APPENDIX E UPDATED CORRESPONDENCE LETTERS

Appendix E-1: Expanded Environmental Notification Form Supplemental Information

Erin Whoriskey
Lead Environmental Scientist
NE Environmental Permitting

October 21, 2021

Secretary Kathleen A. Theoharides
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Subject: New England Power Company
N12/M13 Double Circuit Tower Separation Project
Expanded Environmental Notification Form
Somerset and Fall River, Massachusetts

Dear Secretary Theoharides:

The New England Power Company (NEP) is pleased to submit the enclosed supplementary information in support of the Expanded Environmental Notification Form (Expanded ENF) that was filed on September 30, 2021 for the N12/M13 Double Circuit Tower Separation Project (Project) located in the municipalities of Somerset and Fall River, Massachusetts.

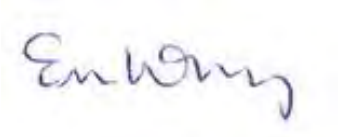
NEP received an email response from MEPA staff on October 18, 2021 stating that NEP needed to address the MEPA Interim Protocol on Climate Change Adaptation and Resiliency. The enclosed information addresses MEPA's interim policy on Climate Change Adaptation and Resiliency for the Project. This supplementary information is also being distributed to those parties identified on the Project Circulation List.

NEP respectfully requests that the Notice of Availability for this Expanded ENF be published in the next issue of the Environmental Monitor (October 22, 2021) to initiate the public review and comment period. We acknowledge that the review period for the Expanded ENF requesting a Single EIR lasts for 37 Days. Copies of the Expanded ENF have been distributed to public agencies and municipal officials in accordance with 301 CMR 11.16 (see enclosed circulation list). The Spectator and the Fall River Herald News have each been requested to publish a Public Notice of Environmental Review.

Please do not hesitate to contact me at (781) 907-3598, or Erin.Whoriskey@nationalgrid.com, or Jamie Durand at (401) 439-3020, or jamie.durand@powereng.com, if you have any questions or require additional information. Thank you for your consideration and review.

nationalgrid

Sincerely,



Erin Whoriskey
Lead Environmental Scientist
National Grid

James Durand
Environmental Project Manager
POWER Engineers Consulting, PC

Attachments

c: Circulation List (attached)
D. Beron, NEP
W. Levine, NEP
L. Peloquin Shea, NEP

CLIMATE CHANGE ADAPTATION AND RESILIENCY SECTION

This section of the Environmental Notification Form (ENF) solicits information and disclosures related to climate change adaptation and resiliency, in accordance with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency (the "MEPA Interim Protocol"), effective October 1, 2021. The Interim Protocol builds on the analysis and recommendations of the 2018 Massachusetts Integrated State Hazard Mitigation and Climate Adaptation Plan (SHMCAP), and incorporates the efforts of the Resilient Massachusetts Action Team (RMAT), the inter-agency steering committee responsible for implementation, monitoring, and maintenance of the SHMCAP, including the "Climate Resilience Design Standards and Guidelines" project. The RMAT team recently released the RMAT Climate Resilience Design Standards Tool, which is available here.

The MEPA Interim Protocol is intended to gather project-level data in a standardized manner that will both inform the MEPA review process and assist the RMAT team in evaluating the accuracy and effectiveness of the RMAT Climate Resilience Design Standards Tool. Once this testing process is completed, the MEPA Office anticipates developing a formal Climate Change Adaptation and Resiliency Policy through a public stakeholder process. Questions about the RMAT Climate Resilience Design Standards Tool can be directed to rmat@mass.gov.

All Proponents must complete the following section, referencing as appropriate the results of the output report generated by the RMAT Climate Resilience Design Standards Tool and attached to the ENF. In completing this section, Proponents are encouraged, but not required at this time, to utilize the recommended design standards and associated Tier 1/2/3 methodologies outlined in the RMAT Climate Resilience Design Standards Tool to analyze the project design. However, Proponents are requested to respond to a respond to a user feedback survey on the RMAT website or to provide feedback to rmat@mass.gov, which will be used by the RMAT team to further refine the tool. Proponents are also encouraged to consult general guidance and best practices as described in the RMAT Climate Resilience Design Guidelines.

Climate Change Adaptation and Resiliency Strategies

I. Has the project taken measures to adapt to climate change for all of the climate parameters analyzed in the RMAT Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat)? _X_Yes __ No

Note: Climate adaptation and resiliency strategies include actions that seek to reduce vulnerability to anticipated climate risks and improve resiliency for future climate conditions. Examples of climate adaptation and resiliency strategies include flood barriers, increased stormwater infiltration, living shorelines, elevated infrastructure, increased tree canopy, etc. Projects should address any planning priorities identified by the affected municipality through the Municipal Vulnerability Preparedness (MVP) program or other planning efforts, and should consider a flexible adaptive pathways approach, an adaptation best practice that encourages design strategies that adapt over time to respond to changing climate conditions. General guidance and best practices for designing for climate risk are described in the RMAT Climate Resilience Design Guidelines.

A. If no, explain why.

B. If yes, describe the measures the project will take, including identifying the planning horizon and climate data used in designing project components. If applicable, specify the return period and design storm used (e.g., 100-year, 24-hour storm).

NEP integrated climate adaptation and resiliency strategies into the Project design, as recommended in the Municipal Vulnerability Preparedness (MVP) program to include elevated structures, reinforced structure foundations, storm protection measures, minimizing impacts to the existing topography/contours, and site stabilization and re-establishment of natural vegetation. These design elements are meant to protect the long-term viability and operability of the electric transmission assets by reducing the vulnerability to anticipated climate risks and improving resiliency for future climate conditions.

NEP has incorporated the following design strategies to protect these proposed structures from the effects of climate change. The proposed new pole structures M13N-5 and M13N-6 will be located above the existing 10-year storm level and include a 4-foot reveal on the new foundation. This will create an approximate 2.5 feet of buffer between the project MHW mark and the bottom of the steel structure, and the proposed structure foundation reveal will sit above the forecasted new sea level in this reach of the Taunton River. The proposed 12.5-feet diameter steel monopole structure M13N-6 will be centered on a 42-feet diameter concrete pile cap supported by a total of 36 micro-piles to secure the structure's position with LSCSF. The base of the transmission structure M13N-6 will be encircled by 5 to 6-feet tall concrete bollards to protect the structure from the potential impact of floating debris during extreme flooding and wave action. In these ways, the new structures will be adequately protected from the anticipated effects of climate change.

C. Is the project contributing to regional adaptation strategies? _X_ Yes __ No; If yes, describe.

The Project has incorporated measures that seek to reduce potential vulnerability to anticipated climate risks and improve resiliency for future climate conditions. The Project, which is designed to improve reliable energy service within the region, serves this overall purpose. (Please refer to Section 7.0 Climate Change Adaptation and Resiliency within the Expanded ENF narrative for additional detail.)

II. Has the Proponent considered alternative locations for the project in light of climate change risks? _X__ Yes ___ No

A. If no, explain why.

B. If yes, describe alternatives considered.

NEP evaluated multiple alternatives to minimize impacts to the natural and social/built environments, while still selecting a feasible option that would address the Project need and reliability issues identified by the ISO-NE. Please refer to Section 3.0 Alternatives Analysis within the Expanded ENF narrative for additional information.

III. Is the project located in Land Subject to Coastal Storm Flowage (LSCSF) or Bordering Land Subject to Flooding (BLSF) as defined in the Wetlands Protection Act? __X _Yes ____No

If yes, describe how/whether proposed changes to the site's topography (including the addition of fill) will result in changes to floodwater flow paths and/or velocities that could impact adjacent properties or the functioning of the floodplain. General guidance on providing this analysis can be found in the CZM/MassDEP Coastal Wetlands Manual, available here.

The design of the new transmission structure and overhead conductors takes advantage of the collocation opportunity within the existing electric transmission line corridor. The location of the proposed structure on the Fall River side of the river takes into consideration the existing topography and the height of the existing overhead conductors above the MHW line over the Taunton River, and therefore there is no significant change proposed to the existing terrain within LSCSF. The installation of the transmission structure foundation for structure M13-6 is to include a 42-foot concrete cap over micro-piles which will create approximately 132 square feet of new impervious area within LSCSF. This amount of displacement created by the foundation is expected to result in a di minimis effect on LSCSF. As discussed above, the base of the transmission structure will be encircled by 5 to 6-feet tall concrete bollards to protect the structure from the potential impact of floating debris during extreme coastal flooding and flowing water. By incorporating these protective measures, the new structure will be adequately protected from the effects of elevated flood waters within LSCSF.

7.0 CLIMATE CHANGE ADAPTATION AND RESILIENCY

NEP has taken steps to promote climate change adaptation and resiliency in the design of the Project. The Project will result in a more climate-ready and resilient transmission system that can withstand more extreme weather events; address existing system capacity shortages and increased demand; and support future interconnections from renewable energy projects and offshore wind. In addition, NEP's preferred solution uses substantial portions of existing ROW, thereby minimizing alteration of new land resources to construct the Project. A copy of the output report generated by the Resilient Massachusetts Action Team (RMAT) Climate Resilience Design Standards Tool is attached as Attachment J. The purpose of the Project is to eliminate potential widespread voltage collapse and loss of load and service to regional customers.

7.1 Measures to Adapt the Project to Climate Change Per RMAT Design Standards

The Project has incorporated measures that seek to reduce potential vulnerability to anticipated climate risks and improve resiliency for future climate conditions. The Executive Office of Energy and Environmental Affairs' (EEA) Climate Change and Adaptation Report (Report) documents that with increasing temperatures as a result of climate change, electricity demand in the Commonwealth could increase by 40 percent in 2030. The Report identifies that without reliable energy service, the basic needs of residents, visitors, businesses, and governments cannot be met. The Project, which is designed to improve reliable energy service within the region, serves this overall purpose.

The Report identified three primary climate change concerns for the energy sector: flooding, extreme weather events, and increased temperature. NEP considered each of these factors in designing the Project.

With respect to flooding, NEP reviewed the RMAT Climate Resilience Design Standards Tool for climate projections, including coastal vulnerability, sea level rise and coastal flooding from the National Oceanic and Atmospheric Administration (NOAA) and temperature rise. NEP also reviewed the Massachusetts Sea Level Rise and Coastal Flooding Viewer for the Project. The map viewer displays NOAA's January 2013 sea level rise data. Recognizing that the Project must address reliability concerns in an area that crosses the Taunton River, the Project area is mostly located outside of areas identified as vulnerable to sea level rise and coastal flooding with the exception of structures N12/M13N-5 and N12/M13N-6. Further information regarding design within areas potentially subject to sea level rise and flooding is available in Section [7.2].

The Project is also designed to account for more frequent extreme weather events and extreme heat. The Project's engineering design used structure loading criteria required by the National Electric Safety Code (NESC) and National Grid Design Loads for Overhead Transmission Structures. The NESC load criteria require consideration of combined ice and wind district loading, extreme wind conditions, and extreme ice with concurrent wind conditions. NEP's standards also include consideration and contingency for heavy load imbalances and heavy ice conditions. All of these considerations result in a design that is better equipped to withstand extreme weather. The design incorporates materials (including steel structures and state of the art conductors) that have long useful lives and respond well to corrosive environments. The Project is also equipped to respond to increases in temperature. The RMAT temperature forecasts project a minimum change in temperature of 3.5°F and a maximum change in temperature of 3.9°F in the Project area. The new transmission line conductors are designed to operate at higher maximum operating temperatures at a higher carrying capacity and under fluctuations in air temperature.

NEP integrated climate adaptation and resiliency strategies into the overall Project design, as recommended in the Municipal Vulnerability Preparedness (MVP) program to include elevated structures, reinforced structure foundations, storm protection measures, minimizing impacts to the existing topography/contours, and site stabilization and re-establishment of natural vegetation. These design elements are meant to protect the long-term viability and operability of the electric transmission assets by reducing the vulnerability to anticipated climate risks and improving resiliency for future climate conditions.

The Project also contributes to regional adaptation strategies for the SEMA-RI area. As described above, EEA's Climate Change and Adaptation Report documents that with increasing temperatures as a result of climate change, electricity demand in the Commonwealth could increase by 40 percent in 2030. The Report documents the vulnerability of existing aging infrastructure and identifies key strategies to alleviate these vulnerabilities, including repair, upgrades and reuse and timely maintenance. The Project addresses the issues identified in the Report and ISO studies by reconfiguring double-circuit towers to improve reliability, avoiding the potential for widespread voltage collapse and loss of load and supporting future growth and forecasted demand within the SEMA-RI area. The Project will result in a stronger electrical transmission system that is vital to the area's safety, security and economic prosperity.

7.2 Consideration of Alternative Locations and Design Strategies in Light of Climate Change

For the reasons described in Section 3.0, the Project team concluded that the proposed Project location meets the identified Project need and reliability, addresses the various regulatory objectives, minimizes environmental impacts, and provides a cost-effective solution to customers. Also, the Project is mostly located outside of areas identified as vulnerable to sea level rise and coastal flooding with the exception of structures N12/M13N-5 and N12/M13N-6 crossing over the Taunton River.

The Project team carefully considered its design at the Taunton River crossing. The selected alternative requires the installation of two new 300-foot tall Y-frame structures (structures M13N-5 and M13N-6) parallel to the existing N12/M13 crossing of the Taunton River. In these locations, existing ROW, real estate constraints and design restrictions severely limited the potential installation locations. The configuration and geometry of the existing overhead transmission lines and river crossing towers dictates the siting and design of the proposed facilities, including structure location, loading, height, pole base diameter, angle and span length. Due to these engineering criteria, the Project team determined that these two structures must be located within LSCSF and within a regulatory floodway, and there are no feasible options for siting the structures outside of LSCSF. NEP has incorporated design measures to minimize impacts to these areas while providing protection for the proposed transmission assets.

On the Somerset side of the Taunton River, the area surrounding existing structure N12-5 and proposed structure M13N-5 is mapped within a category 4 hurricane surge inundation area. These structures are located inland of the seawall along the west bank of the Taunton River.

On the Fall River side of the Taunton River, data indicates that this area could encounter potential Mean Higher High Water (MHHW) with sea level rise-up to 4-5 feet above the current MHHW mark. The Project is located outside of the extent of inundation projected from a 0 to 6-foot rise in sea level above the current mean high-water mark. Existing structure N12-6 and proposed structure M13N-6 on the east bank of the Taunton River are located in areas subject to inundation with a sea level rise of 4 to 5 feet and FEMA Velocity Zone, with a determined base flood elevation of 17-feet. These structure locations are also mapped within a category 1 hurricane surge inundation area.

NEP has incorporated the following design strategies to protect existing structure N12-6 and proposed structure M13N-6 from the effects of climate change. The proposed new structures will be located above the existing 10-year storm level and include a 4-foot reveal on the new foundation. This will create an approximate 2.5 feet of buffer between the project MHW mark and the bottom of the steel structure, and the proposed structure foundation reveal will sit above the forecasted new sea level in this reach of the Taunton River. The proposed 12.5-feet diameter steel monopole structure will be centered on a 42-feet diameter concrete pile cap supported by a total of 36 micro-piles to secure the structure's position with LSCSF. The base of the transmission structure will be encircled by 5 to 6-feet tall concrete bollards to protect the structure from the potential impact of floating debris during extreme flooding and wave action. In these ways, the new structures will be adequately protected from the anticipated effects of climate change.

7.3 Potential Changes to Land Subject to Coastal Storm Flowage

Areas designated as LSCSF/ the velocity zone (VE) extends to elevation 17 feet NGVD on the eastern side of the Taunton River (as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) FIRMette map in Appendix K), which encompasses the existing NEP ROW where the existing and proposed transmission structures are located. The existing steel lattice tower which supports the existing transmission lines is also located within LSCSF, and NEP is not aware of any adverse effects that this structure poses within LSCSF. The CAM sea level rise and coastal flooding data acknowledges this area of the Project as being located within Zone VE (elevation 17-feet). NEP reviewed the NOAA storm event database to include the reports on Tropical Storm Elsa which made landfall in Massachusetts on July 9, 2021. The storm interacted with a stalled frontal boundary and brought widespread heavy rainfall of 2 to 3.5 inches and gusty winds along the south coast, which caused scattered tree damage. NOAA reported on Hurricane Sandy which was a Category 3 Hurricane that hit the east coast, including Massachusetts, during the period between October 29th - October 30th 2012. Wind gusts were reported at 70-80 miles per hour (mph) along the coast with storm surges from 2.5 feet - 4.5 feet. Minor coastal flooding was reported in Fall River and it was reported that Battleship Cover was flooded. Battleship Cove is located approximately 2.5 miles down-river from the Project site. The NOAA database also reports on Hurricane Irene Hurricane Ida which was a Category 1 Hurricane that hit the east coast, including Massachusetts on August 28, 2011. Wind speeds were reported at 40 miles per hour (mph) with gusts up to 58 mph. A storm surge of 3.84 feet impacted areas of southern Bristol County, and closed East Beach Road in Westport. Numerous trees and branches were reported being downed throughout southern Bristol County.

The design of the new transmission structure and overhead conductors takes advantage of the collocation opportunity within the existing electric transmission line corridor. The location of the proposed structure on the Fall River side of the river takes into consideration the existing topography and the height of the existing overhead conductors above the MHW line over the Taunton River, and therefore there is no significant change proposed to the existing terrain within LSCSF. The installation of the transmission structure foundation for structure M13N-6 will include a 42-foot concrete cap over micro-piles which will create approximately 132 square feet of new impervious area within LSCSF. This amount of displacement created by the foundation is expected to result in a di minimis effect on LSCSF. As discussed above, the base of the transmission structure will be encircled by 5 to 6-feet tall concrete bollards to protect the structure from the potential impact of floating debris during extreme coastal flooding and flowing water. By incorporating these protective measures, the new structure will be adequately protected from the effects of elevated flood waters within LSCSF.

RMAT Climate Resilience Design Standards Tool Project Report

N12/M13 DCT Separation
Date Created: 10/7/2021 10:48:13 AM

Created By: jdurand

Project Summary

Link to Project

Estimated Construction Cost: $39000000.00
Useful Life: 2070 - 2079

Ecosystem Benefits	Scores
Project Score	Moderate
Exposure	**Scores**
Sea Level Rise/Storm Surge	High Exposure
Extreme Precipitation - Urban Flooding	Moderate Exposure
Extreme Precipitation - Riverine Flooding	High Exposure
Extreme Heat	High Exposure

Asset Summary

Number of Assets: 1

Asset Risk	Sea Level Rise/Storm Surge	Extreme Precipitation - Urban Flooding	Extreme Precipitation - Riverine Flooding	Extreme Heat
115 kV electric transmission lines	High Risk	High Risk	High Risk	High Risk

Project Outputs

	Target Planning Horizon	Intermediate Planning Horizon	Percentile	Return Period	Tier
Sea Level Rise/Storm Surge					
115 kV electric transmission lines	2070	2050		200-yr (0.5%)	Tier 3
Extreme Precipitation					
115 kV electric transmission lines	2070			50-yr (2%)	Tier 3
Extreme Heat					
115 kV electric transmission lines	2070		90th		Tier 3

Scoring Rationale - Exposure

Sea Level Rise/Storm Surge

This project received a "High Exposure" because of the following:

- Located within the predicted mean high water shoreline by 2030
- Exposed to the 1% annual coastal flood event as early as 2030
- Located within the 0.1% annual coastal flood event within the project's useful life

Extreme Precipitation - Urban Flooding

This project received a "Moderate Exposure" because of the following:

- Projected increase in rainfall within project's useful life
- No historic flooding at project site
- No increase to impervious area

Extreme Precipitation - Riverine Flooding

This project received a "High Exposure" because of the following:

- Exposed to riverine flooding within the project's useful life
- No historic riverine flooding at project site

Extreme Heat

This project received a "High Exposure" because of the following:

- 30+ days increase in days over 90 deg. F within project's useful life
- Tree removal
- Located within 100 ft of existing water body

Scoring Rationale - Asset Risk Scoring

Asset - 115 kV electric transmission lines
Primary asset criticality factors influencing risk ratings for this asset:

- Asset may inaccessible/inoperable for more than a day but less than a week after natural hazard event
- Greater than 100,000 people would be directly affected by the loss/inoperability of the asset
- The infrastructure is located in an environmental justice community, and/or does provide services to vulnerable populations
- Inoperability of the asset would result in moderate or severe injuries or moderate or severe impacts to chronic illnesses
- Cost to replace is between $30 million and $100 million
- There are no hazardous materials in the asset

Project Design Standards Output

Asset: 115 kV electric transmission lines — Infrastructure

Sea Level Rise/Storm Surge — High Risk

Target Planning Horizon: 2070
Intermediate Planning Horizon: 2050
Return Period: 200-yr (0.5%)

Applicable Design Criteria

Tiered Methodology: Tier 3 (Link)

Tidal Benchmarks: Yes
Stillwater Elevation: Yes
Design Flood Elevation (DFE): Yes
Wave Heights: Yes
Duration of Flooding: Yes
Design Flood Velocity: Yes
Wave Forces: Yes
Scour or Erosion: Yes

Extreme Precipitation — High Risk

Target Planning Horizon: 2070
Return Period: 50-yr (2%)

Applicable Design Criteria

Tiered Methodology: Tier 3 (Link)

Total Precipitation Depth for 24-hour Design Storms: Yes
Peak Intensity for 24-hour Design Storms: Yes
Riverine Peak Discharge: Yes
Riverine Peak Flood Elevation: Yes
Duration of Flooding for Design Storm: Yes
Flood Pathways: Yes

Extreme Heat — High Risk

Target Planning Horizon: 2070
Percentile: 90th Percentile

Applicable Design Criteria

Tiered Methodology: Tier 3 (Link)

Annual/Summer/Winter Average Temperature: Yes
Heat Index: Yes
Days Per Year With Max Temperature > 95°F: Yes
Days Per Year With Max Temperature > 90°F: Yes
Days Per Year With Max Temperature < 32°F: Yes
Number of Heat Waves Per Year: Yes
Average Heat Wave Duration (Days): Yes
Cooling Degree Days (Base = 65°F): No
Heating Degree Days (Base = 65°F): No
Growing Degree Days: No

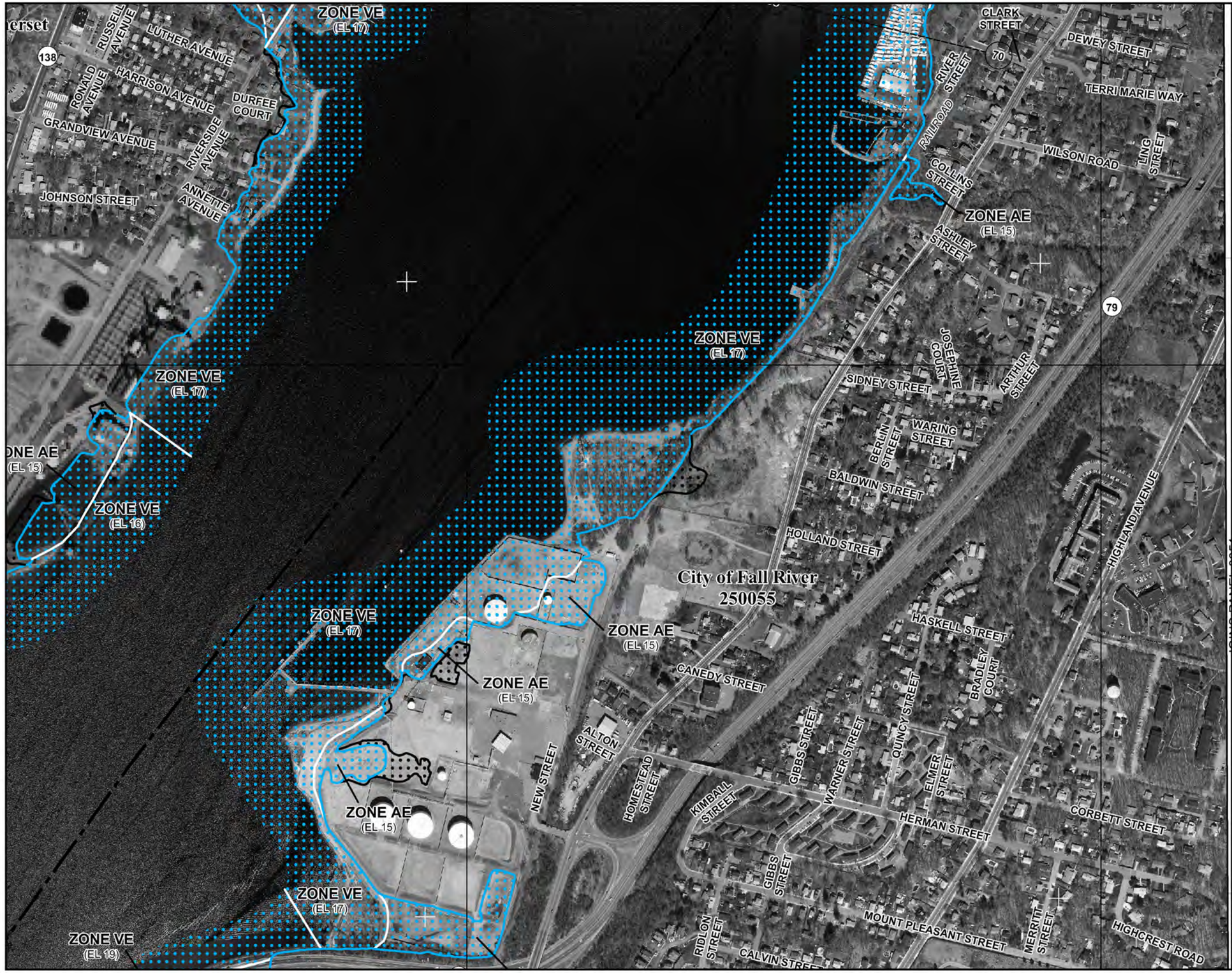
Project Inputs

Core Project Information	
Name:	N12/M13 DCT Separation
Given the expected useful life of the project, through what year do you estimate the project to last (i.e. before a major reconstruction/renovation)?	2070 - 2079
Location of Project:	Fall River
Estimated Capital Cost:	$39,000,000
Entity Submitting Project:	Executive Office of Energy and Environmental Affairs
Is this project being submitted as part of a state grant application?	No
Which grant program?	
Is climate resiliency a core objective of this project?	No
Is this project being submitted as part of the state capital planning process?	No
Is this project being submitted as part of a regulatory review process?	Yes
Brief Project Description:	MEPA
Project Ecosystem Benefits	
Provides flood protection through green infrastructure or nature-based solutions	No
Provides storm damage mitigation	Yes
Provides groundwater recharge	No
Protects public water supply	No
Filters stormwater	No
Improves water quality	No
Promotes decarbonization	Yes
Enables carbon sequestration	No
Provides oxygen production	No
Improves air quality	Yes
Prevents pollution	No
Remediates existing sources of pollution	No
Protects fisheries, wildlife, and plant habitat	Yes
Protects land containing shellfish	No
Provides pollination	Yes
Provides recreation	No
Provides cultural resources/education	Yes
Project Climate Exposure	
Does the project site have a history of coastal flooding?	No
Does the project site have a history of flooding during extreme precipitation events (unrelated to water/sewer damages)?	No
Does the project site have a history of riverine flooding?	No
Does the project result in a net increase in impervious area of the site?	No
Are existing trees being removed as part of the proposed project?	Yes

Project Assets

Asset: 115 kV electric transmission lines
Asset Type: Utility Infrastructure
Asset Sub-Type: Energy (electric, gas, petroleum, renewable)
Construction Type: Major Repair/Retrofit
Construction Year: 2024
Useful Life: 50
Identify the length of time the asset can be inaccessible/inoperable without significant consequences.
Infrastructure may be inaccessible/inoperable for more than a day, but less than a week after natural hazard without consequences.
Identify the geographic area directly affected by permanent loss or significant inoperability of the infrastructure.
Impacts would be regional (more than one municipality and/or surrounding region)

Identify the population directly served that would be affected by the permanent loss or significant inoperability of the infrastructure.
Greater than 100,000 people
Identify if the infrastructure is located within an environmental justice community or provides services to vulnerable populations.
The infrastructure is located in an environmental justice community, and/or provides some services to vulnerable populations (services are not available elsewhere to same population)
Will the infrastructure reduce the risk of flooding?
No
If the infrastructure became inoperable for longer than acceptable in Question 1, how, if at all, would it be expected to impact people's health and safety?
Inoperability of the infrastructure would result in moderate or severe injuries or moderate or severe impacts to chronic illnesses
If there are hazardous materials in your infrastructure, what are the extents of impacts related to spills/releases of these materials?
There are no hazardous materials in the infrastructure
If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts on other facilities, assets, and/or infrastructure?
Significant – Inoperability is likely to impact other facilities, assets, or buildings and result in cascading impacts that will likely affect their ability to operate
If the infrastructure was damaged beyond repair, how much would it approximately cost to replace?
Between $30 million and $100 million
Does the infrastructure function as an evacuation route during emergencies? This question only applies to roadway projects.
No
If the infrastructure became inoperable for longer than acceptable in Question 1, what are the environmental impacts related to natural resources?
No impact on surrounding natural resources is expected
If the infrastructure became inoperable for longer than acceptable in Question 1, what are the impacts to government services (i.e. the infrastructure is not able to serve or operate its intended users or function)?
Loss of infrastructure may reduce the ability to maintain some government services, while a majority of services will still exist
What are the impacts to loss of confidence in government resulting from loss of infrastructure functionality (i.e. the infrastructure asset is not able to serve or operate its intended users or function)?
Reduced morale and public support



MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0332G

FIRM

FLOOD INSURANCE RATE MAP

BRISTOL COUNTY, MASSACHUSETTS

(ALL JURISDICTIONS)

PANEL 332 OF 550

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FALL RIVER, CITY OF	250055	0332	G
SOMERSET, TOWN OF	255220	0332	G
SWANSEA, TOWN OF	255221	0332	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
25005C0332G

MAP REVISED
JULY 16, 2014

Federal Emergency Management Agency

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at https://msc.fema.gov.

National Flood Hazard Layer FIRMette

FEMA

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

1:6,000

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, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- 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*

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

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

OTHER FEATURES
- 20.2 — Cross Sections with 1% Annual Chance
- 17.5 — Water Surface Elevation
- Coastal Transect
- 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 represent 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 6/25/2019 at 11:23:05 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.

Appendix E-2: Remote Consultation with Environmental Analyst Response Letter

Erin Whoriskey
Lead Environmental Scientist
NE Environmental Permitting

November 9, 2021

Secretary Kathleen A. Theoharides
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Subject: EEA No. 16467
New England Power Company
N12/M13 Double Circuit Tower Separation Project
Expanded Environmental Notification Form
Somerset and Fall River, Massachusetts

Dear Secretary Theoharides:

On Wednesday, November 3rd, 2021, the New England Power Company (NEP) participated in a remote consultation meeting/site visit with Environmental Analyst, Eva Murray, and other state agencies and stakeholder to review the proposed N12/M13 Double Circuit Tower Separation Project (Project) located in the municipalities of Somerset and Fall River, Massachusetts.

During the virtual meeting, several questions were posed by meeting participants and NEP was requested to respond, in order to incorporate these responses into the record of the filing of for the Expanded Environmental Notification Form. Following is a listing of the questions and NEP's responses.

Question/Request: A zoomed in plan with delineated coastal resource areas (VE Zones) for the two locations where the river-crossing towers will be located.

NEP Response: Attached are two sets of figures. The first set of figures are preliminary grading plans prepared for the proposed construction within Land Subject to Coastal Storm Flowage to install proposed structure M13N-6. The grading plan includes an access route, structure work pad and accommodates for construction staging and construction storm water BMPs. No grading is required for M13N-5. Construction and staging of equipment for M13N-5 will take place on existing asphalt on the east side of the Taunton River. The second set of figures are excerpted from the Project Wetland and Stream Report to illustrate the coastal resource areas and VE zones found on the Somerset and Fall River sides of the Taunton River. Representative photographs of the wetland resource areas are found within the report appended to the ENF filing.

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Question/Response: Outreach that has been conducted to-date.

NEP Response: NEP's stakeholder outreach to-date has included door-to-door visits with direct landowners and abutters, distribution of door hangers and fact sheets to notify the immediate abutters of the pending project, and an active Project 24-hour call-in number and email address so that community members can contact Project staff directly. NEP is also developing a website that will be available in English and translated to Spanish and Portuguese to promote participation from local environmental justice communities. We expect these to be available to the public by the end of 2021. NEP will be scheduling an open house to support the Section 72 Petition to be filed with the Department of Public Utilities in the 1st Quarter of 2022. Translation services will be available and accessible for those participants whose primary language is not English.

Question/Request: Timeline (duration) matts will be on BVW/Salt Marsh – discussion of any monitoring/restoration (if required) following removal.

NEP Response: As explained below, construction mats will be temporarily placed in salt marsh only if low ground pressure (LGP) equipment is not practicable for wire stringing operations. The mobilization, wire stringing and demobilization of wire stringing equipment is expected to extend for a duration of approximately 4 to 6 weeks meaning the construction mats could remain within the salt marsh for 4-6 weeks. However, if LGP equipment is available and feasible, construction matting impacts can be reduced.

With respect to BVW, we are also proposing temporary placement of construction mats in the NEP ROW between Route 24 and the Sykes Road Substation. The M13N Line needs to be constructed and then the N12 Line needs to be rebuilt. This construction matting will remain in place for at least a period of 6 months, with the possibility of the mats remaining in-place for up to 12 months, within the BVW located in this section of the NEP ROW.

Well-established BMPs that have been required by DEP and other environmental regulators will be employed to minimize and mitigate any impacts. A full-time environmental compliance monitor will be on-site during use of LGP equipment and during the placement of temporary construction mats. Once the construction mats are removed, any visible rutting would be lightly graded, and any exposed soils would be covered with straw mulch. A wetland scientist will make the determination if any corrective actions are needed within the salt marsh or BVW. If traversing the salt marsh causes more than temporary disturbance within the salt marsh, restoration measures would be implemented such as stabilization and revegetation of ground surfaces and soils located upgradient of the coastal features to prevent scouring, supplementary plantings within the salt marsh to incorporate plant species such as salt marsh grass (*Spartina alterniflora*), salt meadow grass (*Spartina patens*) and spike grass (*Distichlis spicata*). NEP anticipates performing post-construction monitoring on coastal and freshwater wetlands affected by the Project.

Question/Request: For impacts that are conservative (i.e., Salt Marsh mats?) a discussion of what conditions would lead to this impact being required.

NEP Response: When pulling or stringing new overhead conductor from transmission structure to transmission structure, a lead line or rope is maneuvered between the spans. Temporary assemblies and pullies are attached to the structures and the conductors are strung onto the structures and tensioned atop the structures. NEP and its contractor will require workspace for the wire pulling operation. Ideally, an area that extends to a 3:1 ratio beyond the structure is needed to attain the proper angle and length of transmission line to perform the wire pulling. Between structures M13N-6, M13N-7, and M13N-8, the lead line for the conductor stringing may require the temporary crossing of a salt marsh and open water inlet of the Taunton River. NEP is proposing alternative means for crossing the salt marsh. The preferred option includes the use of low ground pressure (LGP) equipment such as an all-terrain amphibious vehicle to traverse the salt marsh. The LGP equipment is typically approximately 8-feet wide with ground pressure less than or equal to 3 pounds per square inch. The LGP equipment is used to access through deep water habitats without adversely affecting the underlying soils and hydrology of these habitats.

Where LGP equipment is not practicable, a second alternative is to install temporary construction mats in the salt marsh to allow temporary access to facilitate the wire stringing. If construction mats area used, the mats would be secured in place to prevent them from being dislodged during high tides. Should a coastal storm be forecast, the swamp mats would be secured or removed and staged in an upland area. Access and stringing of the conductors over the salt marsh could be performed during the dormant season if schedule allows and aligns with the scheduled outage window.

For stringing of the conductor across the Taunton River for the new M13N Line, NEP is carrying some options to complete this task. These options include aerial installation via a helicopter or using a boat to gain access across the Taunton River. The use of a helicopter could reduce the impact to salt marsh. Should either of these crossing methods be used the appropriate notifications would be made by NEP including, but not limited to, the Federal Aviation Administration (FAA), U.S. Coast Guard, and Somerset and Fall River Harbormasters. The final decision regarding helicopter use for any Project activity will be made based on site logistics, weather/wind conditions and safety considerations during the construction phase when more detailed information is known and in consultation with the selected contractor.

Question/Request: I do want to note I appreciate the inclusion of these impacts as a conservative measure.

NEP Response: Acknowledged.

Question/Request: Contingency plan regarding work during coastal storms – this can be very high-level at this point, although a more detailed discussion may be requested in the EIR.

NEP Response: Should there be a significant coastal storm forecast during the construction of the Project, NEP would likely call for a standby where all construction work is temporarily suspended. All equipment and vehicles located within Land Subject to Coastal Storm Flowage (LSCSF) would be removed from the site or secured. Potentially hazardous materials such as fuel containers would be relocated outside of LSCSF and secured. There would be no operation of LGP equipment during a coastal storm event nor during an extreme high tidal cycle. If construction mats are installed within the salt marsh, the mats would be anchored in-place or removed. The removal and replacement of construction mats would be determined based on considerations of the forecast sea state, wave height, high tide elevation and wind conditions. If there is a risk of the mats being dislodged or washed away, the mats would be removed from the salt marsh and relocated beyond the forecast elevation of the tide.

Question/Response: Discussion of any proactive work that has been conducted regarding the MCP sites (Attempting to retain an LCP, etc.).

NEP Response: Given the close proximity to the former Shell Oil Terminal, NEP expects to encounter known contaminants associated with the Site's previous operations during the construction of the transmission tower foundations. NEP has retained Brian Klingler, P.G., L.S.P. of Coneco Engineers and Scientists, (LSP No. 8493) to support Massachusetts Contingency Plan (MCP) compliance associated with the construction of the DCT Separation Project. Coneco will facilitate regulatory notifications and reporting required under the MCP and assist with planning and proper management and disposal of impacted soil and groundwater.

Question/Request: Total acreage (or sf, whatever is more appropriate) of tree clearing.

NEP Response: Tree clearing is required within uplands and Land Subject to Coastal Storm Flowage where structure M13N-6 is proposed on the Fall River side of the Taunton River resulting in approximately 2.0- acres of tree removal.

Tree clearing is also proposed within the existing NEP ROW in between State Route 24 easterly to the Sykes Road Substation. Tree removal will occur on the south side of the ROW and the tree removal area ranges from 15-28-feet in width within the existing ROW. The tree clearing will result in approximately 12,162 square feet of conversion of forested wetland to scrub-shrub wetland and approximately 8,000 square feet of tree removal in uplands.

Selective removal of danger and hazard trees, where required, will include the removal of tall-growing woody species within the targeted areas of the ROW. A danger tree is a tree located either on or off the ROW, which may contact electric lines if it failed or were cut. Hazard trees are danger trees that are structurally weak, broken, damaged, decaying or infested and that could contact the structures or conductors (or violate the conductor clearance zones) if they were to fail and fall towards the ROW. The identification of danger or hazard trees occurs closer to the start of construction.

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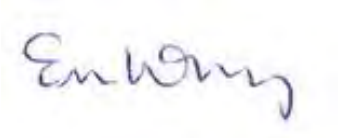
Question/Response: Discussion of coordination that has been conducted up to this point with MBTA re: South Coastal Rail, if any disruption of service is expected (or a discussion of what conditions would lead to disruption being required)

NEP Response: Representatives of NEP and POWER have met with representatives of the MBTA on a routine basis to discuss the coordination required for the MBTA to construct their South Coast Rail Project in Fall River and for NEP to construct the transmission line. The MBTA's plan for the rail yard in Fall River includes an access road for NEP to use on a temporary basis to cross the railroad tracks in order to construct proposed structure M13N-6 and to perform the bussing at existing structure N12-6. Should the N12/M13 DCT Separation Project be approved, NEP would provide an updated construction schedule to the MBTA and notify the MBTA of the dates required to cross the tracks and/or fouling of the tracks. Safety is of the utmost importance to NEP and the MBTA, as well as ensuring uninterrupted service by the MBTA. NEP also has a mandate to ensure continued reliable electric service to the SEMA-RI region.

Please do not hesitate to contact me at (781) 907-3598, or Erin.Whoriskey@nationalgrid.com, or Jamie Durand at (401) 439-3020, or jamie.durand@powereng.com, if you have any questions or require additional information. Thank you for your consideration and review.

Sincerely,

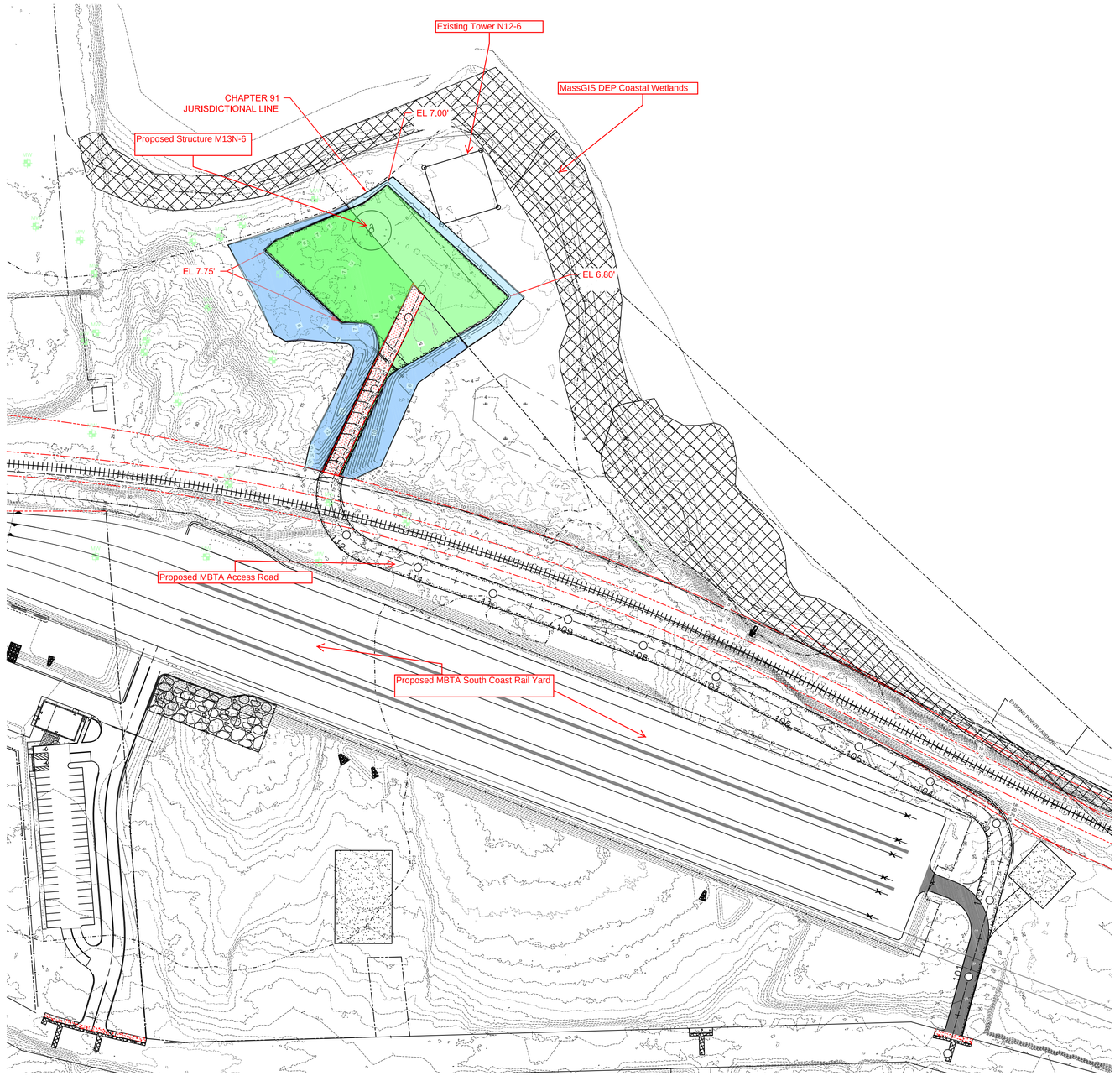


Erin Whoriskey
Lead Environmental Scientist
National Grid

James Durand
Environmental Project Manager
POWER Engineers Consulting, PC

Attachments

c: Eva Murray, Environmental Analyst (MEPA)
D. Beron, NEP
W. Levine, NEP
L. Peloquin Shea, NEP



Access Route Improvements

Grading for Access Route & Structure Work Pad

Clearing & Placement of Gravel for Structure Work Pad

80 0 80 160 FT

SCALE: 1"= 80'

AUTOCAD FILE NAME: 146782_General Access Schematic_A.dwg

CALL BEFORE YOU DIG

WWW.CBYD.COM

POWER ENGINEERS

No	DATE	REVISION	BY	CHKD	ENGR	SUPV

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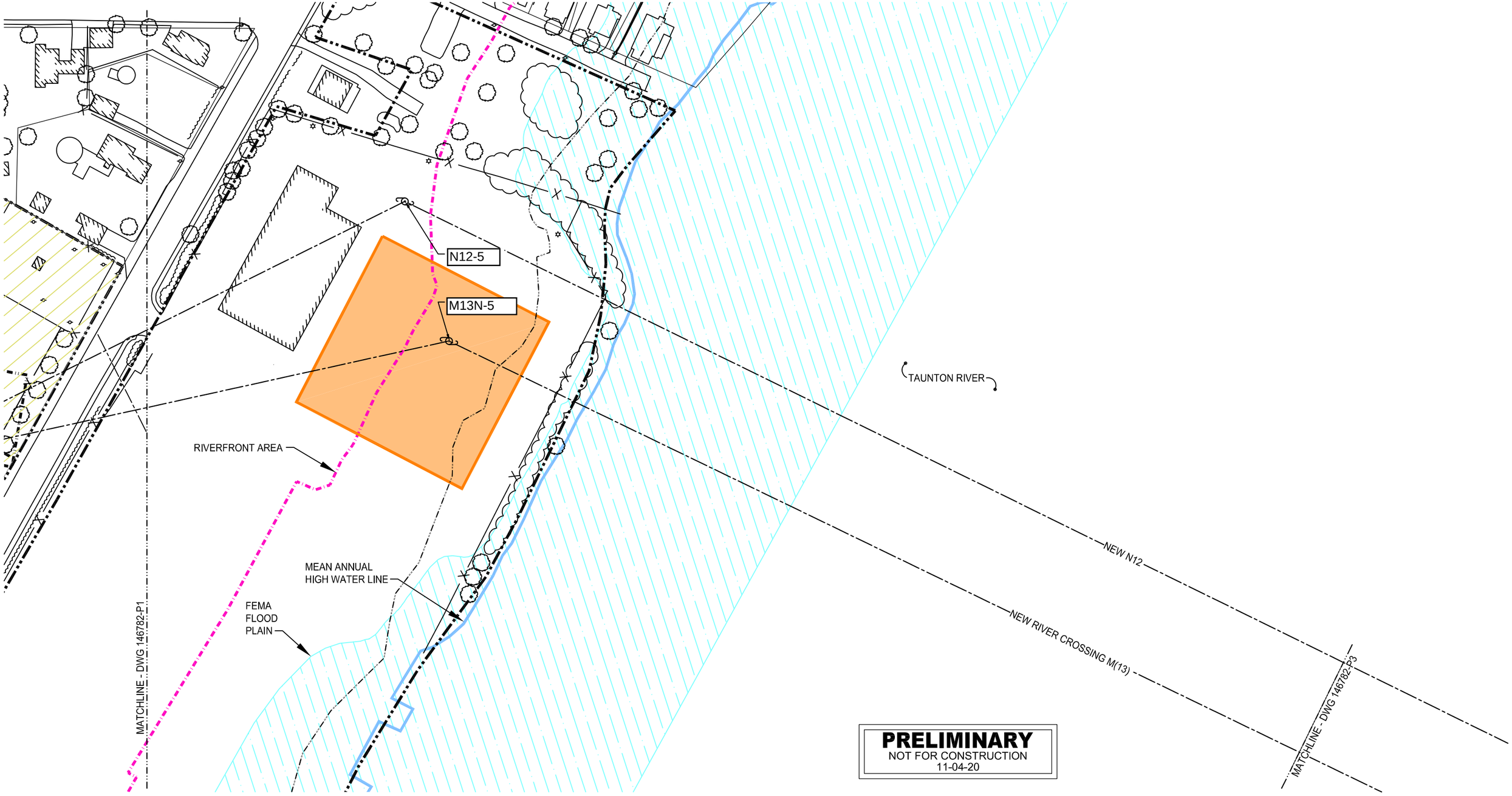
PROJ #	
WORK #	
DRAWN	EVD
CHECKED	PSK
DESIGN ENG	.
DESIGN SUPV	.

ACCESS SCHEMATIC
NATIONAL GRID,
N12 & M13N 115 kV TRANSMISSION LINES
FALL RIVER, MA

DATE	SCALE	SHEET	SHEET NAME
2021-11-04	1"=80'	1 OF 1	146782-C3



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50 0 50 100 FT

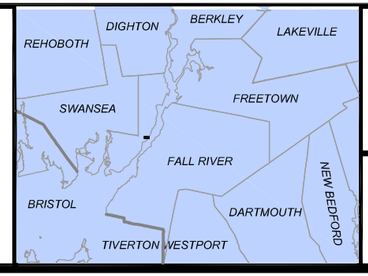
SCALE: 1"= 100'

Work Pad on Existing Paved Surface for Structure M13N-5

M13 and N12 115kV Line DCT Separation
PROPOSED PROJECT
CONSTRUCTION FEATURES

Dwg. No. 146782-P2
SHEET 3 OF 16

Date: XX/XX/XX Drawn: EVD Checked: XXX Revision: C



Commonwealth of Massachusetts

Bristol County:
Town/City of Fall River

NAD 1983 UTM Zone 18N USFt

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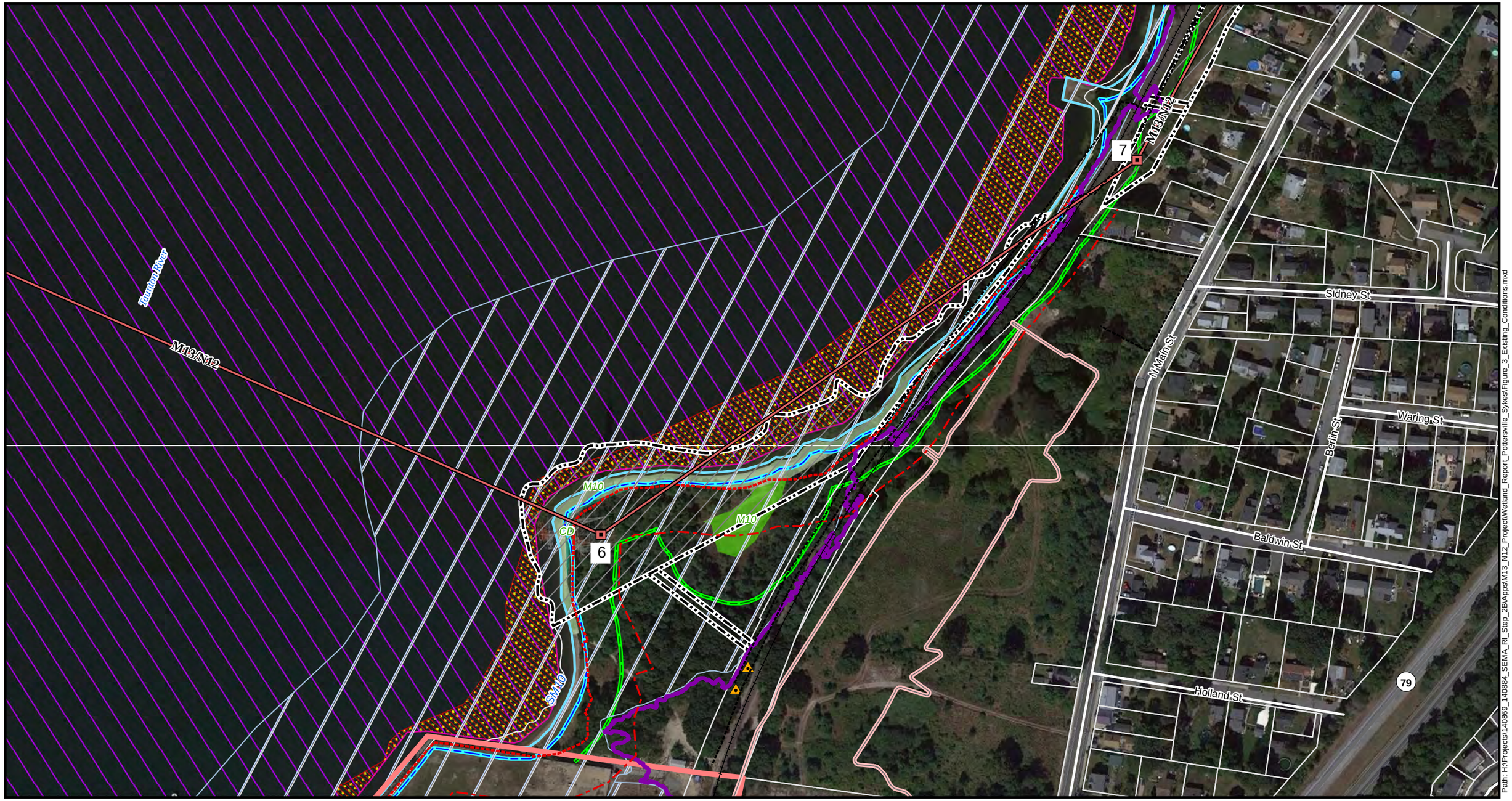


N

W E

S

1 " = 200 '

0 100 200 300

Feet

Legend

- Existing Structure
- Transmission Line
- Existing Right of Way
- National Grid Owned Land
- Parcel Boundary
- State Highway
- Local Road
- Railroad
- Proposed MassDOT Rail Station

Field GPS Survey Point
- Man Hole
- Pipeline Marker
- Approximate Pipeline Location

Field GPS Survey Line
- Stone Wall
- Mean Annual High Water Line
- Coastal Beach and Salt Marsh
- Coastal Dune Wetland (CD)
- Field Delineated Resource Boundary
- Riverfront Area
- 100 ft Buffer
- FEMA Flood Hazard (DFIRM 100yr)
- Land Subject to Coastal Storm Flowage (FEMA VE 17 ft)
- Top of Coastal Bank
- 100 Foot Buffer Zone (Top of Coastal Bank)
- Designated Port Area (DPA)

Shellfish Suitability Areas (Restricted Harvest DMF Area MHB 2.0)
- American Oyster
- Quahog
- Soft-shell Clam

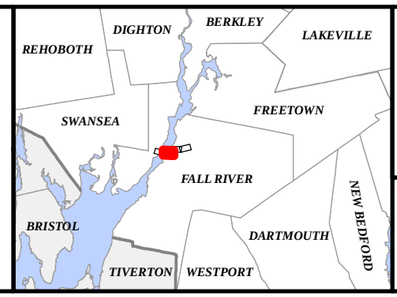
N12/M13 Double Circuit Tower Separation Project

Figure 3
Existing Conditions

Page 2 of 4

New England Power Company

Date: 9/30/2021 Author: TDH



Commonwealth of Massachusetts

Bristol County:
Town/City of Fall River

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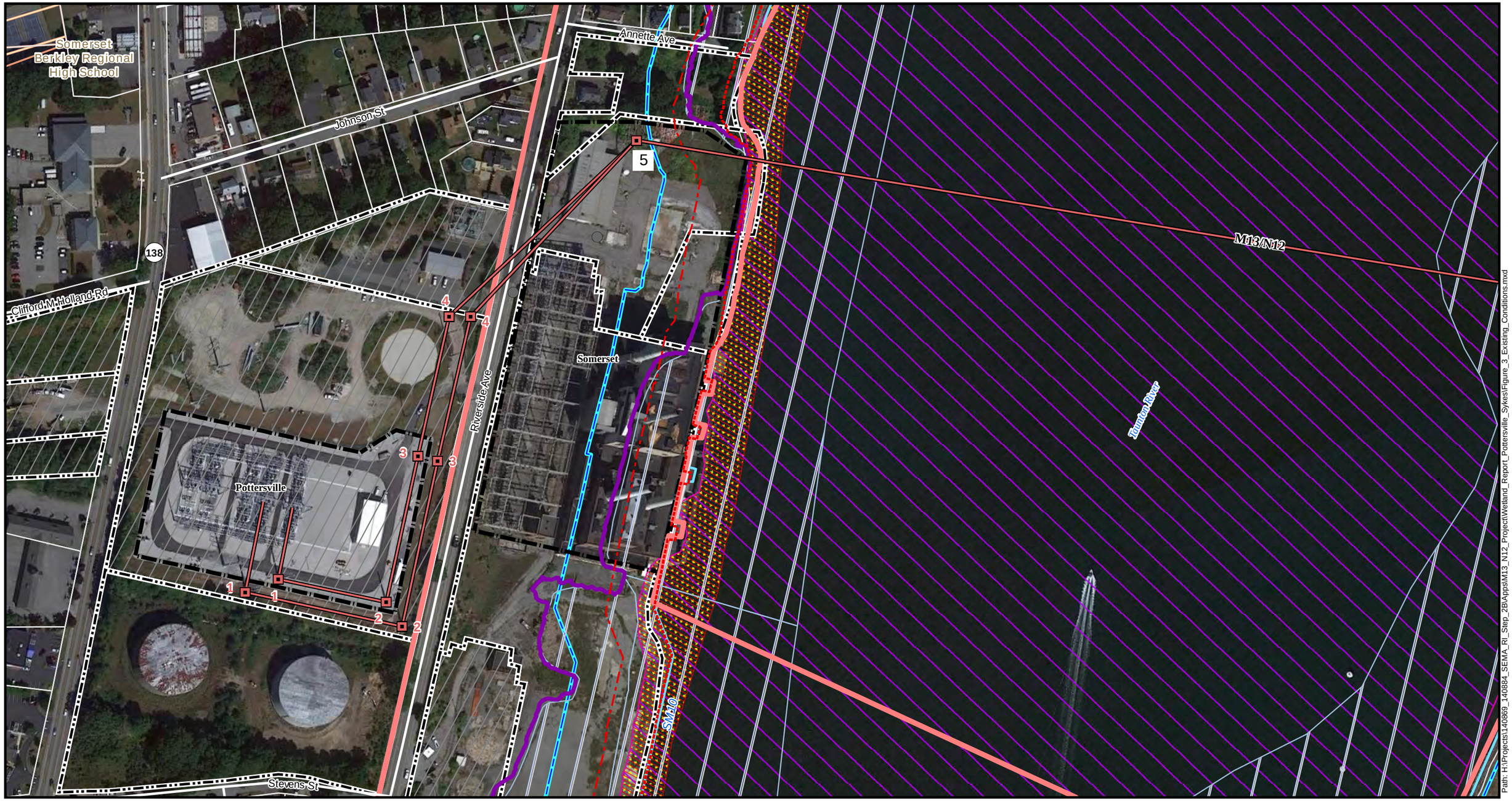

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1 " = 200 '

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Feet

Legend

- Existing Structure
- Transmission Line
- Existing or Proposed Substation Site
- Existing Right of Way
- National Grid Owned Land
- Parcel Boundary
- State Highway
- Local Road

Field GPS Survey Point

- Man Hole

Field GPS Survey Line

- Mean Annual High Water Line
- Riverfront Area
- FEMA Flood Hazard (DFIRM 100yr)
- Land Subject to Coastal Storm Flowage (FEMA VE 17 ft)
- Other Protected Lands
- Top of Coastal Bank
- 100 Foot Buffer Zone (Top of Coastal Bank)
- Designated Port Area (DPA)

Shellfish Suitability Areas (Restricted Harvest DMF Area MHB 2.0)

- American Oyster
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N12/M13 Double Circuit Tower Separation Project

Figure 3
Existing Conditions

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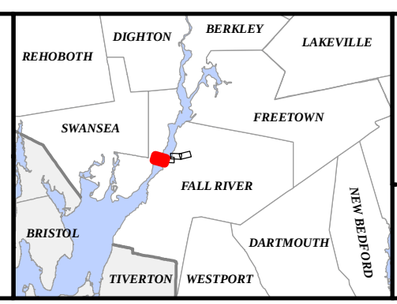

Commonwealth of Massachusetts

Bristol County:
Town/City of Somerset

NAD 1983 UTM Zone 18N USFt

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Appendix E-3: Massachusetts Natural Heritage and Endangered Species Program Response to MESA Checklist

MASSWILDLIFE

DIVISION OF
FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

May 03, 2022

Erin Whoriskey
New England Power
dba National Grid
40 Sylvan Rd
Waltham MA 02451

RE: Project Location: Pottersville substation to Sykes Rd. substation, Somerset/Fall River
Project Description: National Grid N12 and M13 Double Circuit Tower Separation Project
NHESP Tracking No.: 22-41027

Dear Commissioners & Applicant:

Thank you for submitting information regarding your project to the Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division").

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **does not occur within Estimated Habitat of Rare Wildlife or Priority Habitat** as indicated in the *Massachusetts Natural Heritage Atlas* (15th Edition). Therefore, the project is not required to be reviewed for compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.37, 10.59 & 10.58(4)(b)) or the MA Endangered Species Act Regulations (321 CMR 10.18). Any additional work beyond that shown on the site plans may require a filing with the Division.

Please note that this determination addresses only the matter of **rare** wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project. If you have any questions regarding this letter please contact Melany Cheeseman, Endangered Species Review Assistant, at (508) 389-6357.

Sincerely,

Everose Schlüter

Everose Schlüter, Ph.D.
Assistant Director

cc: Jamie Durand, POWER Engineers