRIDGE ROAD:

FULL DEPTH CONSTRUCTION:
- 2" MODIFIED CLASS 12.5 HMA
- 5" CLASS 19.0 HMA (PLACED IN TWO 2.5" LIFTS)
- 12" GRAVEL BORROW SUBBASE COURSE
- ASPHALT EMULSION TACK COAT BETWEEN HMA LAYERS

BRIDGE DECK:
- 3" MIN. MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS (PLACED IN TWO 1.5" MIN. LIFTS, DEPTH VARIES)
- ASPHALT EMULSION TACK COAT BETWEEN HMA LAYERS

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MARCH 2018, WITH ALL REVISIONS AND SUPPLEMENTS AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.

RECEIVED
10/19/2023
COASTAL RESOURCES MANAGEMENT COUNCIL

DAVID J. ELWELL
No. 7127
REGISTERED PROFESSIONAL ENGINEER
CIVIL
9-12-23

SCALES OF DRAWINGS
PLANS: 1 INCH = 20 FEET

BASE OF LEVELS
VERTICAL DATUM USED: NAVD-88
HORIZONTAL DATUM: RHODE ISLAND STATE PLANE, NAD-83 (2007) (2002.00)

PERMIT SUBMISSION
SEPTEMBER 2023

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755
14 BOBALA ROAD, SUITE 2B, HOLYOKE, MA 01040, 413.507.3448

Contract Number -
Number of Sheet 1
Total Sheets 24

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED

ADMINISTRATOR, PROJECT MANAGEMENT — DATE

APPROVED

CHIEF ENGINEER OF INFRASTRUCTURE — DATE

APPROVED

DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR — DATE

00000_V1_HD_COVER

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	2	24

EXISTING		NEW
	EDGE OF PAVEMENT	
	BERM	
	CURB	
	GUARDRAIL	
MB	MAILBOX	
NO.	UTILITY POLE	NO.
	POLE GUY	GUY
	LUMINAIRE	
SIGN	SIGN	
(SIZE)SD	SUBDRAIN	N(SIZE)SD (Length — Size)
(SIZE)D	STORMDRAIN	(Length — Size)
(SIZE)S	SANITARY SEWER	
(SIZE)W	WATER MAIN	N(SIZE)W
(SIZE)G	GAS MAIN	N(SIZE)G
(SIZE)T	TELEPHONE DUCT	N–#(SIZE)T
(SIZE)E	ELECTRIC DUCT	N–#(SIZE)E
	PLUG AND CAP PIPE	
	ABANDONED UTILITY	
	FLARED END SECTION	
	HEADWALL	
WG OR GG	WATER OR GAS GATE	
CB	CATCH BASIN	
MH	MANHOLE	
HYD	HYDRANT	
1+00	BASELINE OR CENTERLINE	1+00
EXIST. S.H.L. PLAT NO. XX	STATE HIGHWAY LINE	*NEW S.H.L. PLAT NO. XX*
EXIST. S.F.L. PLAT NO. XX	STATE FREEWAY LINE	*NEW S.F.L. PLAT NO. XX*
EXIST. P.E.B.	PERMANENT EASEMENT LINE	NEW P.E.B.
EXIST. T.E.B.	TEMPORARY EASEMENT LINE	NEW T.E.B.
P	PROPERTY LINE	
CITY NAME / TOWN NAME	CITY OR TOWN LINE	
PWW	PAVED WATERWAY	
ELEV.	CONTOUR LINE	ELEV.
	OPEN DITCH	
R.I.H.B.	R.I. HIGHWAY BOUND	
S.B.	STONE BOUND	
	RETAINING WALL	
	FIELD STONE WALL	
NO.	BORINGS	NO.
TYPE	FENCE	
	WOOD OR BRUSH LINE	
	TREES	
(NAME)	RIVER OR STREAM	
	WETLAND AREA	
NO. TYPE MATERIAL	BUILDING	
	FOUNDATION	
	BUILDING TO BE REMOVED	
	RAILROAD TRACKS	
	CUT AND MATCH	
	RIP–RAP	
	CUT SLOPE	ROADWAY / TOP OF SLOPE
	FILL SLOPE	ROADWAY / TOE OF SLOPE
	ROCK CUT	ROCK SHELF / ROCK / CUT
00x00	SPOT GRADE	00.00
	AREA GRADED TO DRAIN	ELEV.
	BALED HAY RI STD 9.1.0	
	BALED HAY & SILT FENCE RI STD. 9.3.0	
123 124 125	EDGE OF WETLAND	
	WETLAND PERIMETER	
ASSF	AREA SUBJECT TO STORM FLOW	
100 YR. FLOOD BOUNDARY	100–YEAR FLOOD PLAIN	
	LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
	LIMIT OF CLEARING	LIMIT OF CLEARING

1.1.0	UNDERDRAIN
1.3.0	CONCRETE CONNECTING COLLAR
2.1.0	CONCRETE HEADWALLS FOR PIPE CULVERTS
2.2.0	STANDARD HEADWALLS FOR MULTIPLE 3'–6" TO 7'–0' PIPE CULVERTS
2.3.0 (DIA.)	PRECAST CONCRETE FLARED END SECTION
3.2.0	BRICK/SOLID BLOCK 4'–0" ROUND MANHOLE
3.2.1 (DIA.)	BRICK/SOLID BLOCK 5'–0" OR 6'–0" ROUND MANHOLE
3.3.0	BRICK/SOLID BLOCK TYPE "D" SQUARE CATCH BASIN
3.3.2	BRICK/SOLID BLOCK TYPE "F" SQUARE CATCH BASIN
3.3.3	SOLID BLOCK FLUSH SQUARE CATCH BASIN
3.4.0	BRICK/SOLID BLOCK TYPE "D" ROUND CATCH BASIN
3.4.1	BRICK/SOLID BLOCK ROUND CATCH BASIN WITH GUTTER INLET
3.4.2	BRICK/SOLID BLOCK TYPE "F" ROUND CATCH BASIN
3.4.3	BRICK/SOLID BLOCK TYPE "R" CATCH BASIN
3.4.4	SOLID BLOCK FLUSH ROUND CATCH BASIN
3.4.5 (DIA.)	BRICK/SOLID BLOCK 5'–0" OR 6'–0" ROUND CATCH BASIN
3.5.0	SOLID BLOCK SHALLOW TYPE "F" SQUARE CATCH BASIN
3.5.1 (SIZE)	SOLID BLOCK SHALLOW 5'–0" OR 6'–0" SQUARE CATCH BASIN
3.6.0	BRICK/SOLID BLOCK DROP INLET
3.7.0 (DIA.)	BRICK/SOLID BLOCK ROUND MANHOLE OR CATCH BASIN GREATER THAN 12'–0"
4.2.0	PRECAST 4'–0" ROUND MANHOLE
4.2.1	PRECAST 5'–0" ROUND MANHOLE
4.2.2	PRECAST 6'–0" ROUND MANHOLE
4.3.0 (SIZE)	PRECAST 4'–0" OR 6'–0" SQUARE MANHOLE OR CATCH BASIN
4.4.0 (DIA.)	PRECAST 4'–0", 5'–0", OR 6'–0" ROUND CATCH BASIN
4.5.0	PRECAST CONCRETE DROP INLET
4.5.1	PRECAST CONCRETE DROP INLET LATERAL OUTLET
4.5.2	PRECAST CONCRETE DROP INLET LONGITUDINAL OUTLET
5.3.0	CATCH BASIN AND MANHOLE STEP
5.4.0	CONCRETE COLLARS
6.1.0	LIGHT–DUTY SQUARE FRAME AND ROUND COVER
6.1.1	HEAVY DUTY SQUARE FRAME AND ROUND COVER
6.2.0	LIGHT–DUTY ROUND FRAME AND COVER
6.2.1	HEAVY–DUTY ROUND FRAME AND COVER
6.3.0	SQUARE FRAME AND GRATE
6.3.1	SQUARE FRAME AND GRATE
6.3.2	SQUARE FRAME AND GRATE (BICYCLE SAFE)
6.3.3	HIGH CAPACITY FRAME AND GRATE
6.3.4	HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)
6.4.0	ROUND FRAME AND GRATE
7.1.0S	PRECAST CONCRETE CURB (STRAIGHT)
7.1.0C	PRECAST CONCRETE CURB (CIRCULAR)
7.1.1	3'–0' PRECAST CONCRETE TRANSITION CURB
7.1.2	6'–0" PRECAST CONCRETE TRANSITION CURB
7.1.4	PRECAST 2'–0" RADIUS CORNER
7.1.5	PRECAST CONCRETE INLET STONE (FOR SQUARE CATCH BASIN)
7.1.6	PRECAST CONCRETE INLET STONE (FOR ROUND CATCH BASIN)
7.1.7	PRECAST CONCRETE APRON STONE (FOR SQUARE CATCH BASIN)
7.1.8	PRECAST CONCRETE APRON STONE (FOR ROUND CATCH BASIN)
7.2.0S	PRECAST CONCRETE SLOPED FACE CURB (STRAIGHT)
7.2.0C	PRECAST CONCRETE SLOPED FACE CURB (CIRCULAR)
7.2.1	PRECAST CONCRETE SLOPED FACE TRANSITION CURB
7.2.2	PRECAST CONCRETE TRANSITION CURB (VERTICAL FACE TO SPLOPED FACE)
7.3.0S	GRANITE CURB (STRAIGHT)
7.3.0C	GRANITE CURB (CIRCULAR)
7.3.1	3'–0" GRANITE TRANSITION CURB
7.3.2	6'–0" GRANITE TRANSITION CURB
7.3.3	GRANITE WHEELCHAIR RAMP TRANSITION CURB
7.3.4	GRANITE 2'–0" RADIUS CORNER
7.3.5	GRANITE INLET STONE (FOR SQUARE CATCH BASIN)
7.3.6	GRANITE INLET STONE (FOR ROUND CATCH BASIN)
7.3.7	GRANITE APRON STONE (FOR SQUARE CATCH BASIN)
7.3.8	GRANITE APRON STONE (FOR ROUND CATCH BASIN)
7.4.0	GRANITE SLOPED FACE CURB
7.4.1	GRANITE SLOPED FACE TRANSITION CURB
7.4.2	GRANITE TRANSITION CURB (VERTICAL FACE TO SLOPE FACE)
7.5.0	BITUMINOUS CONCRETE LIP CURB
7.5.1A	BITUMINOUS BERM (CONSTRUCTION METHOD A)
7.5.1B	BITUMINOUS BERM (CONSTRUCTION METHOD B)
7.6.0	CURB SETTING DETAIL
8.2.0	BITUMINOUS CONCRETE DITCH
8.3.0	RIP–RAP DITCH
8.4.0	PAVED WATERWAY
9.1.0	BALED HAY EROSION CHECK
9.2.0	SILT FENCE DETAIL
9.3.0	BALED HAY DITCH EROSION CHECK AND SILT FENCE COMBINED
9.4.0	BALED HAY DITCH AND SWALE EROSION CHECK
9.5.0	LOG AND HAY CHECK DAM
9.7.0	DEWATERING BASIN
9.8.0	BALED HAY CATCH BASIN INLET PROTECTION
9.9.0	CONSTRUCTION ACCESS
10.1.0	WET STONE MASONRY RETAINING WALL
10.2.0	RUBBLE MASONRY WALL
10.3.0	CONCRETE RETAINING WALL
10.4.0	STONE MASONRY STEPS
14.1.0	CONCRETE HIGHWAY BOUND
15.1.0	POST AND MOUNTINGS FOR RURAL MAILBOX
15.2.0 (NO.)	POST AND MULTIPLE MOUNTINGS FOR RURAL MAILBOXES
18.2.0	PRECAST TYPE "A" HANDHOLE
18.2.2	HEAVY DUTY TYPE "H" HANDHOLE
18.3.0	ALUMINUM LIGHTING STANDARDS
20.2.0	BI–DIRECTIONAL CONTROL DEVICE
24.6.1	STREET SIGN MOUNTING DETAIL
26.2.0	POLYETHYLENE DRUM WITH MARKINGS
26.3.0	PVC PLASTIC PIPE TYPE III BARRICADE
31.1.0	CHAIN LINK FENCE 3'–0" TO 4'–0"
31.2.0	CHAIN LINK FENCE 5'–0" TO 6'–0"
31.2.1	CHAIN LINK FENCE 5'–0" TO 6'–0" INTERMEDIATE POST
31.3.0	WOVEN WIRE RIGHT–OF–WAY FENCE (STEEL POST)
34.1.0	TYPICAL GUARDRAIL INSTALLATION
34.2.0	STEEL BEAM GUARDRAIL
34.2.1	STEEL BEAM GUARDRAIL DETAILS
34.2.2	STEEL BEAM GUARDRAIL DOUBLE FACED ASSEMBLY
34.2.3	STEEL BEAM GUARDRAIL FIXTURES
34.2.5	STEEL BEAM GUARDRAIL REFLECTORIZED TRIANGULAR DELINEATOR
34.3.1	GUARDRAIL END SECTION
34.3.2	TERMINAL END SECTION (SINGLE FACE)
34.3.3	ANCHORAGE DETAILS APPROACH END SECTION
34.3.4	ANCHORAGE DETAILS TRAILING END SECTION
34.4.0	STEEL BACKED TIMBER GUARDRAIL
34.4.1	STEEL BACKED TIMBER GUARDRAIL TERMINAL SECTION–TYPE 1
40.1.0	DOUBLE–FACED PRECAST MEDIAN BARRIER
40.2.0	SINGLE–FACED PRECAST MEDIAN BARRIER
40.2.1	SINGLE–FACED PRECAST MEDIAN BARRIER
40.3.0	PRECAST MEDIAN BARRIER TRANSITION UNIT
40.5.0	PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC CONTROL
43.1.0	CEMENT CONCRETE SIDEWALK
43.2.0	BITUMINOUS CONCRETE SIDEWALK
43.3.0	WHEELCHAIR RAMP
43.3.1	WHEELCHAIR RAMP FOR LIMITED RIGHT–OF–WAY AREAS
43.4.0	DRIVEWAY DEVELOPMENT FOR 3'–0" TRANSITION CURB
43.4.1	DRIVEWAY DEVELOPMENT FOR 6'–0" TRANSITION CURB
43.5.0	CEMENT CONCRETE DRIVEWAYS
48.1.0	DETECTABLE WARNING SYSTEM
51.1.0	TREE PROTECTION DEVICE
51.1.1	DRIP LINE TREE PROTECTION DEVICE FOR EXISTING TREES
51.2.0	SHRUB PROTECTION DEVICE
51.3.0	TREE WELL
51.4.0	TREE WALL

AB	ADJUST CATCH BASIN TO GRADE
ABM	ADJUST CATCH BASIN TO MANHOLE
AC	ADJUST CURB STOP TO GRADE
AD	ADJUST DRAINAGE MANHOLE TO GRADE
AE	ADJUST ELECTRIC MANHOLE TO GRADE
AFC	ADJUST FRAME AND COVER TO GRADE
AFG	ADJUST FRAME AND GRATE TO GRADE
AG	ADJUST GAS GATE BOX TO GRADE
AHH	ADJUST HANDHOLE TO GRADE
AS	ADJUST SANITARY SEWER MANHOLE TO GRADE
AT	ADJUST TELEPHONE MANHOLE TO GRADE
AW	ADJUST WATER GATE BOX TO GRADE
BCD	BITUMINOUS CONCRETE DRIVEWAY 3" BITUMINOUS CONCRETE TYPE I–2 8" GRAVEL BORROW SUBBASE COURSE
BPS	BUILD NEW STRUCTURE OVER EXISTING PIPE
CCB	CLEAN CATCH BASIN
CCP	CUT AND CAP PIPE WITH RESTRAINT (ALL SIZES)
CFP	CLEAN AND FLUSH PIPE
CG	CLEARING AND GRUBBING
CMH	CLEAN MANHOLE
CP (DEPTH)	COLD PLANE
CPP	CUT AND PLUG PIPE (ALL TYPES, ALL SIZES)
DB	REMOVE AND DISPOSE BITUMINOUS CURB
DC	REMOVE AND DISPOSE CONCRETE CURB
DCB	REMOVE AND DISPOSE CATCH BASIN
DDI	REMOVE AND DISPOSE DROP INLET
DF	REMOVE AND DISPOSE FENCE
DFC	REMOVE AND DISPOSE FRAME AND COVER
DFE	REMOVE AND DISPOSE FLARED END SECTION
DFG	REMOVE AND DISPOSE FRAME AND GRATE
DFH	REMOVE AND DISPOSE FIRE HYDRANT
DFP	REMOVE AND DISPOSE FLEXIBLE PAVEMENT
DG	REMOVE AND DISPOSE GUARDRAIL
DH	REMOVE AND DISPOSE HEADWALL
DHB	REMOVE AND DISPOSE HIGHWAY BOUND
DHH	REMOVE AND DISPOSE HANDHOLE
DL	REMOVE AND DISPOSE LIGHT AND FOUNDATION
DMB	REMOVE AND DISPOSE MEDIAN BARRIER
DMH	REMOVE AND DISPOSE MANHOLE
DMM	REMOVE AND DISPOSE MEDIAN MARKER
DOW	REMOVE AND DISPOSE OBSERVATION WELL
DP	REMOVE AND DISPOSE PIPE
DPB	REMOVE AND DISPOSE PAVEMENT AND RIGID BASE
DRB	REMOVE AND DISPOSE RIGID BASE
DS	REMOVE AND DISPOSE SIGN
DSS	REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM
DSW	REMOVE AND DISPOSE SIDEWALK
DTD	REMOVE AND DISPOSE TELEPHONE DUCT BANKS
DUP	REMOVE AND DISPOSE UTILITY POLE
DWW	REMOVE AND DISPOSE PAVED WATERWAY
FF	FILTER FABRIC RIPRAP FLARED END UNDERLAYMENT
GET	FLARED GUARDRAIL END TREATMENT
IA	IMPACT ATTENUATOR
IDL	IMPERVIOUS DITCH LINER
LOD	LIMIT OF DISTURBANCE
LOR	LIMIT OF REGRADING
LS	4" LOAM AND SEED
NFH	NEW FIRE HYDRANT WITH GATE VALVE
NIC	NOT IN THIS CONSTRUCTION CONTRACT
NWB	FURNISH AND INSTALL NEW WATER GATE VALVE BOX
NWVB	FURNISH AND INSTALL NEW WATER GATE VALVE AND BOX
NWCB	FURNISH AND INSTALL NEW WATER CURB STOP BOX
NWSB	FURNISH AND INSTALL NEW WATER CURB STOP AND BOX
PCD	PERMANENT CHECK DAM
PS	4" PLANTABLE SOIL AND SEED
RCB	RECONSTRUCT TYPE "D" CATCH BASIN, TO CATCH BASIN WITH GUTTER INLET
RCM	R.I.D.O.T. COMMUNICATIONS MANHOLE
RHH	REMOVE, HANDLE, HAUL, TRIM, RESET CURB EDGING, STRAIGHT, CIRCULAR (ALL TYPES)
RLP	RELOCATE LAMP POST
RMB	RELOCATE MAILBOX (BY OTHERS)
RPM	REMOVE PAVEMENT MARKINGS
RRP	RIP–RAP PAD (SEE DETAIL)
RRS	REMOVE AND RELOCATE SIGN
RUP	RELOCATE UTILITY POLE (BY OTHERS)
SB	STONE BAFFLE
SBAE	STEEL BEAM BRIDGE CONNECTION APPROACH END (W/O NESTED RAIL)
SBTE	STEEL BEAM BRIDGE CONNECTION TRAILING END (W/NESTED RAIL)
SD–	STRUCTURAL DISPOSITION – SEE CS PAGES OF SPECIFICATION
SF	REMOVE AND STOCKPILE FENCE
SGA	SPECIAL GRADED AGGREGATE
SGC	REMOVE AND STOCKPILE GRANITE CURB
SGR	REMOVE AND STOCKPILE GUARDRAIL
SH	REMOVE AND STOCKPILE HYDRANT
SS	REMOVE AND STOCKPILE SIGN
STS	REMOVE AND STOCKPILE TRAFFIC SIGNAL SYSTEM
TB	CONCRETE THRUST BLOCK
TEP	TIE EXISTING PIPE INTO NEW STRUCTURE
TNP	TIE NEW PIPE INTO EXISTING STRUCTURE
TBT	THRIE BEAM TRANSITION
TBBC	THRIE BEAM BRIDGE CONNECTION
TT	TREE TRIMMING
WCM	4" WOOD CHIP MULCH
4DY	4" EPOXY RESIN PAVEMENT MARKINGS – DOUBLE YELLOW
6W	6" EPOXY RESIN PAVEMENT MARKINGS – WHITE
12W	12" EPOXY RESIN PAVEMENT MARKINGS – WHITE
6WT	6" PREFORMED PATTERNED MARKING (HIGH PERFORMANCE TAPE)
4Y	4" EPOXY RESIN PAVEMENT MARKINGS – YELLOW
6Y	6" EPOXY RESIN PAVEMENT MARKINGS – YELLOW
P.G.L.	PROFILE GRADE LINE

RECEIVED 10/19/2023 COASTAL RESOURCES MANAGEMENT COUNCIL

PARE

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE: AUGUST 2023
SHEET: 2
OF: 45

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	6/07	TRB			

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON — RHODE ISLAND

STANDARD PLAN SYMBOLS & STANDARD LEGEND

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	3	24

GENERAL NOTES:

1. ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, CONDUIT, SIDEWALK, FENCES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.

2. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL AS FAR AWAY AS POSSIBLE FROM THE EDGE OF THE TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD, IN ACCORDANCE WITH SECTION 106.06 OF THE R.I.D.O.T. STANDARD SPECIFICATION, LATEST EDITION.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBLITERATED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL, THEREBY ENABLING HIM TO CONSTRUCT THE PROJECT IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. THE RESIDENT ENGINEER WILL NOT AUTHORIZE CONSTRUCTION ACTIVITIES TO BEGIN UNTIL HE IS SATISFIED THAT ALL GROUND CONTROL HAS BEEN ESTABLISHED, TIED DOWN, AND DULY RECORDED IN STANDARD FIELD BOOKS.

4. ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.

5. THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.

6. ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

7. ASPHALT EMULSION TACK COAT SHALL BE PLACED PRIOR TO PAVEMENT PLACEMENT ON THE CONCRETE BASE OR COLD PLANED PAVEMENT, AND ON ANY NEW COURSE WHICH HAS BEEN OPEN TO TRAFFIC, OR ANY NEW COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN 3 DAYS, AND/OR AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN ADJOINING PAVEMENT SECTIONS. ALL APPLICATIONS ON BOTH HORIZONTAL AND VERTICAL SURFACES SHALL BE PAID FOR UNDER THE CONTRACT UNIT BID PRICE FOR CODE 403.0300 "ASPHALT EMULSION TACK COAT."

8. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND PLACING, AT HIS OWN EXPENSE, PLANTABLE SOIL AND SEED IN AREAS WHICH ARE OUTSIDE OF THE PROJECT'S AREAS OF DISTURBANCE AND WHICH ARE IMPACTED BY CONSTRUCTION OPERATIONS INCLUDING THOSE AREAS WHERE VEHICLES, EQUIPMENT AND MATERIALS ARE STORED WITH THE PERMISSION OF THE ENGINEER.

9. UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.

10. CLEANING AND SWEEPING OF PAVEMENT WILL INCLUDE REMOVAL OF ALL PAVEMENT DEBRIS PRIOR TO THE PLACEMENT OF EACH BITUMINOUS PAVEMENT LIFT. ALL CLEANING AND SWEEPING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.

11. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.

12. THE COORDINATE SYSTEM, IF SHOWN, IS THE RHODE ISLAND STATE PLANE COORDINATE SYSTEM.

13. PAVEMENT OPERATIONS FOR CURBED SECTIONS: IN AREAS WHERE CURBING IS SET TO FINISH LINE AND GRADE, THE CONTRACTOR WILL NOT BE REQUIRED TO UTILIZE THE SENSOR AND SKI-TYPE DEVICE FOR AUTOMATIC GRADE CONTROL, BUT WILL BE ALLOWED TO MANUALLY ADJUST THE BITUMINOUS PAVER FOR CONTROLLING GRADE.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

15. NO FUEL STORAGE, VEHICLE REFUELING, OR EQUIPMENT STORAGE SHALL TAKE PLACE IN DESIGNATED WETLANDS, NOR WITHIN 100' OF ANY WATER BODY. THIS REQUIREMENT SHALL NOT SUPERSEDE ANY FEDERAL, STATE OR LOCAL LAW, ORDINANCE, RULE OR REGULATION THAT APPLIES TO THE SAME, UNLESS THIS REQUIREMENT IS MORE STRINGENT THAN SAID LAW, ORDINANCE, RULE OR REGULATION.

16. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT AT THE END OF FINAL PAVING OPERATIONS, FLOW TO EXISTING DRAINAGE STRUCTURES HAS BEEN REESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO PAVING AND COLD PLANING OPERATIONS.

17. ALL EMBANKMENTS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 12" (AFTER COMPACTION) AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED. ALSO, EMBANKMENT CONSTRUCTION SHALL CONFORM TO SECTION 202.03.2 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

18. IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE, AS DESIGNATED ON THE COVERSHEET, THE CONTRACTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.

19. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS STATED IN THE ENVIRONMENTAL APPROVALS ISSUED FOR THE PROJECT FROM THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM). AND/OR THE ARMY CORPS OF ENGINEERS (ACOE). AND/OR THE COASTAL RESOURCES MANAGEMENT COUNCIL (CRMC). COPIES OF EACH OF THESE PERMITS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH THESE CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

20. FOR ALL PROJECTS INVOLVING KNOWN SITE REMEDIATION ISSUES, THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE CONSTRUCTION RELATED PROVISIONS, CONDITIONS, AND STIPULATIONS OF ANY REMEDIAL PLANS DEVELOPED FOR THE PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH COMPLIANCE WITH THESE DOCUMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

21. NO UNPROTECTED CONSTRUCTED FEATURE MAY PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. HEADWALL, DRAINAGE INLET, ETC.

22. THE REMAINING SECTION OR STUB OF A BREAKAWAY BASE MAY NOT PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. SIGN POSTS, LIGHT POLES, FIRE HYDRANTS, ETC.

DRAINAGE AND EROSION CONTROL NOTES:

1. FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS OF THE GENERAL PERMIT AND THE SITE SPECIFIC SWPPP FOR THIS PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH ADHERENCE TO THE SWPPP SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

2. NO UNDISTURBED AREAS SHALL BE CLEARED OF EXISTING VEGETATION AFTER OCTOBER 15 OF ANY CALENDAR YEAR OR DURING ANY PERIOD OF FULL OR LIMITED WINTER SHUTDOWN. ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY SUCH AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE RESIDENT ENGINEER OR ENVIRONMENTAL INSPECTOR, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR HAY MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15 THROUGH APRIL 15, CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THAT DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE RESTABILIZED WITHIN 5 WORKING DAYS. ANY WORK TO CORRECT PROBLEMS RESULTING FROM FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THERE WILL BE NO SEPARATE PAYMENT FOR THIS PROVISION, IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 2 WEEKS OF FINAL GRADING.

3. STOCKPILES OF MATERIAL SHALL NOT BE LOCATED WITHIN REGULATED WETLANDS OR BUFFER ZONE AREAS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES OF ERODABLE MATERIAL SHALL ALSO BE SEEDED AND RINGED WITH R.I. STD. 9.1.0 TO STABILIZE.

4. IF THE PLANS INCLUDE SPECIFIC AREAS FOR PLACEMENT OF CONSTRUCTION DEWATERING BASINS AND/OR EQUIPMENT AND MATERIALS STORAGE AND STOCKPILING, AND IF THE CONTRACTOR ELECTS TO UTILIZE ANY OTHER AREAS FOR THESE PURPOSES, THIS SHALL BE APPROVED BY THE ENGINEER ONLY AFTER OBTAINING ANY NECESSARY PERMITS AND/OR PERMIT MODIFICATIONS FROM THE APPROPRIATE REGULATORY AUTHORITY(IES). ANY PERMITTING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ACCOMPLISHED AT NO COST TO THE STATE. THE ENGINEER WILL COORDINATE SUBMISSION OF ANY REQUIRED PERMIT APPLICATION MATERIALS WITH THE R.I.D.O.T. OFFICE OF ENVIRONMENTAL PROGRAMS.

5. JUTE MESH SHALL BE USED TO STABILIZE PLANTABLE SOIL AND/OR LOAM IN ALL DITCHES, ON ALL SLOPES ADJACENT TO WETLANDS AND WETLAND PERIMETERS, AND ON ALL SLOPES WITHIN WATER QUALITY BASINS. JUTE MESH IN DITCHES SHALL EXTEND TO AN ELEVATION 2 FEET ABOVE THE BOTTOM OF THE DITCH.

6. SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.

   a. SEEDING TYPE I.

   b. ADHESIVE MULCH STABILIZER

7. UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.

8. PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED. ANY VARIATION FOUND FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION. WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.

9. ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.

10. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL THROUGHOUT THE WORK AREA.

11. CATCH BASIN RIM GRADES NOTED ON PLANS ARE DEPRESSED 0.1' LOWER THAN THE GUTTER GRADE. RIM ELEVATIONS SHOWN ARE FINAL GRADES. THE CONTRACTOR SHALL PLACE FRAMES AND GRATES 0.1' BELOW THE GRADE CONSTRUCTED IN THIS CONTRACT OR AS DIRECTED BY THE ENGINEER.

12. PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.

    ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.

    NO HEAVY EQUIPMENT MAY ENCROACH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.

13. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES FOR OUTLET PROTECTION PRIOR TO CLEANING AND FLUSHING STORM WATER DRAINAGE. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL FLUSHED SEDIMENTS ARE REMOVED. AT ALL OUTFALL LOCATIONS WHERE PIPES ARE TO BE CLEANED AND FLUSHED, OUTLET PROTECTION (R.I. STD. 9.1.0 OR 9.3.0) SHALL BE INSTALLED TO TRAP SEDIMENTS. THESE SEDIMENTS SHALL THEN BE REMOVED AND DISPOSED OF LEGALLY BEFORE THE OUTLET PROTECTION DEVICES ARE REMOVED. IF OUTLET PROTECTION AT THE OUTFALL IS NOT FEASIBLE, THEN THE OUTLET PIPE OF THE LAST DRAINAGE STRUCTURE TO BE CLEANED SHALL BE PLUGGED TO CAPTURE ALL MATERIALS FLUSHED FROM PIPES. AFTER THE MATERIALS ARE REMOVED FROM THE DRAINAGE STRUCTURE, THE OUTLET SHALL BE UNPLUGGED TO RESUME NORMAL FUNCTIONING.

14. R.I. STD. 9.8.0 BALED HAY INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS AND INLETS WHENEVER SUBBASE IS EXPOSED, AND SHALL REMAIN IN PLACE UNTIL THE ABUTTING GROUND SURFACES ARE STABILIZED.

15. WHERE BALED HAY INLET PROTECTION AND SILT FENCES ARE USED AT CATCH BASINS, THEY SHALL BE REMOVED AT THE END OF THE PROJECT OR AS DIRECTED BY THE ENGINEER IN ORDER TO PREVENT CLOGGING OF THE INLET.

DRAINAGE AND EROSION CONTROL NOTES (CONTINUED):

16. DETENTION AND RETENTION BASINS MAY BE ROUGH GRADED AND STABILIZED WITH VEGETATION AND/OR OTHER EROSION CONTROL MEASURES AS REQUIRED BY THE ENGINEER PRIOR TO USE AS TEMPORARY SEDIMENTATION BASINS DURING PROJECT CONSTRUCTION. FINAL BASIN CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL SOURCES OF SEDIMENT HAVE BEEN ELIMINATED, FINAL ROADSIDE VEGETATION IS ESTABLISHED AND USE OF TEMPORARY BASINS IS NO LONGER REQUIRED AS DIRECTED BY THE ENGINEER. ANY ISSUES RELATING TO EROSION AND/OR SEDIMENT TRANSPORT INTO WETLAND AREAS RESULTING FROM SUCH USE OF SEDIMENTATION BASINS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY CORRECTIVE ACTION REQUIRED TO RESOLVE SUCH ISSUES SHALL BE COMPLETED BY THE CONTRACTOR.

17. THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST 1' INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROL MEASURES WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED.

18. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THOSE AREAS INDICATED ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS.

19. ALL HAY BALES, SILT FENCE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. TEMPORARY SEED WILL CONFORM TO R.I.D.O.T. STANDARD TEMPORARY SEED MIX.

20. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE STATE.

21. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

22. ADDITIONAL EROSION CONTROLS, SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT ENGINEER. THESE ADDITIONAL ITEMS WILL BE PAID AT THE UNIT PRICE FOR THAT BID ITEM.

UTILITY NOTES:

1. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES ARE PRESENT TO ALL BUILDINGS.

2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES BOTH UNDERGROUND AND OVERHEAD BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH CHAPTER 39-1.2 OF THE R.I. GENERAL LAWS ENTITLED "EXCAVATION NEAR UNDERGROUND UTILITY FACILITIES", WITH AMENDMENTS EFFECTIVE AS OF NOVEMBER 1, 2009 AND, WHEN NECESSARY, BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY APPLICABLE CITY, TOWN, STATE OR FEDERAL AGENCY. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE DIG SAFE PROGRAM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO COMMENCING THEIR WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY, SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE STATE.

3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.

4. EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.

5. UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.

6. FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.

7. ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.

8. ALL UTILITY POLE RELATED WORK SHALL BE BY OTHERS.

PARE

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE: AUGUST 2023
SHEET: 3
OF: 45

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	4/07	TRB			
2	3/10	RBH			
3	4/14	MLP			

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

STANDARD NOTES - 1

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	4	24

LANDSCAPE NOTES:

1. ALL PLANT MATERIAL MUST BE TAGGED AT THE NURSERY (A RECOGNIZED GROWER OF PLANT MATERIAL) IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION. ALL PLANT MATERIAL MUST BE NURSERY GROWN; NO PLANTATION GROWN PLANT MATERIAL WILL BE ACCEPTED.
2. ALL PLANT SUBSTITUTIONS AND/OR CHANGES IN PLANT LOCATION MUST BE APPROVED IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A REPRESENTATIVE FROM THE R.I.D.O.T. LANDSCAPE ARCHITECTURE UNIT.
4. A R.I.D.O.T. LANDSCAPE REPRESENTATIVE MUST BE ON SITE TO APPROVE ALL TRIMMING AND CLEARING NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
5. ANY TOPSOIL USED AS PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM TO SECTION M.18 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
6. ALL TREES AND SHRUBS SHALL BE MULCHED WITH PINE BARK MULCH IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
7. ALL TREES AND/OR SHRUBS THAT ARE PLANTED AS A BED SHALL BE MULCHED AS A BED.
8. PROVIDE A MINIMUM 6'-8" BRANCHING STANDARD ON ALL TREES INSTALLED ADJACENT TO SIDEWALKS AND/OR PEDESTRIAN ACCESS AREAS.

STRUCTURAL NOTES FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS:

GENERAL

1. ALL SUPPORT DESIGNS AND ASSOCIATED SHOP DRAWING REVIEWS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION, OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (THE "SPECIFICATIONS"), INCLUDING THE LATEST INTERIM SPECIFICATIONS, EXCEPT AS MODIFIED HEREIN.

CONSTRUCTION DRAWINGS AND DETAILS

1. THE FOLLOWING NOTES SHALL BE INCLUDED ON ALL PLANS AND/OR SHOP DRAWINGS IN REFERENCE TO ANCHOR BOLTS:
   - "PRETENSIONING OF ALL ANCHOR NUTS IS REQUIRED, AND SHALL BE ACCOMPLISHED BY TIGHTENING TO 1/6TH TURN BEYOND THE SNUG-TIGHT POSITION."
   - "THE MAXIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LEVELING NUTS AND THE TOP OF THE CONCRETE IS CRITICAL AND SHALL NOT EXCEED THE AMOUNT SPECIFIED ON THIS DRAWING."
2. THE USE OF GROUT UNDER BASE PLATES SHALL GENERALLY NOT BE PERMITTED. IF SPECIFIC CONDITIONS WARRANT ITS USE, THE GROUT SHALL NOT BE CONSIDERED LOAD CARRYING; LOADS SHALL BE DIRECTLY SUPPORTED BY THE ANCHOR BOLTS. ADEQUATE DRAINAGE SHALL BE PROVIDED.
3. THE DAMPENING EFFECTS OF VIBRATION MITIGATION DEVICES SHALL NOT BE CONSIDERED IN THE DESIGN OF STRUCTURAL SUPPORTS FOR SIGNS AND TRAFFIC SIGNALS. IF THE CONTRACTOR CHOOSES TO USE THESE DEVICES FOR WARRANTY PURPOSES, THE TYPE OF DEVICES PROPOSED SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO FABRICATION OF SUPPORTS.

TRAFFIC SIGNAL NOTES:

1. ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.
2. BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.
3. THE CONTRACTOR SHALL SUPPLY AND INSTALL ON THE UPPER LEFT HAND CORNER OF THE BACK OF THE CONTROLLER CABINET DOOR A LAMINATED INTERSECTION GRAPHIC AND TABLE DEPICTING THE TRAFFIC DETECTOR RELAY CHANNEL ASSIGNMENTS. THE DIAGRAM SHALL BE A GRAPHIC OF THE INDIVIDUAL INTERSECTION ORIENTED SIMILAR TO THE PLANS SHOWING THE LOCATIONS OF EACH OF THE LOOP DETECTORS. THE DIAGRAM SHALL, AT A MINIMUM, INCLUDE DETECTOR NUMBERS, STREET NAME LABELS, NORTH ARROW, AND CONTROLLER CABINET LOCATION. THE ASSIGNMENT INFORMATION SHALL BE INCLUDED IN A TABLE WHICH SHALL INCLUDE, AT A MINIMUM, THE APPROACH NAME, DETECTOR NUMBER, TERMINAL NUMBER, DETECTOR RACK SLOT NUMBER, RELAY NUMBER, RELAY CHANNEL NUMBER, AND PHASE ASSOCIATED WITH EACH DETECTOR.
4. TRAFFIC CONTROLLER CABINETS, UNLESS OTHERWISE NOTED, SHALL BE NEMA TS2 TYPE 1 CABINET SIZE 6 ("P" TYPE) WITH NOMINAL DIMENSIONS OF 52"Hx44"Wx24"D.
5. ALL DELAY AND EXTENSION TIMES, AS CALLED FOR ON THE PLANS, FOR PROPOSED LOOP DETECTORS SHALL BE PROGRAMMED IN THE TRAFFIC SIGNAL CONTROLLER AND NOT THE DETECTOR RELAY.
6. A BARE GROUND WIRE SHALL BE PLACED IN ALL PVC CONDUITS AND SHALL BE BONDED TO GROUND RODS IN ACCORDANCE WITH SECTION T.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
7. THE FINAL POSITION OF SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, DETECTORS, AND STOP LINE AND CROSSWALK PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD ACCORDING TO ACTUAL INTERSECTION CHARACTERISTICS.
8. A 2' MINIMUM BUFFER SHALL BE PROVIDED BETWEEN THE CURB AND ALL LATERAL OBSTRUCTIONS (INCLUDING ALL SIGNAL POLES AND TRAFFIC/PEDESTRIAN SIGNAL HEADS) TO PROVIDE ADEQUATE CLEARANCE FOR TURNING VEHICLES.
9. ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS INSTALLED.
10. WHEN PLACING TRAFFIC SIGNAL HANDHOLES OR CONDUIT IN EXISTING PORTLAND CEMENT CONCRETE SIDEWALKS, THE ENTIRE SIDEWALK SQUARE OF CONCRETE SHALL BE REPLACED IN ACCORDANCE WITH R.I. STD. 43.1.0. NO PATCHES WILL BE ALLOWED.
11. ALL PEDESTRIAN PUSHBUTTONS SHALL BE COMPLIANT WITH "THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" (ADAAG) AND SHALL INCLUDE A PRESSURE-ACTIVATED (NON-MOVING) BUTTON. SIGNS APPLICABLE TO PUSHBUTTON ACTUATION SHALL BE INSTALLED SUCH THAT THE CROSSING ASSIGNED TO EACH BUTTON IS CLEARLY INDICATED. IF SITE CONDITIONS DO NOT ALLOW PEDESTRIAN PUSHBUTTONS TO BE INSTALLED WHERE CALLED FOR ON THE PLANS, THE R.I.D.O.T. TRAFFIC ENGINEERING UNIT SHALL BE CONSULTED WITH THROUGH AN R.F.I. PRIOR TO INSTALLING THE PUSHBUTTONS. THE FINAL PLACEMENT OF ALL PEDESTRIAN PUSHBUTTONS SHALL BE IN ACCORDANCE WITH ADAAG AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
12. ALL LOOP DETECTORS SHALL BE CENTERED WITHIN EACH LANE AS DELINEATED, UNLESS OTHERWISE DIMENSIONED ON PLANS.
13. ALL LOOP DETECTORS SHALL BE CUT INTO THE FINAL PAVEMENT SURFACE COURSE.
14. TRAFFIC SIGNAL CONTROLLERS SHALL BE WIRED SO THAT ANY FIRE PRE-EMPTION SHALL OVERRIDE MANUAL (PUSH BUTTON) OPERATION.
15. THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE TRAFFIC SIGNAL OPERATION TO ITS INTENDED PURPOSE WHEN REPLACING THE TRAFFIC SIGNAL EQUIPMENT. A POLICE DETAIL IS REQUIRED TO DIRECT TRAFFIC AT THE INTERSECTION AT ALL TIMES WHEN THE TRAFFIC SIGNAL IS INOPERATIVE. AT NO TIME SHALL THE CONTRACTOR LEAVE THE SITE BEFORE RESTORING FULL TRAFFIC OPERATIONS.

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

1. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELIZING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. ALL SIGN MOUNTINGS FOR TEMPORARY AND CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. THE CONTRACTOR SHALL COVER ALL EXISTING AND/OR TEMPORARY SIGNS THAT ARE NOT RELEVANT TO THE TRAFFIC CONTROL REQUIRED DURING ANY PARTICULAR STAGE OF THE CONTRACT.
4. ADVANCE FLAGPERSON SIGNS (W20-7A) SHALL BE USED IN ADVANCE OF ANY POINT AT WHICH A FLAGPERSON OR A POLICE OFFICER HAS BEEN STATIONED TO CONTROL TRAFFIC. WHEN NEEDED, AN APPROPRIATE DISTANCE MESSAGE MAY BE DISPLAYED ON A SUPPLEMENTAL PLATE (24"x18") BELOW THE FLAGPERSON SYMBOL SIGN. THE SIGN SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE FLAGPERSON IS NOT AT THE STATION.
5. POLICE OFFICERS (AND NOT FLAGPERSONS) SHALL BE UTILIZED WHEN WORK WILL IMPACT SIGNALIZED INTERSECTIONS AND LIMITED ACCESS HIGHWAYS.
6. POLYETHYLENE DRUMS SHALL BE UTILIZED AS A CHANNELIZING DEVICE WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT. CONES SHALL BE UTILIZED WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY BROKEN DOWN AT THE END OF THE WORKDAY.
7. ARROW PANELS SHALL BE SET IN THE FLASHING FOUR CORNERS CAUTION MODE UNLESS UTILIZED FOR A MERGING TAPER. ARROW PANELS SET IN THE FLASHING ARROW MODE SHALL NOT BE UTILIZED FOR LANE SHIFTS.
8. TEMPORARY CONSTRUCTION SIGNS AND OTHER WORKZONE TRAFFIC CONTROL DEVICES THAT ARE DAMAGED OR REQUIRE RELOCATION SHALL BE REPLACED AND / OR RELOCATED UNDER THE PAY ITEM FOR "MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION."
9. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED ON THE TRAVEL LANES OR SHOULDERS. THEY MAY BE PARKED WITHIN THE STATE RIGHT-OF-WAY ONLY IN AREAS 30' BEYOND THE OUTSIDE EDGE OF THE TRAVEL LANES AND/OR IN AREAS APPROVED BY THE ENGINEER.
10. TEMPORARY CONSTRUCTION SIGNS AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC, AND SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER APPROPRIATE.
11. THE INTENDED VEHICLE PATHS THROUGH EACH WORK ZONE SHALL BE CLEARLY MARKED AT ALL TIMES. WATERBORNE PAVEMENT MARKINGS SHALL BE INSTALLED BEFORE THE END OF THE WORK SHIFT ON ALL COLD-PLANED AND NEW ROADWAY SURFACES THAT WILL BE OPENED TO TRAFFIC AT THE END OF THE SHIFT.

PARE

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE: AUGUST 2023
SHEET: 4
OF: 45

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY
1	4/07	TRB			
2	11/07	TRB			
3	3/10	RBH			

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

STANDARD NOTES - 2

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	5	24

JOB SPECIFIC GENERAL NOTES:

1. EXISTING CONDITIONS SURVEY WAS PREPARED BY MARTINEZ COUCH & ASSOCIATES. ROCKY HILL, CONNECTICUT, IN SEPTEMBER OF 2020.
2. FOR SURVEY WORK PERFORMED BY THE CONTRACTOR, ALL SURVEY FIELD BOOKS AND ELECTRONIC DATA SHALL BE SUBMITTED TO THE RIDOT SURVEY SECTION UPON COMPLETION OF THE CONSTRUCTION WORK. FIELD BOOKS SHALL INCLUDE A LISTING OF ALL RI HIGHWAY BOUNDS THAT WERE SET WITH STATIONS, OFFSETS, COORDINATES, AND DATE SET CERTIFIED BY THE CONTRACTOR'S PROFESSIONAL LAND SURVEYOR.
3. ALL REQUIRED TREE TRIMMING WILL BE COMPLETED UNDER THE RIDOT STATEWIDE TRIMMING CONTRACT. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK.
4. EXCEPT WHERE NOTED OTHERWISE ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REESTABLISHED WITH LOAM AND TYPE 2 SEED. IF AREAS ARE BEYOND WORK LIMIT LINES, THEN THE COST SHALL BE BORNE BY THE CONTRACTOR.
5. TREE AND SHRUB PROTECTION DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING TREES AND THEIR ROOT SYSTEMS DURING CONSTRUCTION.
6. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES AND NOTIFY THE APPROPRIATE UTILITY AUTHORITIES INCLUDING "DIG SAFE" PRIOR TO STARTING WORK. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE COST OF REPAIRS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
7. ALL WORK WITHIN THE STATE RIGHT-OF-WAY AND PORTIONS OF WORK ON TOWN ROADWAYS SHALL CONFORM TO THE RHODE ISLAND STANDARD SPECIFICATIONS, DETAILS, AND ALL ADDENDA.
8. THE CONTRACTOR SHALL BE AWARE OF THE PRESENCE OF OVERHEAD UTILITIES WITHIN THE WORK ZONE AND SHALL PLAN ALL CONSTRUCTION ACCORDINGLY. NO ADDITIONAL PAYMENT WILL BE MADE FOR EQUIPMENT AND METHODS REQUIRED TO ACCOMMODATE THE OVERHEAD UTILITIES.
9. NO SEPARATE PAYMENT WILL BE MADE FOR TEMPORARY EARTH SUPPORT. SHOULD THE CONTRACTOR USE ANY TEMPORARY EARTH SUPPORT STRUCTURES, THE COST SHALL BE CONSIDERED INCIDENTAL TO THE CORRESPONDING ITEMS OF WORK.
10. THERE SHALL BE NO PARKING OR STORING OF CONSTRUCTION EQUIPMENT UNDER THE DRIPLINE OF ANY TREE.
11. THERE ARE NO DESIGNATED CONCRETE WASHOUT AREAS WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER TO EITHER DESIGNATE AN AREA WITHIN THE PROJECT LIMITS OR TO ENSURE THAT THE CONCRETE WASHOUT IS BEING PERFORMED OFFSITE.
12. CONTRACTOR TO EXCAVATE TEST PITS IN AREAS OF POTENTIAL UTILITY CONFLICTS AND RELAY INFORMATION TO THE ENGINEER PRIOR TO COMMENCEMENT OF UTILITY WORK.
13. WETLANDS WERE FLAGGED BY PARE ON JULY 16, 2020 AND SURVEYED BY MARTINEZ COUCH & ASSOCIATES. THE FOLLOWING GPS-LOCATED POINTS WERE OBTAINED BY PARE AS SUPPLEMENT TO THE SURVEY. THIS WAS DONE FOR FLAGS A-2 TO A-4, R107, R108, R110, SM-8, C1, P103.
14. ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP FOR BRISTOL COUNTY, RHODE ISLAND (COMMUNITY PANEL 44005C0112J, EFFECTIVE DATE SEPTEMBER 4, 2013), THE SITE IS LOCATED WITHIN THE 100-YEAR FLOODPLAIN ASSOCIATED WITH ALMY CREEK AND NONQUIT POND. NONQUIT POND IS MAPPED AS ZONE AE, SUBJECT TO WAVE ACTION, WITH A BASE FLOOD ELEVATION OF 16 FEET. THE AREAS TO THE NORTHEAST AND NORTHWEST OF THE BRIDGE, THE BRIDGE ITSELF, AND THE ROADWAY ARE MAPPED AS ZONE AE WITH A BASE FLOOD ELEVATION OF 14 FEET. ALMY CREEK DOWNSTREAM OF THE BRIDGE IS MAPPED AS A COASTAL BARRIER RESOURCE AREA (D02) SYSTEM UNIT UNDER JURISDICTION OF THE USFWS. THE ALMY CREEK CHANNEL IS MAPPED AS A ZONE AE, COASTAL FLOOD ZONE SUBJECT TO WAVE ACTION, WITH A BASE FLOOD ELEVATION OF 16 FEET. THE AREA DOWNSTREAM OF THE BRIDGE IS MAPPED AS ZONE AE, COASTAL FLOOD ZONE SUBJECT TO WAVE ACTION, WITH A BASE FLOOD ELEVATION OF 15 FEET.

JOB SPECIFIC GUARDRAIL REPLACEMENT NOTES:

1. NEW GUARDRAIL AND GUARDRAIL INSTALLATIONS SHALL MEET THE 2016 MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. THE APPROXIMATE LOCATION AND LENGTH OF PARTIAL AND COMPLETE GUARDRAIL REMOVAL AND REPLACEMENT ARE SHOWN IN THE REFERENCE DRAWINGS. PRIOR TO DISMANTLING ANY SECTION OF THE GUARDRAIL, THE CONTRACTOR SHALL VERIFY THESE LOCATIONS AND LENGTHS WITH THE ENGINEER. ALL GUARDRAIL SECTIONS THAT ARE TO BE REMOVED SHALL BE REPLACED THE SAME DAY. IF SAME DAY REPLACEMENT IS NOT POSSIBLE, THE CONTRACTOR SHALL PROVIDE CONCRETE BARRIERS WITH FLARE OUTSIDE THE CLEAR ZONE OR CRASH CUSHION. PLACEMENT AND REMOVAL OF CONCRETE BARRIER SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL REPLACEMENT, THEREFORE THERE IS NO SEPARATE PAYMENT.
3. THE CONTRACTOR SHALL NOT INSTALL GUARDRAIL POSTS WITHIN PAVED WATERWAYS, ON TOP OF DRAIN LINES, OR ON TOP OF BOX CULVERTS. WHERE NECESSARY, POST SPACING SHALL BE ADJUSTED TO AVOID CONFLICTS, PROVIDED MINIMUM DEFLECTION REQUIREMENTS ARE STILL MET. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO INSTALL STEEL BEAM GUARDRAIL POSTS ON EITHER SIDE OF AN OBSTRUCTION THAT IS LESS THAN SIX (6) FEET WIDE USING THE NORMAL 6'-3" POST SPACING. THIS MAY REQUIRE THAT THE GUARDRAIL INSTALLATION IS STARTED AT THE OBSTRUCTION AND CONTINUED IN EITHER DIRECTION AWAY FROM THE OBSTRUCTION TO THE DESIRED LENGTH SHOWN ON THE PLANS AND SPECIFIED IN THE CONTRACT DOCUMENTS.
4. THE CONTRACTOR SHALL NOTE THAT THE REQUIRED INSTALLATION OF REFLECTORIZED DELINEATORS ON ALL GUARDRAIL AND GUARDRAIL END TREATMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE GUARDRAIL ITEM. NO SEPARATE PAYMENT WILL BE MADE FOR THE REFLECTORIZED DELINEATORS. DELINEATION STICKERS ARE ALSO REQUIRED ON ALL APPROACH END SECTIONS, AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE END TREATMENT.
5. WHERE EXISTING GUARDRAIL POSTS ARE REMOVED AND NO NEW GUARDRAIL IS INSTALLED, THE POST HOLES SHALL BE FILLED WITH COMMON BORROW. PLANTABLE SOIL AND SEED SHALL BE SPREAD ACROSS THE FILLED HOLES. HOLES SHALL BE FILLED WITH CONCRETE BITUMINOUS PATCH ON IMPERVIOUS SURFACES. THE COST OF THIS ITEM SHALL BE INCIDENTAL TO ITEM CODE 201.0415 REMOVE AND DISPOSE GUARDRAIL AND POST ALL TYPES.
6. THERE WILL BE NO DIRECT PAYMENT FOR ANY HARDWARE, UNLESS OTHERWISE NOTED, REQUIRED TO PROPERLY COMPLETE THE INSTALLATION OF GUARDRAIL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, STANDARD DETAILS, OR SPECIAL DETAILS CONTAINED IN THE CONTRACT. HARDWARE SHALL INCLUDE ALL NUTS, BOLTS, AND WASHERS.

JOB SPECIFIC EROSION CONTROL NOTES:

1. BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS MUST BE USED AND MAINTAINED IN EFFECTIVE OPERATIONAL CONDITION DURING THE ACTIVITY, AND ALL EXPOSED SOIL AND OTHER FILLS MUST BE PERMANENTLY STABILIZED AT THE EARLIEST POSSIBLE DATE. (SEE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" ("RISESC HANDBOOK") AND THE LATEST VERSION OF THE "RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL ("RISDIS MANUAL") FOR DESIGN GUIDANCE AND ADDITIONAL REQUIREMENTS".)
2. NO ACTIVITY SHALL RESULT IN SEDIMENT TRANSPORT TO WETLANDS AND/OR WATERWAYS.
3. NO EQUIPMENT SHALL BE PLACED IN ANY WATERCOURSE OR WETLAND FOR THE PURPOSE OF THE WORK, UNLESS AUTHORIZED BY THE GOVERNING AUTHORITY. ANY MATERIAL REMOVED FROM THE STRUCTURE DURING THE REPAIR SHALL BE DISPOSED PROPERLY OFFSITE.
4. EXCEPT AS PROVIDED FOR BY PAY ITEMS, ALL WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
5. PROPER CONTAINMENT MEASURES SUCH AS NETTING, TARP OR OTHER METHODS MUST BE USED TO PREVENT BRIDGE DEMOLITION DEBRIS AND ANY OTHER MATERIAL FROM ENTERING THE WATERWAY. DEBRIS AND OTHER MATERIAL THAT DOES ENTER THE WATERWAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.

JOB SPECIFIC CONSTRUCTION ACTIVITY NOTES:

1. ALL WETLAND FUNCTIONS AND VALUES MUST BE PROTECTED TO THE MAXIMUM EXTENT POSSIBLE SO AS TO PREVENT POLLUTANTS, SEDIMENT, DIRECT DISCHARGE OF STORMWATER RUNOFF, OR ANY MATERIAL FOREIGN TO A WETLAND OR HAZARDOUS TO LIFE, FROM ENTERING ANY WETLAND.
2. STATE AND LOCAL PERMITTING AGENCIES MAY REQUIRE A WORK PLAN PRIOR TO THE ISSUANCE OF A PERMIT.
3. NO CONCRETE WASHOUT AREAS WILL BE PERMITTED WITHIN 150 FEET OF THE WATERBODIES.
4. ALL CONSTRUCTION ACTIVITIES MUST STRICTLY ADHERE TO THE CONTRACT DOCUMENTS REGARDING THE PROTECTION OF ESSENTIAL FISH HABITAT, MIGRATORY BIRDS, NORTHERN LONG-EARED BAT, AND NORTHERN DIAMONDBACK TERRAPIN.
5. THE CONTRACTOR SHALL ALLOW ACCESS TO THE FISH LADDER AT ALL TIMES DURING CONSTRUCTION.
6. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE EXISTING DRY HYDRANTS AT ALL TIMES DURING CONSTRUCTION.

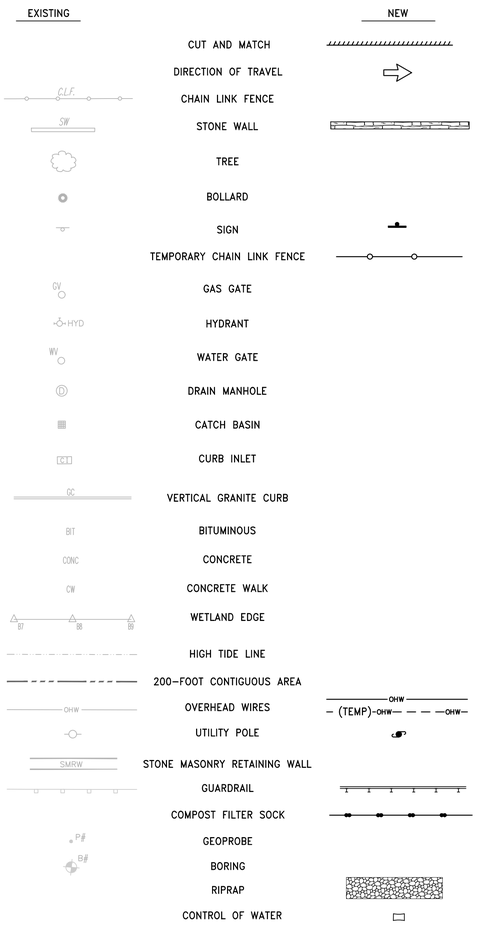
GENERAL NOTE REGARDING TEMPORARY CONSTRUCTION CONDITIONS :

1. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE THE EXISTING PAVEMENT DURING THE INSTALLATION AND RELOCATION OF TEMPORARY BARRIERS.

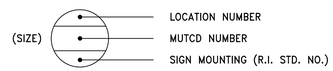
JOB SPECIFIC VERIZON UTILITY NOTES:

1. A RADIAL CLEARANCE OF THREE FEET (3') MUST BE MAINTAINED BETWEEN VERIZON'S AERIAL EQUIPMENT (CABLES, TERMINALS, POLES, ETC) IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS. THIS INCLUDES TRAFFIC SIGNAL AND CONSTRUCTION EQUIPMENT.... EITHER TEMPORARY OR PERMANENT. PLEASE REFER TO R.I.D.O.T. DOCUMENT TAC-0049 FOR ADDITIONAL INFORMATION.

JOB SPECIFIC PLAN SYMBOLS



TYPICAL SIGN DESIGNATION SYMBOL



JOB SPECIFIC LEGEND:

- (CFS) COMPOST FILTER SOCK (SEE DETAILS)
- (DFP) DISPOSE FLEXIBLE PAVEMENT
- (ETR) EXISTING TO REMAIN
- (ETEA) GUARDRAIL END TERMINAL – ENERGY ABSORBING (MASH TL-3)
- (FDS) FULL DEPTH SAWCUT OF BITUMINOUS PAVEMENT
- (GD-1) GUARDRAIL END DELINEATOR – RED (SEE DETAILS)
- (GD-2) GUARDRAIL END DELINEATOR – GREEN (SEE DETAILS)
- (GRT) GUARDRAIL TRANSITION (BRIDGE BARRIER TO STD. GUARDRAIL)
  THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 901.9902 GUARDRAIL "STEEL BEAM SINGLE FACE R.I. STD. 34.2.0M (MASH TL-3) (MODIFIED)" (SEE DETAILS)
- (P) FULL DEPTH RECONSTRUCTION – ROADWAY
  2" MODIFIED CLASS 12.5 HMA
  5" CLASS 19.0 HMA
  12" GRAVEL BORROW SUBBASE
  ASPHALT EMULSION TACK COAT BETWEEN LAYERS
- (PMG) PLACEMENT OF MILLINGS BENEATH GUARDRAIL TO A MINIMUM DEPTH OF 5"
- (R&D) REMOVE AND DISPOSE
- (TUP) TEMPORARY UTILITY POLE (BY OTHERS)

R.I. STD. DETAILS:

- (8.1.0) SEEDED DITCH
- (8.3.0M) RIPRAP DITCH (MODIFIED)(SEE DETAILS)
- (26.1.0) FLUORESCENT TRAFFIC CONES
- (29.1.0) CONSTRUCTION SIGNS

PARE

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE: AUGUST 2023
SHEET: 5
OF: 45

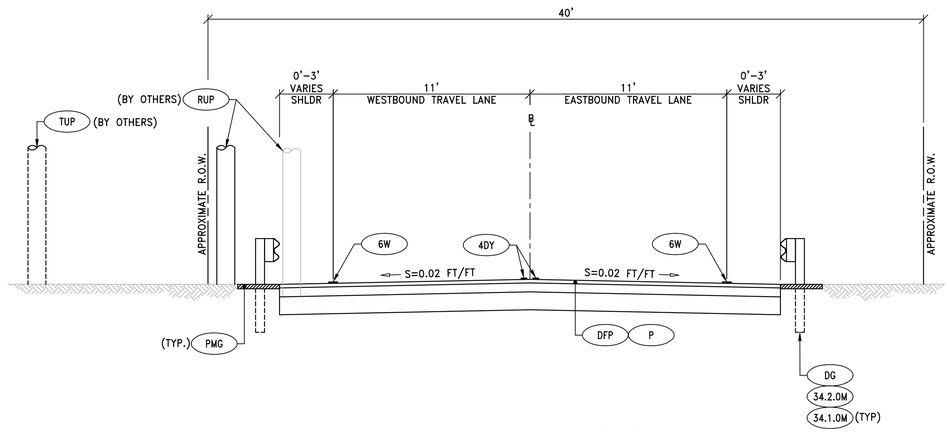
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

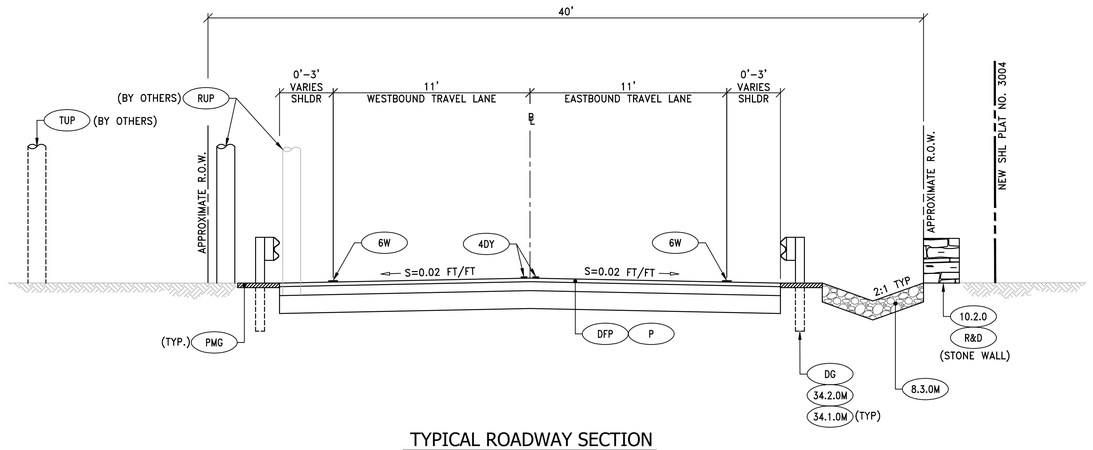
JOB SPECIFIC
PLAN SYMBOLS, LEGEND & NOTES

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	6	24



TYPICAL ROADWAY SECTION

STA: 11+14 TO STA: 11+84



TYPICAL ROADWAY SECTION

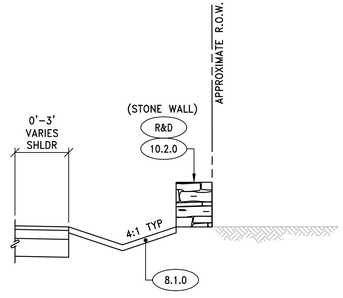
STA: 12+72 TO STA: 14+25

PAVEMENT STUCTURE:

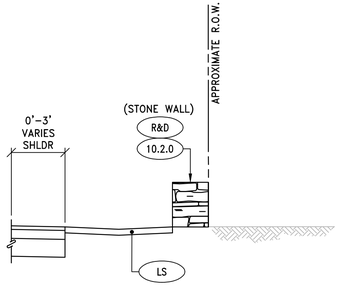
THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 961.9902 GUARDRAIL "STEEL BEAM SINGLE FACE R.I. STD. 34.2.0M (MASH TL-3) (MODIFIED)" (SEE DETAILS)

(P) FULL DEPTH RECONSTRUCTION - ROADWAY

2" MODIFIED CLASS 12.5 HMA
5" CLASS 19.0 HMA



STA: 13+15 RT TO STA: 13+75 RT



STA: 13+75 RT TO STA: 14+25

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RHODE ISLAND DEPARTMENT OF TRANSPORTATION

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SHEET: 6
OF: 45

Scale: 1"=4'
0 2' 4' 8'

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NO.	DATE	BY	NO.	DATE	BY

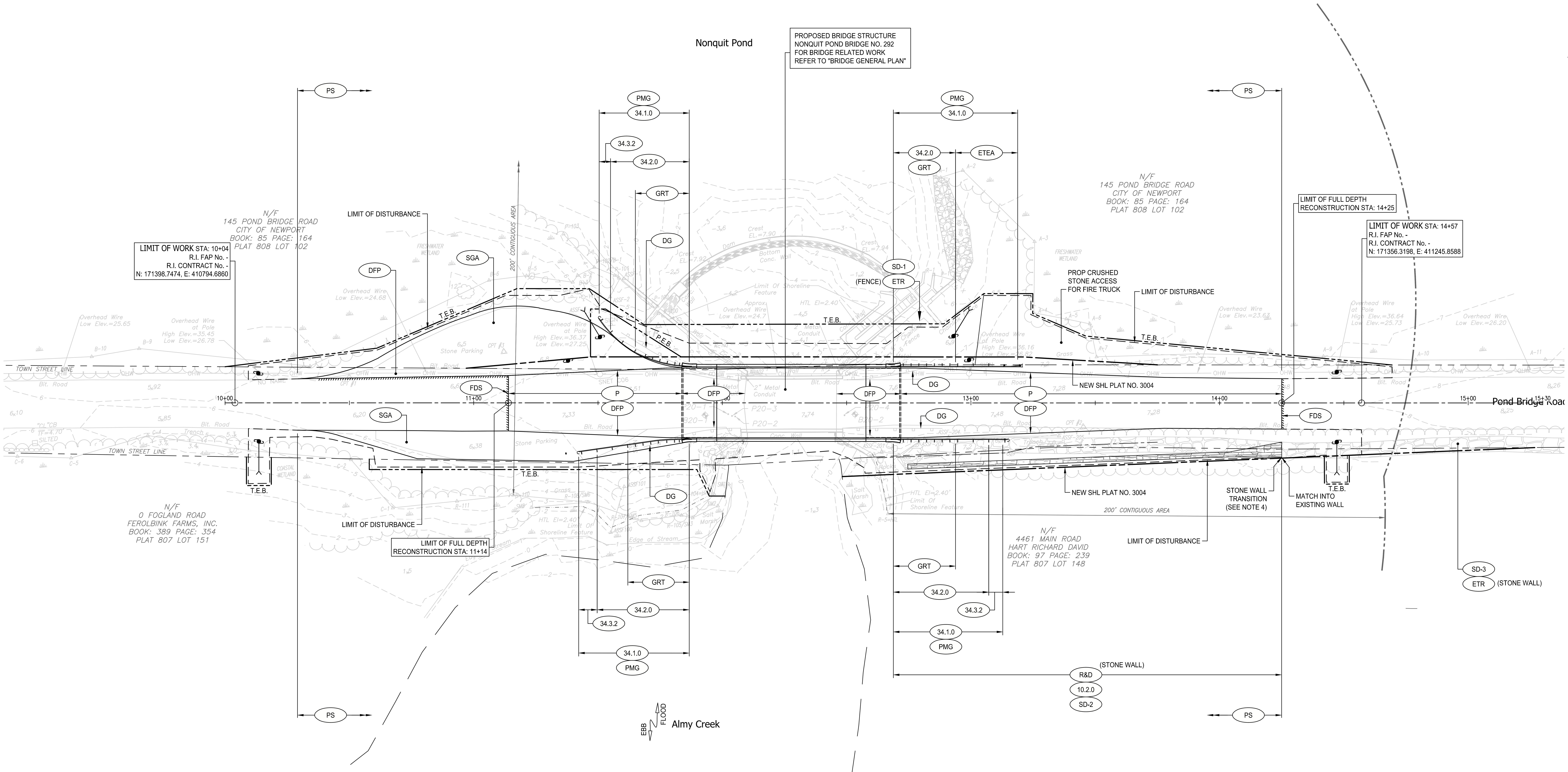
REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

TYPICAL SECTION

Z:\JOBS\20_Jobs\220686.01 RIDOT Nonquit Pond Bridge No. 292\Dwgs\000000_V1-MS_TYPICAL001.dwg

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	7	24



NOTES

1. IN ENVIRONMENTALLY SENSITIVE AREAS THAT REQUIRE CONTROL OF WATER, MEASURES USED TO CONTROL THE WATER SHOULD BE REMOVED UPON COMPLETION OF WORK IN THAT AREA.
2. CONTRACTOR TO USE MAXIMUM 60 LB. SANDBAGS ACROSS SALT MARSH.
3. CONTRACTOR SHALL NOT DISTURB OR ENCROACH ON SALTMARSH OTHER THAN TO PLACE AND REMOVE CONTROL OF WATER MEASURES.
4. THE TRANSITION FROM EXISTING STONE WALL TO THE NEW STONE WALL SHALL BE CONSIDERED INCIDENTAL TO ITEM 912.0100 "REMOVE, REBUILD DRY STONE WALLS RUBBLE STD 10.2.0".
5. THE ENTIRE WORK AREA IS WITHIN JURISDICTIONAL AREA AND BUFFER ZONE OF CRMC FRESHWATER WETLANDS IN THE VICINITY OF THE COAST.

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PARE

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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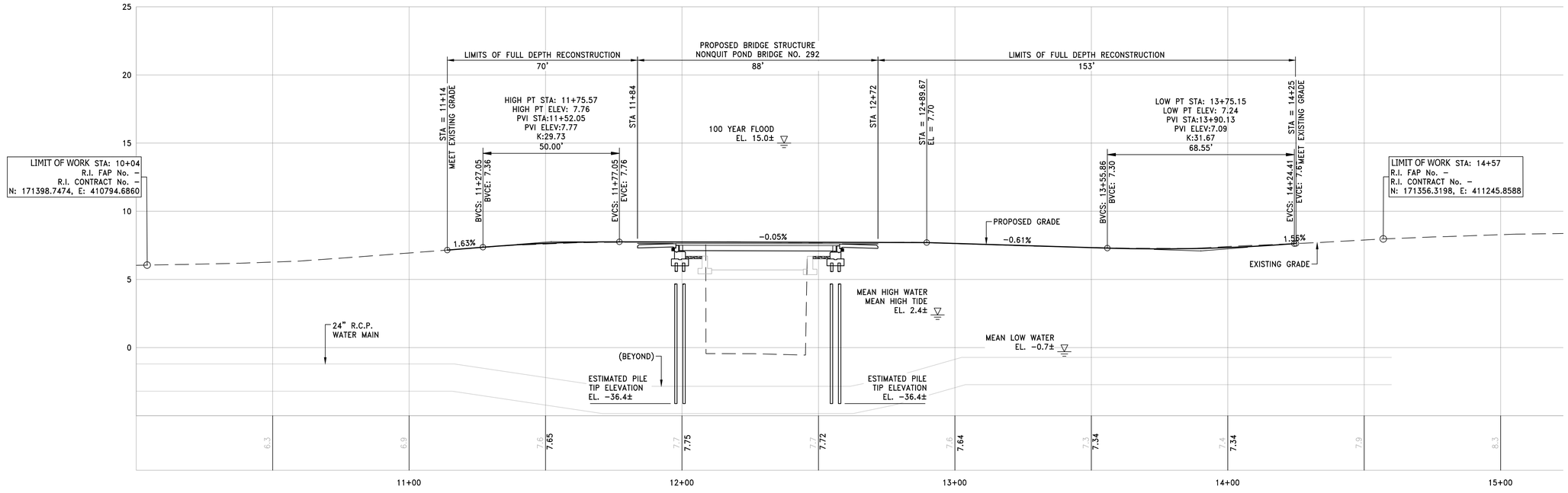
SHEET: 7
OF: 45

Scale: 1"=20'

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292
TIVERTON RHODE ISLAND
GENERAL PLAN

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	8	24



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DEPARTMENT OF TRANSPORTATION

DESIGNED BY:	
CHECKED BY:	
DATE:	AUGUST 2023
SHEET:	8
OF:	24

Vertical: 0 2' 4' 8'
Horizontal: 0 10' 20' 40'

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NO.	DATE	BY	NO.	DATE	BY

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

ROADWAY PROFILE

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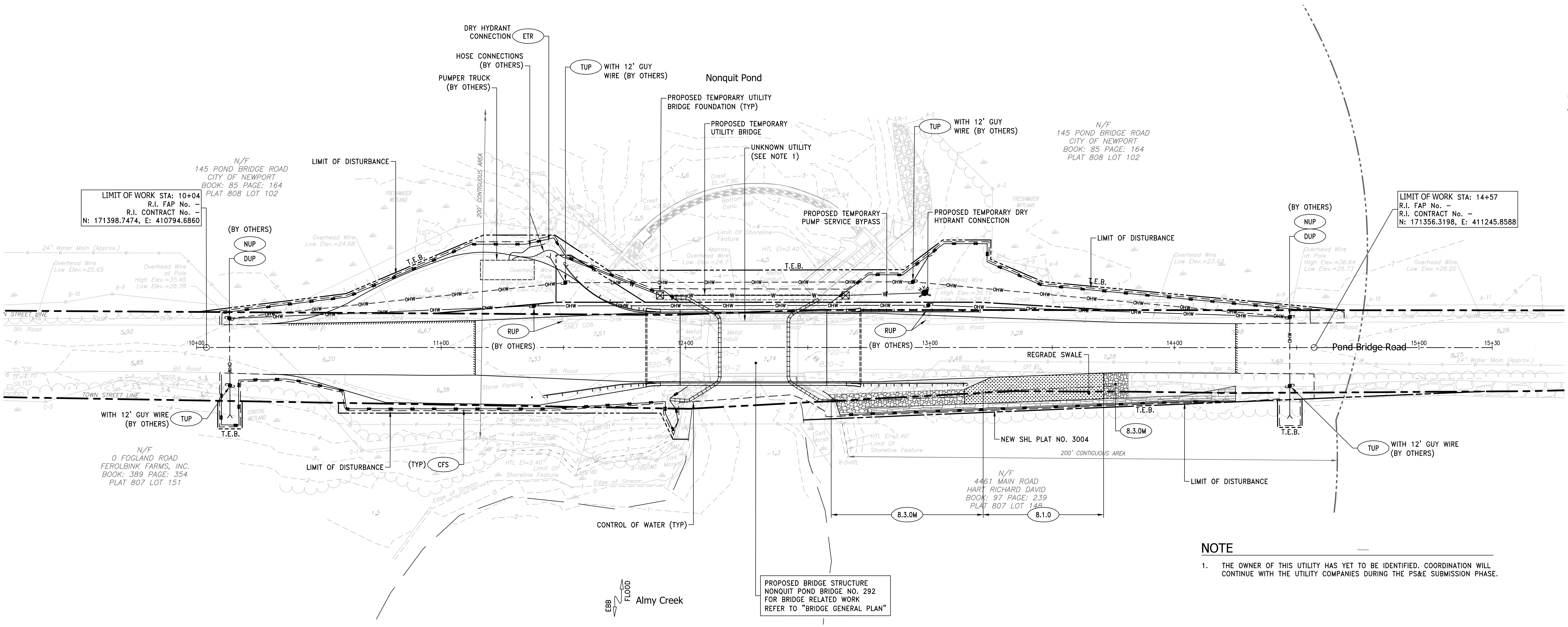
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	9	24



NOTE

1. THE OWNER OF THIS UTILITY HAS YET TO BE IDENTIFIED. COORDINATION WILL CONTINUE WITH THE UTILITY COMPANIES DURING THE PS&E SUBMISSION PHASE.

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PARE

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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SHEET: 9
OF: 24

Scale: 1"=20'
0 10' 20' 40'

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

DRAINAGE AND UTILITY

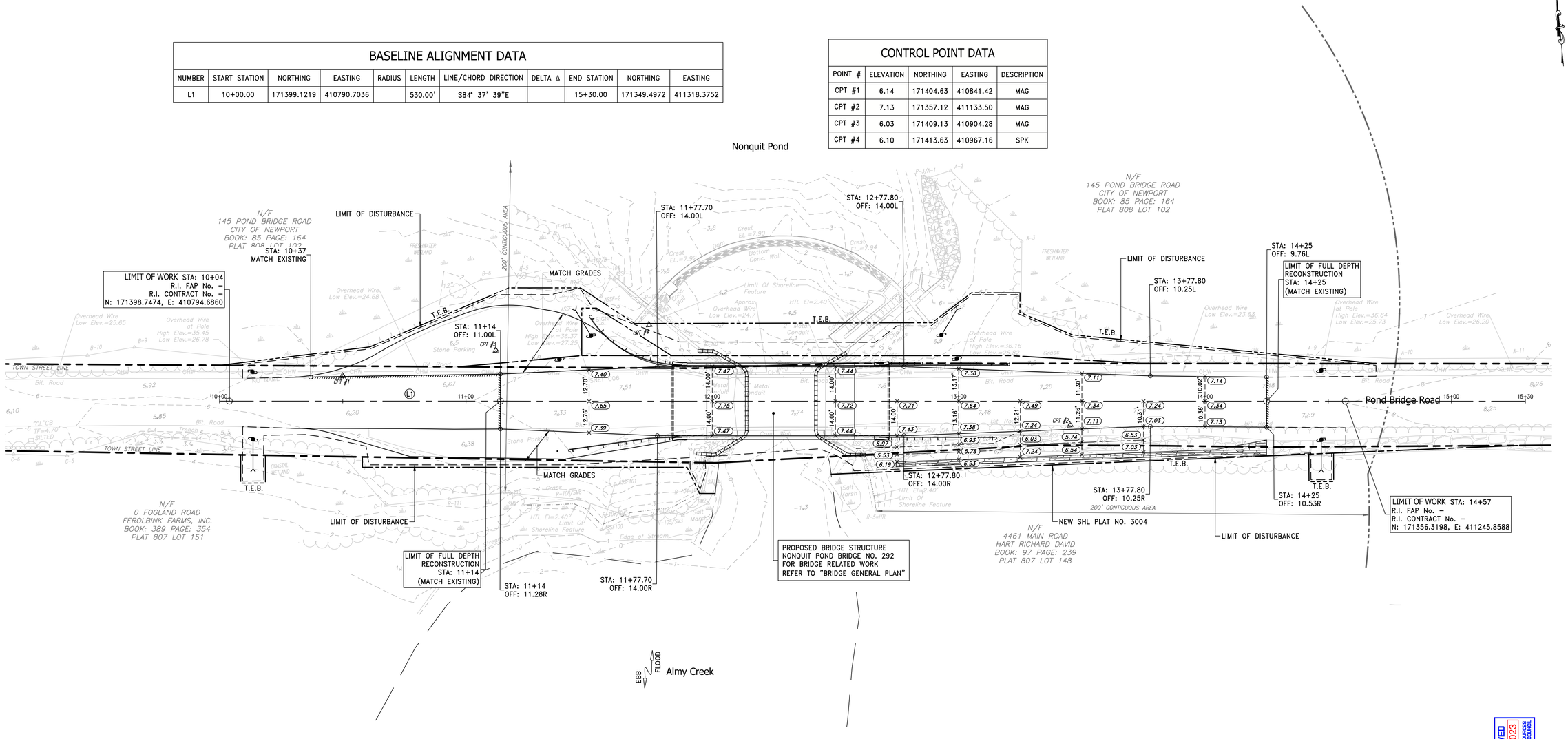
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	10	24

BASELINE ALIGNMENT DATA

NUMBER	START STATION	NORTHING	EASTING	RADIUS	LENGTH	LINE/CHORD DIRECTION	DELTA Δ	END STATION	NORTHING	EASTING
L1	10+00.00	171399.1219	410790.7036		530.00'	S84° 37' 39"E		15+30.00	171349.4972	411318.3752

CONTROL POINT DATA

POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION
CPT #1	6.14	171404.63	410841.42	MAG
CPT #2	7.13	171357.12	411133.50	MAG
CPT #3	6.03	171409.13	410904.28	MAG
CPT #4	6.10	171413.63	410967.16	SPK



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DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
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OF: 24

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0 10' 20' 40'

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REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

GRADE AND LOCATION PLAN

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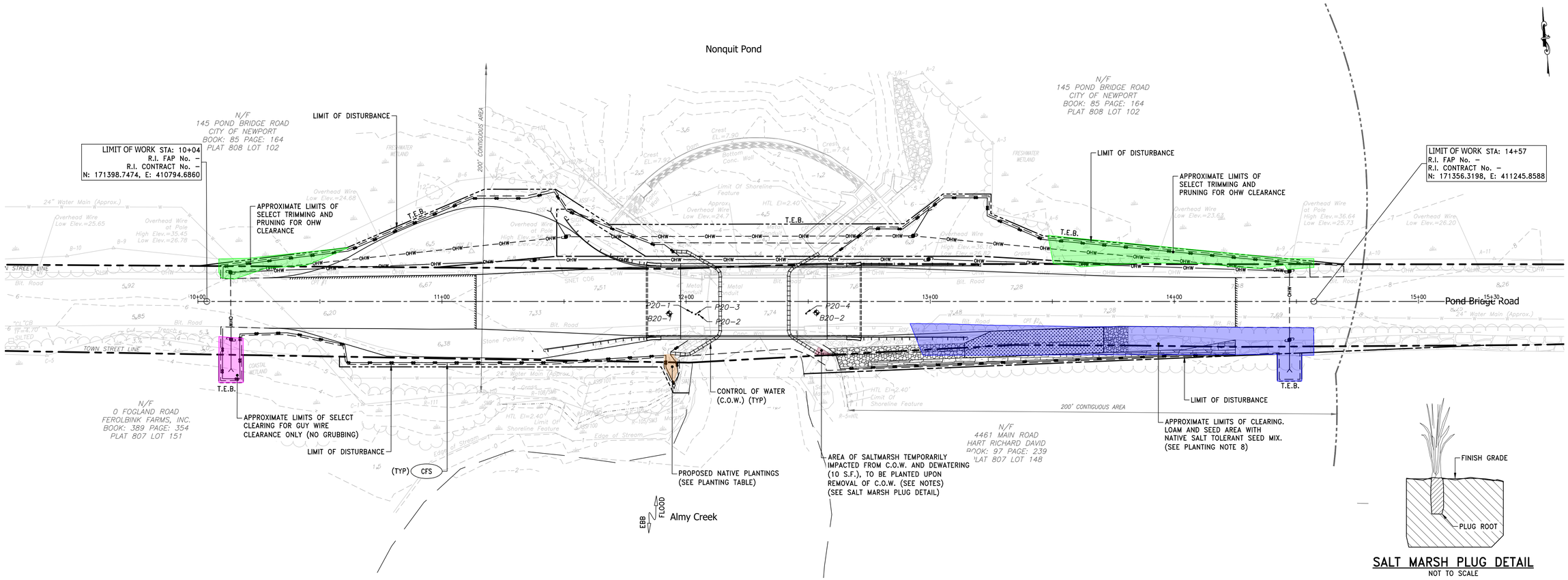
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	11	24



SALT MARSH PLUG DETAIL
NOT TO SCALE

GENERAL VEGETATION REMOVAL NOTES:

1. VEGETATION CLEARING, TRIMMING AND PRUNING MUST BE PERFORMED DURING THE FOLLOWING TIME-OF-YEAR WINDOWS:

   SEP 1– FEB 28 (DURING MIGRATORY BIRD NON-BREEDING SEASON), AND
   NOV 1– MAR 31 (DURING NLEB INACTIVE SEASON)

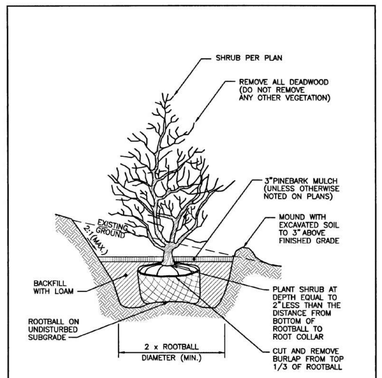
2. IF VEGETATION REMOVAL CANNOT BE PERFORMED DURING THE SPECIFIED TIMEFRAMES, THE CONTRACTOR SHALL NOTIFY RIDOT NRU IMMEDIATELY TO EVALUATE PRIOR TO COMMENCEMENT OF ACTIVITIES.

NORTHERN LONG-EARED BAT (NLEB) NOTES:

1. GENERAL AVOIDANCE AND MINIMIZATION MEASURE (AMM) 1: ALL OPERATORS, EMPLOYEES, AND CONTRACTORS WORKING IN AREAS OF KNOWN OR PRESUMED BAT HABITAT ARE AWARE OF ALL FHWA/FRA/FTA (TRANSPORTATION AGENCIES) ENVIRONMENTAL COMMITMENTS, INCLUDING ALL APPLICABLE AVOIDANCE AND MINIMIZATION MEASURES.
2. TREE REMOVAL AMM 1: ALL PHASES/ASPECTS OF THE PROJECT (E.G., TEMPORARY WORK AREAS, ALIGNMENTS) WILL BE MODIFIED, TO THE EXTENT PRACTICABLE, TO AVOID TREE REMOVAL IN EXCESS OF WHAT IS REQUIRED TO IMPLEMENT THE PROJECT SAFELY.
3. TREE REMOVAL AMM 2: TIME OF YEAR RESTRICTIONS WILL BE APPLIED FOR TREE REMOVAL WHEN BATS ARE NOT LIKELY TO BE PRESENT (INACTIVE SEASON NOV 1– MAR 1).
4. TREE REMOVAL AMM 3: TREE REMOVAL WILL BE LIMITED TO THAT SPECIFIED ON THIS PLAN SHEET AND ENSURE THAT CONTRACTORS UNDERSTAND CLEARING LIMITS AND HOW THEY ARE MARKED IN THE FIELD (E.G., INSTALL BRIGHT COLORED FLAGGING/FENCING PRIOR TO ANY TREE CLEARING TO ENSURE CONTRACTORS STAY WITHIN CLEARING LIMITS).
5. TREE REMOVAL AMM 4: THE PROJECT WILL AVOID CUTTING DOWN/REMOVAL OF ALL (1) DOCUMENTED INDIANA BAT OR NLEB ROOSTS (THAT ARE SUITABLE FOR ROOSTING), (2) TREES WITHIN 0.25 MILES OF ROOSTS, AND (3) DOCUMENTED FORAGING HABITAT ANY TIME OF YEAR.
6. REFER TO PARAGRAPH 19 OF GENERAL PROVISIONS – CONTRACT SPECIFIC

PLANTING NOTES:

1. THE INTENT OF THE PLAN IS TO PROVIDE NATIVE VEGETATION IN THE DISTURBED AREAS.
2. THE PROPOSED NATIVE VEGETATION AREA SOUTHWEST OF THE BRIDGE IS APPROXIMATELY 55 SQUARE FEET.
3. CONTRACTOR TO COORDINATE WITH RIDOT NATURAL RESOURCES UNIT (NRU) AND ONSITE ENGINEER TO IDENTIFY APPROPRIATE LOCATIONS FOR SHRUB PLANTINGS.
4. GRADING AND EXCAVATION AROUND EXISTING ROOTS TO REMAIN SHALL BE UNDERTAKEN WITH CARE TO AVOID DISTURBANCE TO THE EMBANKMENT SLOPE.
5. ALL PLANTING SHALL BE CONDUCTED IN ACCORDANCE WITH RIDOT BLUE BOOK STANDARDS, SECTION L.06.03.2.
6. PLANT MATERIAL SHALL CONFORM TO THE SIZES AND TYPES SPECIFIED ON THE PLANTING TABLE. IN THE EVENT THAT SPECIFIED PLANT MATERIALS ARE NOT AVAILABLE, APPROPRIATE SUBSTITUTIONS MAY BE ALLOWED WITH RIDOT NRU APPROVAL.
7. VEGETATION IN THE NATIVE PLANTING AREA, INCLUDING GROUND COVER, SHALL NOT BE CUT OR REMOVED, UNLESS FOR THE PURPOSE OF INVASIVE SPECIES REMOVAL.
8. LOAM AND SEED ALL DISTRUBED AREAS WITH NATIVE COASTAL SALT TOLERANT SEED MIX.
9. SEED MIX WILL CONSIST OF NATIVE SALT TOLERANT GRASS MIX WITH THE FOLLOWING SPECIES OR A SIMILAR MIX: CANADA WILD RYE (ELYMUS CANADENSIS), RED FESCUE (FESTUCA RUBRA), ATLANTIC COASTAL PANIC GRASS (PANICUM AMARUM), BIG BLUESTEM (ANDROPOGON GERARDII), INDIAN GRASS (SORGHASTRUM NUTANS), SWITCH GRASS (PANICUM VIRGATUM), PATH RUSH (JUNCUS TENUIS). SHOP DRAWING OF SEED MIX REQUIRED FOR APPROVAL.
10. SPARTINA ALTERNIFLORA PLUGS SHALL BE PLANTED 12" APART USING HAND TOOLS. PLUGS WILL BE PLANTED TO A DEPTH EQUAL TO THE BASE OF GRASS STEMS SUCH THAT NO ROOTS ARE EXPOSED.
11. THE CONTRACTOR SHALL NOT DISTURB OR ENCROACH ON SALT MARSH OTHER THAN TO PLACE AND REMOVE C.O.W. MEASURES.



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION L.06 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS NO.	BY	DATE

SHRUB PLANTING ON SLOPE

JUNE 15, 1998

R.I. STANDARD 50.3.2

PROPOSED PLANTING SCHEDULE

SPECIES	QUANTITY	SIZE	SPACING
SHRUBS			
WILD ROSE (ROSA VIRGINIANA)	4	1 GAL.	3–5' O.C., EL. 5–6
BAYBERRY (MORELLA PENSYLVANICA)	4	1 GAL.	3–5' O.C., EL. 3–5
MARSH ELDER (IVA FRUTESCENS)	5	1 GAL.	3–5' O.C., EL. 2.4–3
PLUGS			
SMOOTH CORDGRASS (SPARTINA ALTERNIFLORA)	10	12–18"	1' O.C.

PARE

RI DOT
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE: AUGUST 2023
SHEET: 11
OF: 24

Scale: 1"=20'
0 10' 20' 40'

REVISIONS NO.	DATE	BY	REVISIONS NO.	DATE	BY

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292
TIVERTON RHODE ISLAND

VEGETATION IMPACT AND LANDSCAPE PLAN

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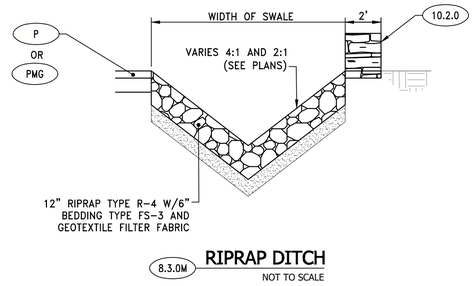
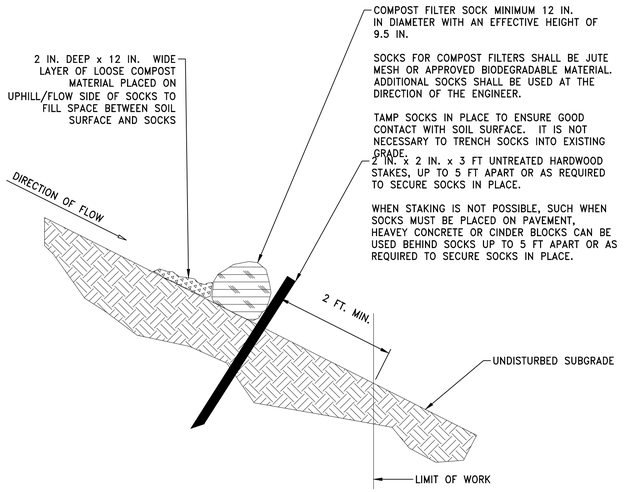
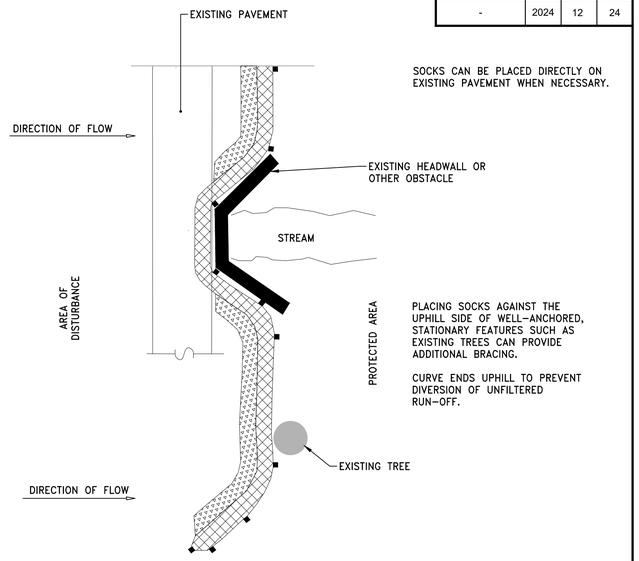
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	12	24

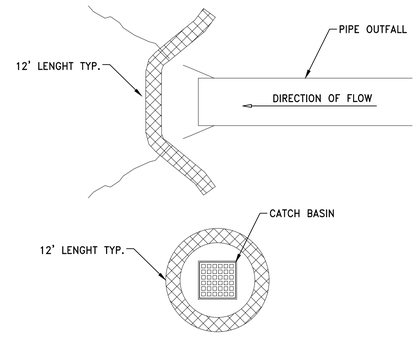


8.3.0M **RIPRAP DITCH**
NOT TO SCALE





PLAN VIEW



PROVIDE 3 FT. MINIMUM OVERLAP AT ENDS OF SOCKS TO JOIN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING SOCKS SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.

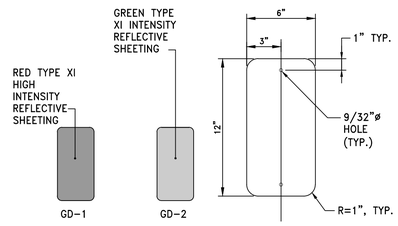
SECURES ENDS OF SOCKS WITH STAKES SPACED 18 IN. APART THROUGH TOPS OF SOCKS.

PLAN VIEW - JOIN DETAIL

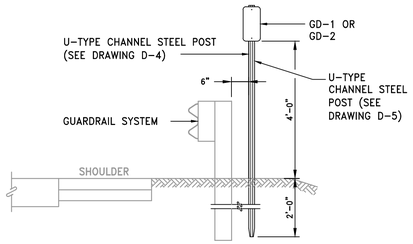
NOTES:

1. PROVIDE A MINIMUM SOCK DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER SOCK DIAMETER OR ADDITIONAL COURSING OF FILTER SOCKS TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL SOCKS ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE SOCKS AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.

CFS **COMPOST FILTER SOCK DETAIL**
NOT TO SCALE



DELINEATOR DETAIL



TYPICAL SHOULDER SECTION

NOTES:

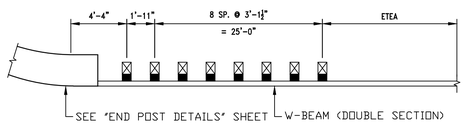
1. GUARDRAIL ENDS DELINEATOR GD-1 AND GD-2 SHALL BE USED TO MARK THE STARTS AND ENDS OF A LONGITUDINAL GUARDRAIL, AND SHALL BE INSTALLED IMMEDIATELY BEHIND GUARD RAIL TERMINAL ENDS (ALL TYPES) AS SHOWN ON THIS SHEET. THE HOLE SHALL BE THOROUGHLY PAINTED WITH TOUCH-UP GALVANIZING SPRAY PAINT PRIOR TO ATTACHING THE DELINEATOR POST.
2. WHEN SOUND ROCK IS ENCOUNTER BEFORE THE 2'-0" MINIMUM EMBEDDED DEPTH. POSTS SHALL BE SECURED A MINIMUM OF 12" INTO SOUND ROCK.
3. U-CHANNEL POST AND REFLECTOR SIZE AND HARDWARE SHALL MEET THE REQUIREMENTS OF "GROUND MOUNTED POST DETAILS AND NOTES" DRAWING NO. D-5 FOR SINGLE FACE REFLECTOR, WITH EXCEPTION OF THE COLOR OF THE REFLECTOR TO BE GREEN AND RED.
4. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 901.0193, "GUARDRAIL STEEL BEAM SINGLE FACE STD 34.2.0".

LEGEND

GD-1 GUARDRAIL END DELINEATOR – RED

GD-2 GUARDRAIL END DELINEATOR – GREEN

GD-# **GUARDRAIL END DELINEATOR DETAILS AND NOTES**
NOT TO SCALE



GRT **GUARDRAIL TRANSITION**
NOT TO SCALE

RECEIVED 10/19/2023 COASTAL RESOURCES MANAGEMENT COUNCIL

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RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:
CHECKED BY:
DATE: AUGUST 2023
SHEET: 12
OF: 24

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

DETAILS

Z:\JOBS\20 Jobs\20085.01 RIDOT Nonquit Pond Bridge No. 292\Dwg\100000_01_00_DETAILS001.dwg

GENERAL NOTES

1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
   - THE *2018* EDITION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
   - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, 9TH EDITION, 2020, INCLUDING THE LATEST INTERIM REVISIONS.
   - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
2. DIMENSIONS, STATIONS, AND ELEVATIONS ARE SHOWN TO THE NEAREST ONE-HUNDREDTH OF A FOOT OR ONE-EIGHTH OF AN INCH, EXCEPT STRUCTURAL STEEL DIMENSIONS WHICH ARE TO THE NEAREST ONE-SIXTEENTH OF AN INCH.
3. ALL ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF NAVD 88.
4. COORDINATES USED ON THESE PLANS ARE BASED ON THE STATEWIDE COORDINATE SYSTEM, THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
5. TOPOGRAPHIC CONDITIONS WERE OBTAINED FROM THE PLAN ENTITLED "EXISTING CONDITIONS PLAN; TOPOGRAPHIC/BOUNDARY SURVEY; NONQUIT POND ROAD BRIDGE; TIVERTON, RHODE ISLAND PREPARED BY MARTINEZ COUCH & ASSOCIATES; SEPT. 23, 2020; SCALE: 1"=20'.
6. FOR BENCH MARKS AND TIES, SEE HIGHWAY LOCATION PLANS.
7. ANGLES ARE SHOWN TO THE NEAREST SECOND.
8. ALL FOOTINGS AND PILE CAPS SHALL BE APPROVED BY THE ENGINEER AS TO DIMENSIONS, ELEVATIONS, AND SUITABILITY OF FOUNDATION MATERIAL BEFORE THE PLACING OF CONCRETE.
9. ALL WORKING POINTS ARE SHOWN AT THE CENTERLINES OF BEARINGS OF ABUTMENTS AND AT THE CENTERLINES OF PIERS, UNLESS OTHERWISE NOTED.
10. ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
11. THE EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND WERE LOCATED USING THE BEST AVAILABLE INFORMATION. NO BUILDING SERVICE CONNECTIONS (ELECTRIC, TELEPHONE, GAS, WATER, SANITARY AND OTHERS) ARE SHOWN. THE CONTRACTOR IS TO ASSUME THAT SERVICES TO ALL BUILDINGS ARE PRESENT.
12. BOTH FEDERAL AND STATE LAW (RI. GENERAL LAW 39-1.2) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES BEFORE DIGGING, TRENCHING, BLASTING, DEMOLISHING, BORING, BACK FILLING, GRADING, LANDSCAPING, OR OTHER EARTH MOVING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES (INCLUDING THROUGH THE "DIG SAFE" PROGRAM) TO ENSURE THAT ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "DIG SAFE" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANIES, SHALL BE REPAIRED OR REPLACED (AS DEEMED APPROPRIATE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY) AT NO ADDITIONAL COST TO THE STATE.

DESIGN DATA

1. **DESIGN SPECIFICATIONS**
   - THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020, INCLUDING ALL INTERIM REVISIONS TO DATE.
   - THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL 2008 EDITION INCLUDING ALL REVISIONS TO DATE.
   - ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2008.
   - THE 2018 REVISION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
   - IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN.

2. **LOAD MODIFIERS**

   THE LOAD MODIFIERS FOR THIS PROJECT ARE AS FOLLOWS:
   - THE LOAD MODIFIER FOR DUCTILITY SHALL BE TAKEN AS 1.0 FOR ALL LIMIT STATES.
   - THE LOAD MODIFIER FOR REDUNDANCY SHALL BE TAKEN AS 1.0 FOR ALL LIMIT STATES.
   - THE LOAD MODIFIER FOR OPERATIONAL IMPORTANCE SHALL BE TAKEN AS 1.0 FOR ALL LIMIT STATES.

3. **LOAD FACTORS**

   ALL LOAD FACTORS SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EXCEPT AS MODIFIED IN THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL (SPECIFIED BELOW).
   - THE LOAD FACTOR FOR TEMPERATURE GRADIENT SHALL BE TAKEN AS 0.0 FOR STRENGTH AND EXTREME LIMIT STATES, AND 0.5 OR 1.0 FOR SERVICE LIMIT STATES.
   - THE LOAD FACTOR FOR LIVE LOAD FOR THE EXTREME EVENT I SHALL BE TAKEN AS ZERO.
   - THE LOAD FACTOR FOR DEAD LOAD FOR THE EXTREME EVENT I AND EXTREME EVENT II SHALL BE TAKEN AS 1.0
   - THE LOAD FACTOR FOR SETTLEMENT FOR ALL LIMIT STATES SHALL BE TAKEN AS 1.0

4. **LIVE LOADS**
   - THE DESIGN VEHICULAR LIVE LOAD SHALL BE THE HL-93 DESIGNATION ADJUSTED FOR DYNAMIC LOAD ALLOWANCE, MULTIPLE PRESENCE FACTOR, AND AS REQUIRED BY TO ALL CONSULTANTS MEMO 347.

5. **FOUNDATION DESIGN DATA**

   DEEP FOUNDATIONS:

   THE FACTORED AXIAL AND UPLIFT RESISTANCES FOR THE VARIOUS DEEP FOUNDATION TYPES ARE AS FOLLOWS:

		FACTORED AXIAL RESISTANCE (KIPS)			
		GEOTECHNICAL		STRUCTURAL	
LOCATION	TYPE	STRENGTH LIMIT STATES	EXTREME LIMIT STATES	STRENGTH LIMIT STATES	EXTREME LIMIT STATES
ABUTMENT	10-$\frac{3}{4}$" O.D. MICROPILE	151	274	293	390
WINGWALL	10-$\frac{3}{4}$" O.D. MICROPILE	100	183	293	390

		FACTORED UPLIFT RESISTANCE (KIPS)	
LOCATION	TYPE	STRENGTH LIMIT STATES	EXTREME LIMIT STATES
PROJECT WIDE	10-$\frac{3}{4}$" O.D. MICROPILE	23	43

   - THE FACTORED DESIGN AXIAL RESISTANCE AT EACH LOCATION IS THE LESSER VALUE OF THE FACTORED GEOTECHNICAL AND THE FACTORED STRUCTURAL RESISTANCES INDICATED.
   - THE FACTORED GEOTECHNICAL AXIAL RESISTANCE FOR THE STRENGTH LIMIT STATE IS BASED ON THE NOMINAL AXIAL RESISTANCE AS DETERMINED USING THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, AND A RESISTANCE FACTOR OF 0.55.
   - THE FACTORED GEOTECHNICAL AXIAL RESISTANCE FOR THE EXTREME LIMIT STATE IS BASED ON THE NOMINAL AXIAL RESISTANCE AS DETERMINED USING THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, AND A RESISTANCE FACTOR OF 1.00.
   - THE FACTORED GEOTECHNICAL UPLIFT RESISTANCE FOR THE STRENGTH LIMIT STATE IS BASED ON THE NOMINAL UPLIFT RESISTANCE AS DETERMINED USING THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, AND A RESISTANCE FACTOR OF 0.55.
   - THE FACTORED GEOTECHNICAL UPLIFT RESISTANCE FOR THE EXTREME LIMIT STATE IS BASED ON THE NOMINAL UPLIFT RESISTANCE AS DETERMINED USING THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, AND A RESISTANCE FACTOR OF 1.00.

6. **WIND LOADING DESIGN DATA**

   THE WIND LOADING DESIGN SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL, AND AS MODIFIED HEREIN.
   - EXCEPT DURING CONSTRUCTION, THE DESIGN WIND PRESSURE IS BASED ON A DESIGN WIND SPEED OF 120 MPH.
   - THE DESIGN WIND PRESSURES DURING CONSTRUCTION SHALL BE AS SPECIFIED UNDER THE NOTES TITLED "GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS".

7. **TRAFFIC DATA**

   AADT (2021) 1,000 VEH
   AADT (2041) 1,100 VEH
   D 55/45
   T 1%
   DHV (2041) 99 VEH
   DESIGN SPEED 30 MPH

8. **HYDRAULIC AND SCOUR DATA**

DRAINAGE AREA	6.0 SQ. MI.
100-YEAR FLOOD EL. UPSTREAM OF BRIDGE	15.0

9. **DESIGN TIDAL INFORMATION (NAVD 88)**

MEAN HIGH TIDE WATER ELEVATION	=	2.4
MEAN HIGH WATER ELEVATION	=	2.4
MEAN LOW WATER ELEVATION	=	-0.7

   THE CONTRACTOR SHALL NOTE THAT HIGHER AND LOWER TIDES ARE POSSIBLE.

   THE HIGH TIDE LINE WAS SURVEYED IN THE FIELD ON 1/12/2021. FIELD OBSERVATIONS SHOW THAT MEAN HIGH TIDE AND MEAN HIGH WATER ELEVATIONS TO BE SIMILAR. THE TIDAL RANGE IS REFERENCED FROM RIDOT PLAN ENTITLED "BRIDGE REPLACEMENT, SEAPOWET BRIDGE, TIVERTON, RHODE ISLAND" CRMC FILE #1994-01-04.

10. **THERMAL DESIGN FORCE DATA**

   UNIFORM TEMPERATURE EFFECTS HAVE BEEN TAKEN INTO CONSIDERATION IN ACCORDANCE WITH THE PROCEDURE PROCEDURE B OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE MINIMUM DESIGN TEMPERATURE SHALL BE 0 DEGREES F, AND THE MAXIMUM TEMPERATURE SHALL BE 100 DEGREES F.

11. **SEISMIC DESIGN DATA**
   - THE SEISMIC ANALYSIS AND DESIGN SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL AND THE "GEOTECHNICAL INVESTIGATION AND FOUNDATION REPORT FOR THE RECONSTRUCTION OF THE NONQUIT POND BRIDGE NO. 029201" BY PARE CORPORATION, DATE NOVEMBER 2020.
   - THE COMBINATION OF SEISMIC FORCE EFFECTS IS IN ACCORDANCE WITH THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL.
   - THIS BRIDGE HAS BEEN CLASSIFIED AS NON-CRITICAL.
   - THE SITE HAS BEEN CLASSIFIED AS SITE CLASS C.
   - SCOUR AND LIQUEFACTION EFFECTS HAVE BEEN CONSIDERED IN THE SEISMIC ANALYSIS OF THIS BRIDGE.

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	14	24

MATERIALS

STEEL PILES:

- ASTM A252, GRADE 3 OR BETTER

STEEL PLATES:

- AASHTO M270, GRADE 50

REINFORCING STEEL:

- AASHTO DESIGNATION M 31, GRADE 60

PRESTRESSING STEEL:

- UNCOATED SEVEN WIRE LOW-RELAXATION STRAND, AASHTO DESIGNATION M 203, GRADE 270

CONCRETE STRENGTHS:

- CLASS HP ¾" f'c=8,000 PSI

  PRESTRESSED BEAMS

- CLASS HP ¾" f'c=5,000 PSI

  PARAPETS, BACKWALLS, END DIAPHRAGMS, ENDPOSTS, CLOSURE POURS, CURTAIN WALLS

- CLASS XX ¾" f'c=4,000 PSI

  APPROACH SLABS, ABUTMENT CAPS

- CLASS MC ¾" f'c=5,000 PSI

  ABUTMENT STEMS, WINGWALLS

- CLASS MC ¾" f'c=4,000 PSI

  PILE CAPS

- PATCHING MORTAR f'c=4,000 PSI

FOUNDATIONS

1. THE FURNISHING AND INSTALLING OF THE DEEP FOUNDATIONS TYPES SPECIFIED IN THIS CONTRACT SHALL BE IN ACCORDANCE WITH JOB SPECIFIC SPECIFICATIONS AND THE RI STANDARD SPECIFICATIONS .
2. REFER TO THE BORING LOGS SHOWN ON THE "SUBSURFACE EXPLORATION PLAN" AND "SUBSURFACE EXPLORATION LOGS" SHEETS FOR GEOTECHNICAL DATA.

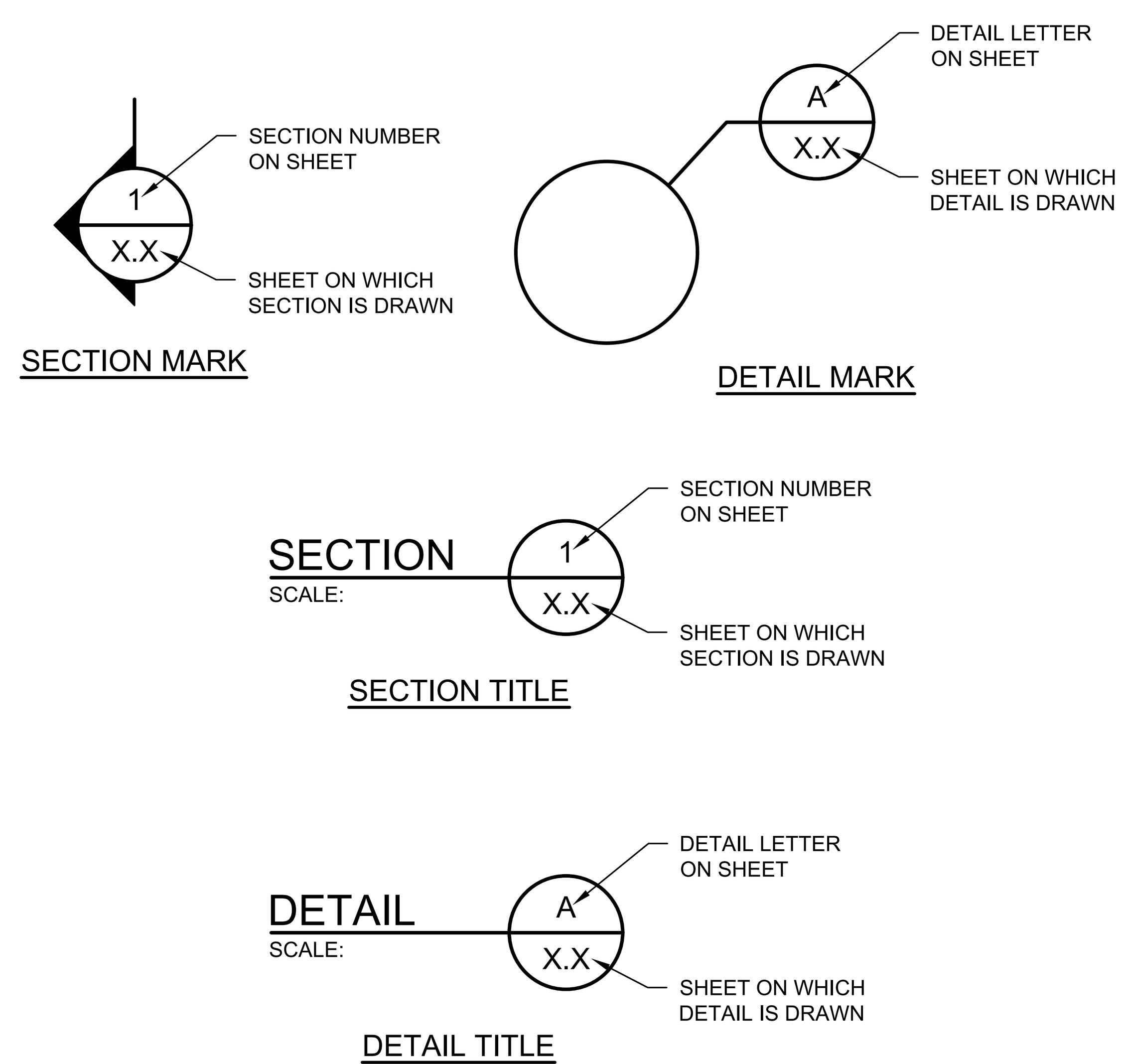
CONCRETE NOTES

1. CLASSES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP, CLASS MC, AND CLASS XX, AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. REFER TO THE "MATERIAL" NOTES FOR CLASSES OF CONCRETE SPECIFIED FOR VARIOUS COMPONENTS.
2. THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENGINEER, PROPOSE THE USE OF SELF-CONSOLIDATING CONCRETE FOR ANY CLASS OF CONCRETE ON THIS PROJECT. SECTION 606 "SELF CONSOLIDATING CONCRETE (SCC)", CONTAINS THE REQUIREMENTS FOR MODIFYING ALL CLASSES OF CONCRETE MIX DESIGN FOR SELF-CONSOLIDATING APPLICATIONS.
3. ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED.
4. ALL REINFORCING STEEL SHALL BE GALVANIZED. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF GALVANIZED REINFORCING SHALL ALSO BE GALVANIZED. GALVANIZED COATING FOR REINFORCING STEEL SHALL CONFORM TO ASTM A767 CLASS 1.
5. ALL CRITICAL LAP SPLICES SHALL BE AS SHOWN ON THE PLANS. ALL SPLICES NOT SHOWN ON THE PLANS SHALL BE LAPPED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR CLASS B LAP SPLICES.
6. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS)	3"
CONCRETE DIRECTLY EXPOSED TO SALT WATER	4"
ALL OTHER BARS	2"

7. COVER TO TIES AND STIRRUPS MAY BE 0.5 INCH LESS THAN THE ABOVE VALUES SPECIFIED FOR MAIN REINFORCING, BUT IN NO CASE LESS THAN 1.5 INCHES.
8. HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.

1.



SECTION & DETAIL DESIGNATIONS

LIST OF ABBREVIATIONS

A

ABUTMENT	= ABUT.
ALTERNATE	= ALT.
ANCHOR BOLT	= A.B.
AND	= &
APPROVED	= APPD.
APPROXIMATE	= APPROX.
AT	= @
AVERAGE	= AVG.

B

BACK TO BACK	= B TO B
BASELINE	= BL
BEAM	= BM.
BEARING	= BRG.
BETWEEN	= BTWN
BITUMINOUS	= BIT.
BOLT CIRCLE	= B.C.
BOTTOM	= BOT.
BUILDING	= BLDG.
BUILDING LINE	= B.L.

C

CENTER TO CENTER	= C TO C
CENTERLINE	= ℄
CIRCLE	= CIR.
CLASS I CONTROLLED LOW STRENGTH MATERIAL	= CLSM
CLEARANCE	= CL.
COLUMN	= COL.
CONCRETE	= CONC.
CONDUIT	= COND.
CONNECTION	= CONN.
CONSTRUCTION	= CONST.
CONTRACTION	= CONTR.
COUNTERSINK	= CSK.
COUPLING	= CPLG.

D

DETAIL	= DET.
DIAGONAL	= DIAG.
DIAMETER	= DIA.
DIAPHRAGM	= DIAPHM.
DIMENSION	= DIM.
DRAIN	= DR.
DRAWING	= DWG.

E

EACH	= EA.
EACH FACE	= E.F.
EACH WAY	= E.W.
EASTBOUND	= E.B.
ELEVATION	= EL.
EQUAL	= EQ.
EXISTING	= EXIST.
EXPANSION	= EXP.

F

FABRICATE	= FAB.
FACE TO FACE	= F TO F
FAR FACE	= F.F.
FAR SIDE	= F.S.
FLANGE	= FLG.
FLAT HEAD	= F.H.
FOOTING	= FTG.
FOUNDATION	= FDN.
FURNISH, FABRICATE & ERECT	= F.F. & E.

G

GAGE	= GA.
GALVANIZE	= GALV.
GRADE	= GR.
GRATING	= GRTG.
GROUND	= GND.

H

HEIGHT	= HGT.
HEXAGON	= HEX.
HIGH POINT	= HP
HORIZONTAL	= HORIZ.

I

INCH	= IN.
INFORMATION	= INFO.
INSIDE DIAMETER	= I.D.
INVERT	= INV.

J

JOINT	= JT.

L

LENGTH	= LGTH. OR LEN
LIGHTING	= LTG.
LOAD AND RESISTANCE FACTOR DESIGN	= LP
LONG	= LG.
LOW POINT	= LP

M

MATERIAL	= MATL.
MAXIMUM	= MAX.
MEAN HIGH WATER	= M.H.W.
MEAN SEA LEVEL	= M.S.L.
MINIMUM	= MIN.
MISCELLANEOUS	= MISC.

N

NEAR FACE	= N.F.
NEAR SIDE	= N.S.
NORTHBOUND	= N.B.
NORTHBOUND	= N.B.
NORTHEAST EXTREME TEE	= NEXT
NOT TO SCALE	= N.T.S.
NUMBER	= NO.

O

ON CENTER	= O.C.
OPENING	= OPNG.
OPTIONAL	= OPT.
OUTSIDE DIAMETER	= O.D.

P

PLATE	= PL
POINT OF CURVATURE	= P.C.
POINT OF TANGENCY	= P.T.
POINT OF VERTICAL CURVATURE	= P.V.C.
POINT OF VERTICAL INTERSECTION	= P.V.I.
POINT OF VERTICAL TANGENCY	= P.V.T.
POLYVINYL CHLORIDE	= PVC
POUNDS PER SQUARE FOOT	= P.S.F.
POUNDS PER SQUARE INCH	= P.S.I.

R

RADIUS	= RAD.
RAILROAD	= RR
REHABILITATION	= REHAB.
REINFORCING	= REINF.
REMOVE & DISPOSE	= R & D
REMOVE & STOCKPILE	= R & S
REQUIRED	= REQD.

S

SCHEDULE	= SCH.
SCHEMATIC	= SCHEM.
SECTION	= SECT.
SHEET	= SH.
SIDEWALK	= SW
SOUTHBOUND	= S.B.
SPACES	= SP.
STATION	= STA.
STAY IN PLACE	= S.I.P.
SYMMETRICAL	= SYM.

T

TOP	= T
TOP AND BOTTOM	= T&B
TOP OF WALL	= T.O.W.
TYPICAL	= TYP.

V

VARIES	= VAR.
VERTICAL	= VERT.
VERTICAL CURVE	= V.C.

W

WELDED WIRE FABRIC	= W.W.F.
WESTBOUND	= W.B.
WIDE FLANGE	= W
WITH	= W/
WORKING POINT	= W.P.

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	15	24

PRESTRESSED CONCRETE NOTES

1. THE FABRICATION OF ALL PRESTRESSED ELEMENTS SHALL BE IN ACCORDANCE WITH SECTION 809 "PRECAST/PRESTRESSED CONCRETE MASONRY" OF THE RI STANDARD SPECIFICATIONS.
2. ANY PRECAST MANUFACTURING PLANT FURNISHING PRECAST PRESTRESSED BRIDGE MEMBERS MUST BE CERTIFIED BY THE PRECAST PRESTRESSED CONCRETE INSTITUTE PLANT CERTIFICATION PROGRAM. THE CERTIFICATION SHALL BE AS A MINIMUM IN THE B3 CATEGORY, EXCEPT FOR DRAPED STRAND BRIDGE MEMBERS IN WHICH CASE A B4 CATEGORY WILL BE REQUIRED. THE MANUFACTURER SHALL SUBMIT PROOF OF CERTIFICATION PRIOR TO THE START OF PRODUCTION.
3. LIFTING DEVICES ARE THE RESPONSIBILITY OF THE PRECASTER.
4. THE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 8000 PSI. THE MINIMUM REQUIRED COMPRESSIVE STRENGTH AT STRESS TRANSFER SHALL NOT BE LESS THAN 6000 PSI.
5. PRESTRESSING STRANDS SHALL CONSIST OF UNCOATED HIGH STRENGTH SEVEN WIRE LOW-RELAXATION STRANDS HAVING A NOMINAL DIAMETER OF 0.6" CONFORMING TO THE REQUIREMENTS OF AASHTO DESIGNATION M 203 GRADE 270.
6. NON-PRESTRESSED REINFORCEMENT SHALL CONFORM TO AASHTO DESIGNATION M 31 GRADE 60 AND SHALL BE GALVANIZED.
7. ALL EXPOSED CORNERS SHALL BE CHAMFERED ¾ UNLESS OTHERWISE NOTED.
8. ANY STRUCTURAL MEMBERS DAMAGED DURING FABRICATION, SHIPPING OR ERECTION, SUCH THAT THEIR STRUCTURAL INTEGRITY IS COMPROMISED, SHALL BE REJECTED AND REPLACED AT THE CONTRACTOR'S OWN EXPENSE. THE ENGINEER SHALL BE THE SOLE JUDGE IN DETERMINING THE STRUCTURAL INTEGRITY OF DAMAGED PRESTRESSED MEMBERS. ANY DAMAGE THAT IS NOT STRUCTURAL IN NATURE SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.
9. DURING HANDLING, THE BEAMS MUST BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND MUST BE PICKED UP ONLY BY MEANS OF APPROVED LIFTING DEVICES AT THEIR APPROVED SUPPORT POINTS.
10. DIMENSIONAL TOLERANCES SHALL NOT EXCEED THOSE RECOMMENDED IN THE LATEST EDITION OF THE PCI "MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF PRECAST AND PRESTRESSED CONCRETE PRODUCTS".
11. THE EXTERIOR FACES OF FASCIA BEAMS SHALL RECEIVE A RUBBED FINISH (IN FIELD OR IN THE PLANT) IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS. THE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PRESTRESSED CONCRETE MEMBERS.
12. THE TOP SURFACES OF THE PRESTRESSED SLABS, BOX BEAMS, & GIRDERS SHALL HAVE EITHER A SMOOTH OR A RAKED FINISHED (1/4" AMPLITUDE) AS INDICATED ON THE PLANS.
13. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING.
14. ALL GALVANIZED PRESTRESSING STEEL AND GALVANIZED REINFORCING BARS SHALL BE SECURELY TIED TO PREVENT DISLOCATION. TIES USED FOR THE GALVANIZED REINFORCING STEEL SHALL ALSO BE GALVANIZED.
15. THE DETAILS OF ALL INSERTS, ANCHORS, AND ANY OTHER ITEMS REQUIRED TO BE CAST INTO THE PRECAST PRESTRESSED UNITS (WHETHER DETAILED ON THE CONTRACT DRAWINGS OR PROVIDED FOR THE CONTRACTOR'S CONVENIENCE) SHALL BE SHOWN ON THE SHOP DRAWINGS. PRECAST UNITS SHALL NOT BE FIRED OR DRILLED INTO FOR ATTACHMENT PURPOSES. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
16. THE ENDS OF BEAMS SHALL BE VERTICAL AFTER ALL DEAD LOADS HAVE BEEN PLACED.
17. HANDHELD VIBRATORS SHALL BE EQUIPPED WITH RUBBER TIPPED HEADS.

GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS:

1. DESIGN WIND PRESSURES FOR CONSTRUCTION:

   MINIMUM WIND PRESSURES TO BE USED BY THE CONTRACTOR FOR DESIGN DURING THE CONSTRUCTION CONTRACT (WITH THE EXCEPTION OF SIGNS) SHALL BE FROM THE FOLLOWING TABLE:

HEIGHT ABOVE GROUND	WIND PRESSURE (PSF)
UP TO 17'	33
OVER 17' AND UP TO 33'	37
OVER 33' AND UP TO 50'	41
OVER 50' AND UP TO 75'	44
OVER 75' AND UP TO 100'	47

   TABLE NOTES:

   A. APPLICATION OF THE TABULAR PRESSURE:

   - BRIDGE COMPONENTS DURING CONSTRUCTION, PRIOR TO THE INSTALLATION OF THE PERMANENT BRACING SYSTEMS, NOT INCLUDING CRANE LIFTING.
   - FALSE WORK, SHORING, AND SCAFFOLDING AS DEFINED IN FHWA "GUIDE DESIGN SPECIFICATION FOR BRIDGE TEMPORARY WORKS", EXCLUDING 3-DIMENSIONAL LATTICED OR TRUSSED FRAMES OR TOWERS;
   - TEMPORARY SHIELDING.

   WIND PRESSURES FOR ALL OTHER STRUCTURES SHALL BE CALCULATED BASED ON ASCE "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION", SEI/ASCE 37-02 (ALL REFERENCES TO THE ASCE 7 IN THE SEI/ASCE 37-02 PUBLICATION, SHALL BE THE LATEST REVISION OF ASCE 7). THE EXPOSURE CATEGORY SHALL BE C.

2. ERECTION OF BRIDGE COMPONENTS:

   FOR THE ERECTION OF STRUCTURES, THE FOLLOWING SHALL APPLY:

   - THE CONTRACTOR SHALL SUBMIT AN ERECTION PLAN THAT PROVIDES COMPLETE DETAILS OF THE PROCESS INCLUDING, BUT NOT LIMITED TO, TEMPORARY SUPPORTS, SCHEDULING AND OPERATION SEQUENCING, CRANE PLACEMENT, AND ASSUMED LOADS AND CALCULATED STRESSES DURING VARYING STAGES OF LIFTING. THIS APPLIES TO STRUCTURES OF ANY KIND. THE CAPACITY OF THE CRANE AND ALL LIFTING AND CONNECTING DEVICES SHALL BE ADEQUATE FOR 125 PERCENT (150 PERCENT OVER AMTRAK) OF THE TOTAL PICK LOAD INCLUDING SPREADERS, RIGGING, HOOKS, AND ALL OTHER MATERIALS. THIS FACTOR OF SAFETY SHALL BE IN ADDITION TO ALL MANUFACTURERS' PUBLISHED FACTORS OF SAFETY.
   - A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF RHODE ISLAND, WILL BE REQUIRED TO STAMP THE CONTRACTOR'S ERECTION PLAN.
   - THE CONTRACTOR'S PROFESSIONAL ENGINEER WILL BE REQUIRED TO INSPECT AND PROVIDE WRITTEN APPROVAL OF INSTALLATION, PRIOR TO ALLOWING VEHICLES OR PEDESTRIANS ON OR BELOW THE STRUCTURE. THE PROFESSIONAL ENGINEER MUST ALSO STAMP ALL CHANGES TO THE CONTRACTOR'S ERECTION PLAN. ADDITIONALLY, ALL PROPOSED CHANGES MUST BE SUBMITTED TO RIDOT FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.
   - A MANDATORY PRE-ERECTION CONFERENCE WILL BE HELD AT LEAST TWO WEEKS PRIOR TO THE START OF THE GIRDER INSTALLATION TO DISCUSS THE PLAN AND PROCEDURES, WORK SCHEDULES, CONTINGENCY PLANS, SAFETY REQUIREMENTS AND TRAFFIC CONTROL. THE CONTRACTOR'S PROFESSIONAL ENGINEER AND ERECTION SUBCONTRACTOR WILL BE REQUIRED TO ATTEND THIS MEETING, AS WILL THE RIDOT RESIDENT ENGINEER, THE DESIGN PROJECT ENGINEER AND THE DESIGN CONSULTANT. BASED UPON DISCUSSIONS AT THIS MEETING AND A REVIEW OF THE CONTRACTOR'S ERECTION PLAN, RIDOT MAY ORDER THE CONTRACTOR TO MODIFY AND RESUBMIT THE ERECTION PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.
   - THE CONTRACTOR WILL BE REQUIRED TO PERFORM DAILY INSPECTIONS OF THE ERECTED GIRDERS UNTIL THE BRIDGE DECK IS COMPLETELY POURED.
   - THE COST OF PREPARING AND STAMPING THE ERECTION PLAN, COMPUTATIONS, AND REPORTS, RESPONDING TO RIDOT'S COMMENTS AND MAKING THE NECESSARY REVISIONS, AND ATTENDANCE AT MEETINGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SUPERSTRUCTURE PAY ITEM, BE IT CONCRETE, STEEL OR TIMBER.

3. TEMPORARY BARRIERS AND CRASH CUSHIONS TO BE UTILIZED ON THE BRIDGE AND IT'S APPROACHES DURING CONSTRUCTION AT ANY TIME ANY PORTION OF THE BRIDGE IS OPEN TO TRAFFIC SHALL MEET TEST LEVEL TL-3 (MASH 2016).
4. FOR DEWATERING DURING CONSTRUCTION, REFER TO THE JOB SPECIFIC SPECIFICATIONS CODE 203.9901, AND RIDOT STANDARD SPECIFICATIONS SECTION 208.

SHOP DRAWINGS (STRUCTURAL/BRIDGE)

THE FOLLOWING LIST OF ITEMS OF WORK FOR WHICH SHOP DRAWINGS AND/OR OTHER SUBMITTALS ARE REQUIRED IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THIS LIST INCLUDES ONLY THE MAJOR ITEMS OF BRIDGE/STRUCTURAL WORK; IT DOES NOT ITEMIZE ALL SUBMITTALS REQUIRED BY THE CONTRACT DOCUMENTS. ALL SUBMITTALS SHALL BE IN ACCORDANCE WITH SECTION 105.02 OF STANDARD SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR THE TIMELY SUBMISSION OF ALL SHOP DRAWINGS AND OTHER DOCUMENTS REQUIRED BY THE CONTRACT. NO EXTRA PAYMENT WILL BE MADE, NOR WILL ANY EXTENSION BE MADE TO THE CONTRACT COMPLETION DATE FOR MAKING REQUIRED SUBMITTALS.

A SUBMITTAL FOR THE GUARDRAIL END TREATMENT, ENERGY ABSORBING TERMINAL IS REQUIRED FOR INFORMATION DETAILING THE END TREATMENT MEASUREMENTS AND MUST BE A PRODUCT LISTED ON THE RIDOT APPROVED MATERIALS LIST FOR APPROVED EQUAL.

1. CONSTRUCTION PROCEDURE: TYPE, SIZE, AND PLACEMENT OF EQUIPMENT, DETAILED SEQUENCE OF WORK, METHODS, CONCRETE FALSEWORK DETAILS, ETC.
2. CONTROL OF WATER: METHODS, EQUIPMENT, AND DETAILED SEQUENCE OF WORK
3. BRIDGE DEMOLITION: METHODS, EQUIPMENT, SHIELDING, AND DETAILED SEQUENCE OF WORK
4. STEEL MICROPILES: PIPE, REINFORCEMENT, CONCRETE FILL, COATINGS, INSTALLATION OF EQUIPMENT AND SEQUENCE, AND LOAD TESTING PLAN AND RESULTS
5. CONCRETE AND CLSM: MIX DESIGNS, PLACING & POURING SEQUENCE, METHODS AND EQUIPMENT, CURING PLAN INCLUDING HEAT FLOW ANALYSES AND METHODS, PERSONNEL RESOURCES, FORMLINERS, FINISHING METHODS
6. TEMPORARY UTILITY BRIDGE
7. WATERSTOPS
8. JOINT FILLERS
9. PRECAST CONCRETE BEAMS
10. WATERPROOFING MEMBRANE
11. NON-SHRINK GROUT
12. REINFORCING STEEL, SPLICERS, AND INSERTS
13. ELASTOMERIC BEARINGS
14. GRANITE CURB FOR BRIDGES
15. FILTER FABRIC

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RI DOT

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OF: 24

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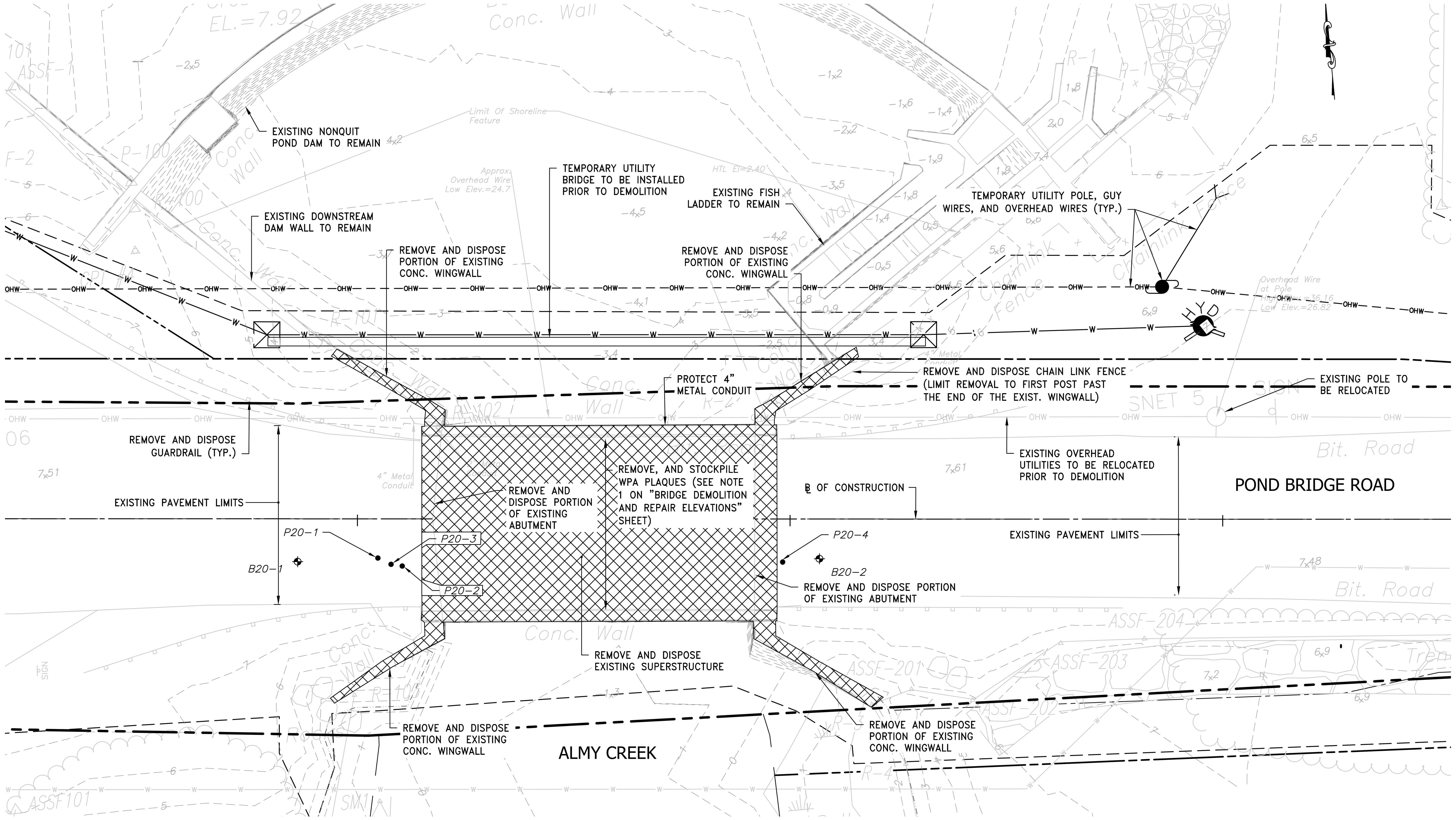
REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

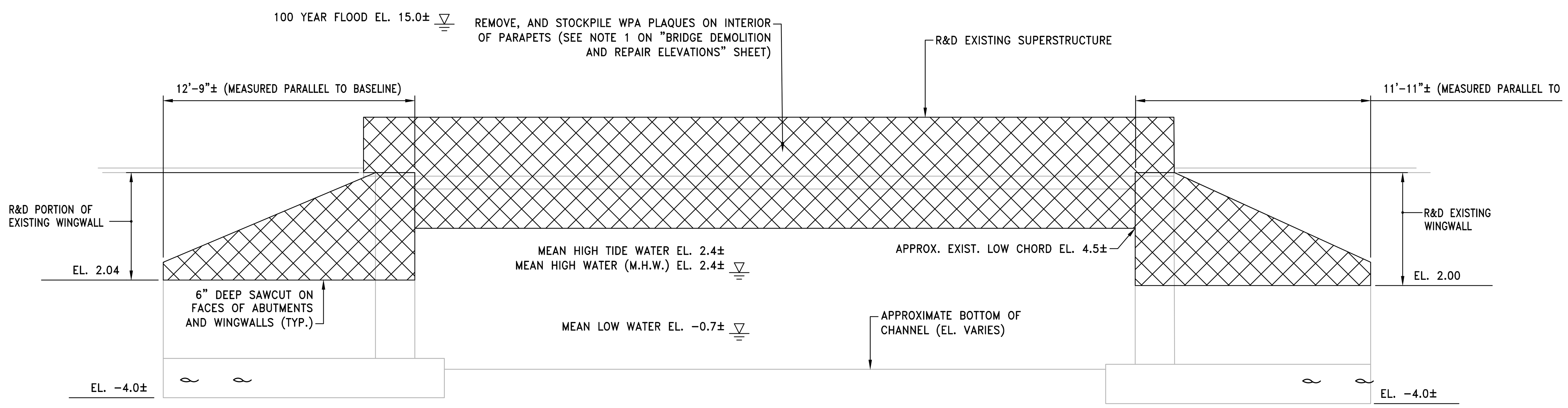
TIVERTON — RHODE ISLAND

BRIDGE NOTES - 3

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	16	24



DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

LEGEND:

PORTION OF EXISTING STRUCTURE TO BE REMOVED AND DISPOSED.

DEMOLITION NOTES:

1. THE EXISTING STRUCTURE SHALL BE DEMOLISHED IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
2. THE CONTRACTOR SHALL PROTECT THE WATERWAY AND SURROUNDING AREAS FROM DEBRIS DURING CONSTRUCTION. EXCEPT AS PROVIDED FOR BY CONTRACT ITEMS, THIS WORK SHALL BE CONSIDERED TO ITEM CODES 803.0100 AND 803.0200.
3. ITEMS TO BE REMOVED AND DISPOSED UNDER ITEM 803.0100 "REMOVE AND DISPOSE EXISTING SUPERSTRUCTURE" INCLUDE, BUT ARE NOT LIMITED TO: ALL THE COMPONENTS ABOVE THE BEAM SEATS INCLUSIVE OF ALL THE BRIDGE BEARINGS AND ALL EMBEDDED OR ATTACHED COMPONENTS.
4. ITEMS TO BE REMOVED AND DISPOSED UNDER ITEM 803.0200 "REMOVE AND DISPOSE EXISTING SUBSTRUCTURE" INCLUDE, BUT ARE NOT LIMITED TO:
   - BACKWALLS
   - ROADWAY JOINT MATERIALS
   - ABUTMENT STEMS TO THE LIMITS SHOWN
   - WINGWALL STEMS TO THE LIMITS SHOWN

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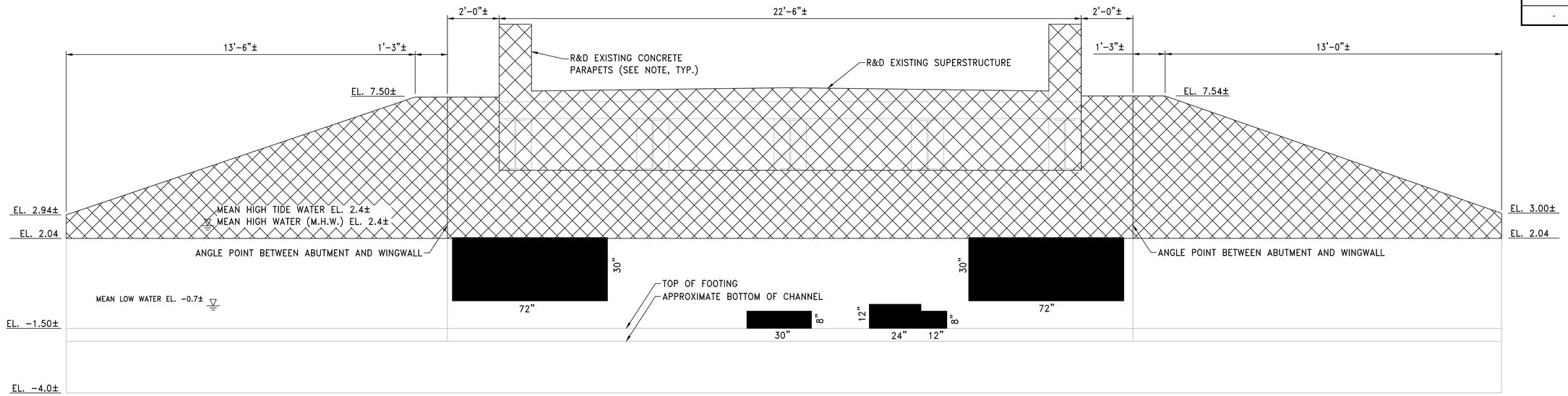
REPLACEMENT OF NONQUIT POND BRIDGE NO. 292
TIVERTON RHODE ISLAND
BRIDGE DEMOLITION PLAN

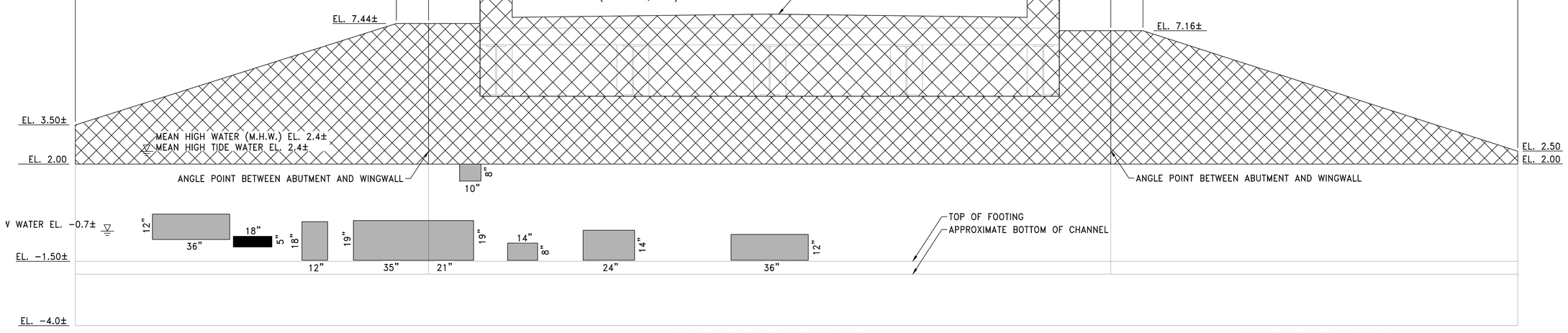
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	17	24



SOUTHWEST WINGWALL
SCALE: 1/2" = 1'-0"

WEST ABUTMENT REPAIRS
SCALE: 1/2" = 1'-0"

NORTHWEST WINGWALL
SCALE: 1/2" = 1'-0"



EAST ABUTMENT REPAIRS
SCALE: 1/2" = 1'-0"

SOUTHEAST WINGWALL
SCALE: 1/2" = 1'-0"

NORTHEAST WINGWALL
SCALE: 1/2" = 1'-0"

APPROXIMATE CONCRETE REPAIR AREA (DIMENSIONS ARE SHOWN IN INCHES).

PORTION OF EXISTING STRUCTURE TO BE REMOVED AND DISPOSED.

1. THE CONTRACTOR SHALL REMOVE AND STOCKPILE THE EXISTING BRASS WPA PLAQUES ON THE EXISTING PARAPETS. THE PLAQUES SHALL BE REMOVED PRIOR TO OTHER DEMOLITION ACTIVITIES TAKING PLACE, AND THE REMOVAL METHODS SHALL BE COORDINATED WITH AND APPROVED BY THE RIDOT CULTURAL RESOURCES UNIT PRIOR TO THEIR REMOVAL. CARE SHOULD BE TAKEN TO AVOID DAMAGE TO THE PLAQUES. THE PLAQUES SHALL BE STORED AT THE FIELD OFFICE PRIOR TO INSTALLATION ON THE PROPOSED PARAPETS. IF THE PLAQUES ARE DAMAGED OR LOST BY THE CONTRACTOR, REPLICAS SHALL BE FABRICATED AND INSTALLED AT NO ADDITIONAL COST TO THE STATE.
2. REMOVAL, CLEANING, RESTORATION, AND RESETTING EXISTING WPA PLAQUES SHALL BE PER THE 899.9901 SPECIAL PROVISION.

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REPLACEMENT OF NONQUIT POND BRIDGE NO. 292
TIVERTON RHODE ISLAND

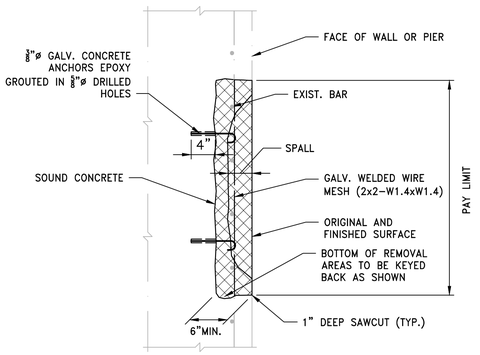
BRIDGE DEMOLITION AND REPAIR DETAILS

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	18	24

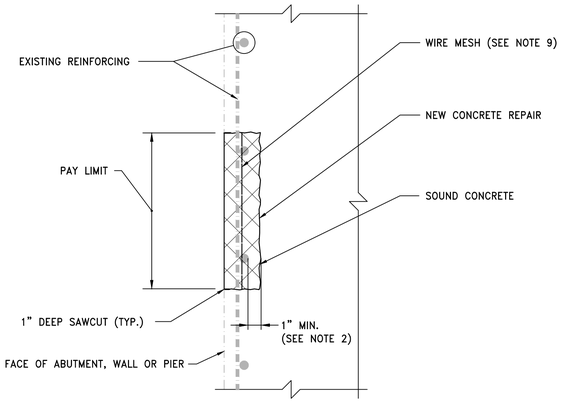
CONCRETE REPAIR NOTES:

1. ALL CONCRETE REPAIRS SHALL BE IN ACCORDANCE WITH RI STANDARD SPECIFICATIONS SECTION 817, "REPAIRS TO STRUCTURE CONCRETE MASONRY".
2. CONCRETE REPAIR TYPES SHALL BE PATCHING MORTAR AND FORM AND CAST–IN–PLACE. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A PLAN IDENTIFYING THE PROPOSED METHOD(S) AND MATERIALS FOR VARIOUS CONDITIONS (DEPTH RELATIVE TO REINFORCEMENT, SQUARE FOOTAGE, ETC.). THE FOLLOWING SHALL APPLY:
   - REPAIRS WITH A DEPTH NOT BEYOND REINFORCEMENT SHALL BE PATCHING MORTAR.
   - REPAIRS WITH DEPTHS BEYOND REINFORCEMENT UP TO 1 INCH MAXIMUM SHALL BE PATCHING MORTAR. FORM AND CAST–IN–PLACE WITH CLASS XX ⅜" MAY BE USED WHERE THE DEPTH BEYOND REINFORCEMENT IS NO LESS THAN 1"
   - REPAIRS WITH DEPTHS MORE THAN 1 INCH BEYOND REINFORCEMENT SHALL BE FORM AND CAST–IN–PLACE.
3. UNSOUND CONCRETE SHALL BE REMOVED ONLY TO THE DEPTH NECESSARY TO EXPOSE A BONDING SURFACE OF SOUND CONCRETE MATERIAL AS DETERMINED BY THE ENGINEER.
4. ALL DETERIORATED AREAS TO BE REPAIRED SHALL BE MARKED AND IDENTIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE ENGINEER THAT ALL REPAIR AREAS ARE CORRECTLY MARKED PRIOR TO MAKING SAWCUTS FOR REMOVAL OF CONCRETE.
5. ALL DETERIORATED AREAS TO BE REPAIRED SHALL THEN BE OUTLINED WITH 1" (±¼") DEEP SAW–CUTS ON A RECTANGULAR SHAPE AROUND THE PERIPHERY OF THE DEFECT. THE ENGINEER WILL INSPECT THE SAWCUT AREAS PRIOR TO REMOVAL OF THE DETERIORATED CONCRETE. THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE ENGINEER THAT ALL REPAIR AREAS ARE CORRECTLY SAWCUT PRIOR TO REMOVAL OF ANY CONCRETE.
6. THE CONTRACTOR SHALL CAREFULLY REMOVE SPALLED, LOOSE AND HOLLOW CONCRETE FROM WITHIN THE SAWCUT LIMITS. POWER TOOLS SHALL BE AS REQUIRED BY THE RI STANDARD SPECIFICATIONS. ANY OVERBREAKAGE OR DAMAGE BEYOND THE LIMITS OF THE APPROVED REPAIR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
7. SAWCUTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER. THE CONTRACTOR SHALL COORDINATE THE SCHEDULE FOR CONCRETE REMOVAL WITH THE RESIDENT ENGINEER.
8. ALL NEW CONCRETE REPAIRS SHALL BE RESTORED TO ORIGINAL CONTOUR.
9. WHERE REPAIR DEPTH EXCEEDS 1½" GALVANIZED WIRE MESH SHALL BE USED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 817.
10. THE CONTRACTOR SHALL LOCATE EXISTING REINFORCING PRIOR TO DEMOLITION OF REPAIR AREA. THE EXISTING REINFORCING SHALL NOT BE DAMAGED.
11. ALL CORRODED REINFORCING BARS WITHIN THE REPAIR AREAS WITH AT LEAST 50% OF THE BAR DIAMETER CORRODED SHALL BE CUT AND REMOVED TO LIMITS OF CONCRETE REPAIR.
12. ALL CORRODED REINFORCING BARS TO REMAIN SHALL BE THOROUGHLY CLEANED TO REMOVE ALL RUST, AND ZINC PRIMER SHALL BE APPLIED TO EXISTING BARS PRIOR TO PATCHING.
13. DURING REMOVAL OF DETERIORATED CONCRETE, IF THE CONTRACTOR'S OPERATIONS CAUSE ANY DAMAGE TO THE EXISTING STRUCTURE, HE SHALL BE REQUIRED TO REPAIR THE AREA TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.
14. THE BONDING SURFACES OF THE REPAIR AREA SHALL BE PREPARED IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATION SECTION 817. THE SURFACES AGAINST WHICH MORTAR OR CONCRETE IS TO BE PLACED SHALL BE KEPT WET FOR AT LEAST ONE HOUR AND THEN ALLOWED TO DRY TO A SATURATED SURFACE DRY CONDITION JUST PRIOR TO APPLICATION OF THE MORTAR OR CONCRETE.
15. REPAIR LIMITS SHOWN ON THESE PLANS ARE BASED ON THE LATEST RIDOT INSPECTION REPORTS AND VERIFIED BY FIELD OBSERVATIONS IN OCTOBER 2020.

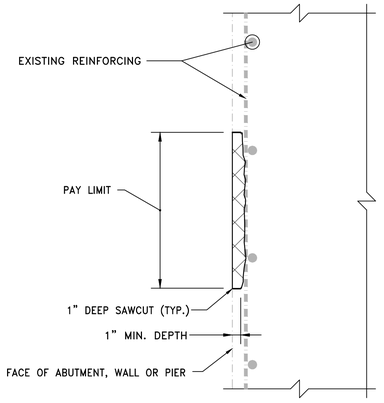
    AREAS NOT ACCESSIBLE DURING FIELD OBSERVATIONS ARE SHOWN ON THE PLANS BASED SOLELY ON THE LATEST RIDOT INSPECTION REPORTS. ADDITIONAL REPAIR AREAS IDENTIFIED DURING CONSTRUCTION SHALL BE REPAIRED AS DIRECTED AND APPROVED BY THE ENGINEER.
16. THE CONTRACTOR SHALL PREVENT DEMOLITION DEBRIS AND REPAIR MATERIALS FROM ENTERING THE WATERWAY, INCLUDING THE BED OF DEWATERED AREAS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE REPAIR ITEM. ANY DEBRIS OR MATERIALS THAT FALL IN THE WATERWAY OR DEWATERED ARES SHALL BE REMOVED BY THE CONTRACTOR.



DEEP SPALL REPAIR DETAIL (> 6" DEEP)
NOT TO SCALE



CONCRETE REPAIR DETAIL (DEPTH BEYOND REINFORCEMENT)
NOT TO SCALE



NOTE:

THIS REPAIR APPLIES TO AREAS WHERE NO MORE THAN ONE–HALF OF THE REBAR SURFACE IS EXPOSED AND SURROUNDING CONCRETE IS SOUND.

CONCRETE REPAIR DETAIL (DEPTH TO REINFORCEMENT)
NOT TO SCALE

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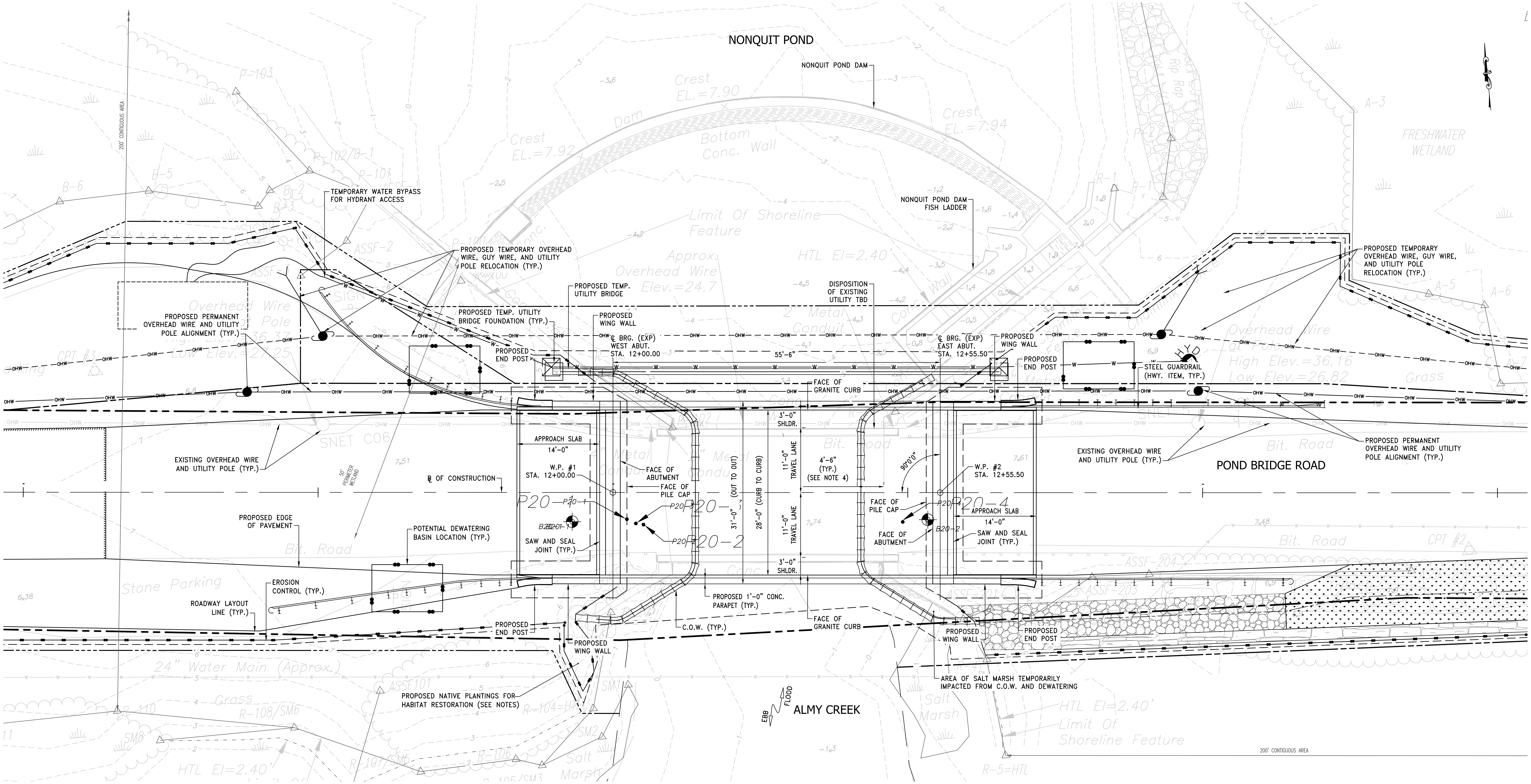
REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

CONCRETE REPAIR NOTES AND DETAILS

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	19	24



NOTES

1. IN ENVIRONMENTALLY SENSITIVE AREAS THAT REQUIRE CONTROL OF WATER, THE WATER CONTROL MEASURES SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF WORK IN THAT AREA.
2. CONTRACTOR TO USE MAXIMUM 60 LB. SANDBAGS ACROSS SALT MARSH.
3. CONTRACTOR SHALL NOT DISTURB OR ENCROACH ON SALTMARSH OTHER THAN TO PLACE AND REMOVE CONTROL OF WATER MEASURES.
4. THE CONTROL OF WATER MEASURES SHOWN ARE THE MAXIMUM EXTENTS IF MEASURES ARE PLACED ON BOTH SIDES OF THE CHANNEL WHILE MAINTAINING THE ALLOWABLE 25% CHANNEL CONSTRICTION. THE EXTENT CAN BE INCREASED IF CONTROL OF WATER IS PLACED ON ONLY ONE SIDE OF THE CHANNEL.

WORKING POINT COORDINATES		
W.P. #1	N 171380.3968	E 410989.8251
W.P. #2	N 171375.2006	E 411045.0813

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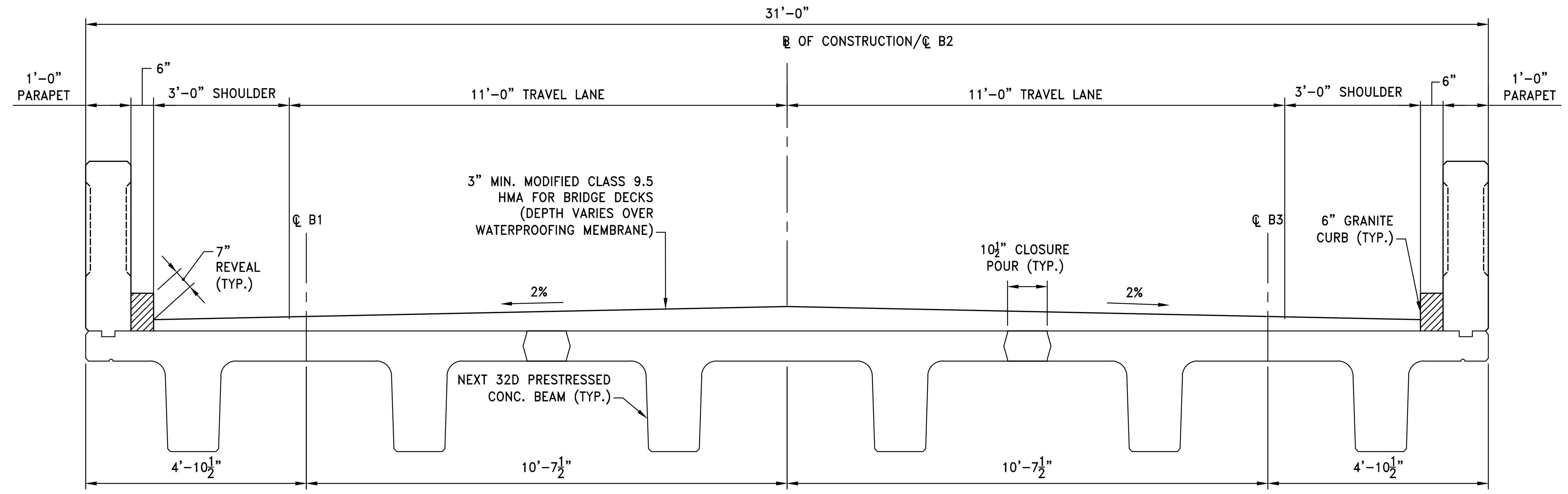
REPLACEMENT OF NONQUIT POND BRIDGE NO. 292

TIVERTON RHODE ISLAND

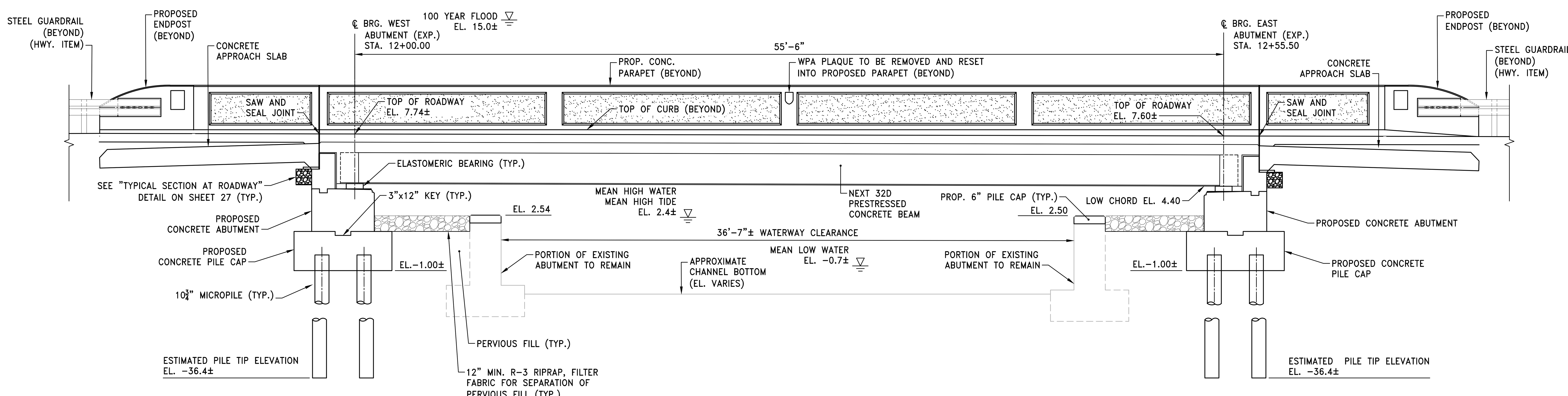
BRIDGE GENERAL PLAN

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
-	2024	20	24



TRANSVERSE SECTION

SCALE: 1/2" = 1'-0"



LONGITUDINAL SECTION

SCALE: 1/4" = 1'-0"

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TIVERTON — RHODE ISLAND

BRIDGE SECTIONS