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September 25, 2020

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
 ON THE
 ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Route 151 (Nathan Ellis Highway) Corridor Improvements
 PROJECT MUNICIPALITY : MASHPEE
 PROJECT WATERSHED : Buzzards Bay
 EEA NUMBER : 16261
 PROJECT PROPONENT : MassDOT; Town of Mashpee
 DATE NOTICED IN MONITOR : August 26, 2020

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project includes the full-depth reconstruction and widening of Nathan Ellis Highway (Route 151) in Mashpee, from the Falmouth town line to the Mashpee Rotary at Route 28/Great Neck Road, approximately 2.2 miles. The project is proposed jointly by the Massachusetts Department of Transportation (MassDOT) and the Town of Mashpee (the Town) to improve traffic operations, create and improve bicycle and pedestrian accommodations, and improve safety within the project limits. The project will address operational deficiencies by providing a consistent roadway cross-section including 5.0-foot wide shoulders, extending an existing 10-foot wide shared-use path on the north side of the roadway, and constructing a 5.0-foot wide ADA-compliant sidewalk on the south side of the roadway in accordance with MassDOT’s Healthy Transportation Policy (HTP). The Project is included in the Cape Cod Commission’s (CCC) 2021 Transportation Improvement Program (TIP) and will significantly improve pedestrian and bicycle accommodations. Specifically, the project includes the following activities:

- Full-depth reconstruction of the existing roadway to achieve uniform 11-foot-wide travel lanes and 5-foot-wide shoulders/bicycle lanes on both sides of the roadway;
- Construction of continuous 5.0-foot ADA-compliant sidewalks along the south side of the roadway, extending 1.6 miles from the intersection of Winslow Drive and Route 151 to the intersection of Jobs Fishing Road and Route 151;
- Widening of the existing variable-width shared-use path on the north side of the roadway to a consistent 10-foot width and extension of the path 1.2 miles westward to the Falmouth town line and 0.25 miles eastward to the Mashpee Commons commercial area;
- Extension of the existing culvert under Route 151 associated with Childs River and construction of a new headwall;
- Installation of a 5.0- to 7.0-foot wide grass strip separating the shared-use path and roadway;
- Widening of the northbound and southbound approach of the Route 151/Old Barnstable Road intersection, and the eastbound approach of the Frank E. Hicks Drive/Job's Fishing Road intersection to provide 3 lanes: a left-, through- and right-turn lane;
- Construction of crosswalks with pedestrian-activated signal phases at all signalized intersections;
- Construction of a center/left-turning lane at the unsignalized intersections of Route 151 at Old Brickyard Road, Massasoit Avenue, Ninigret Avenue, and Algonquin Avenue;
- Installation of 116 deep-sump catch basins, 16 leaching galleys, and 18 gutter inlets;
- Reconstruction of an existing outfall and the construction of two new outfalls; and
- Construction of 10 retaining walls totaling 2,025 linear feet (lf).

Project Site

The project site totals 27.8 acres with the project corridor length extending approximately 2.2 miles. Although Route 151 has a State-route number, the section of roadway within the project site is owned and maintained by the Town of Mashpee. Route 151 is a two-lane east-west Urban-Principal Arterial, varying in width from 29- to 45-feet within the project site. The roadway currently has 12-foot travel lanes with 2- to 4-foot wide shoulders. The eastern end of the project corridor is characterized primarily by commercial and retail development, including the Mashpee Commons commercial shopping area, with residential neighborhoods towards the western end of the project corridor. Mashpee High School and several public- and privately-owned open space properties are present along the project corridor.

Traffic volumes along the project corridor range from 15,200 daily vehicle trips (dvt) west of the Mashpee Rotary, to 22,200 dvt west of the Mashpee Rotary at the Falmouth town line. According to the ENF, several intersections along the Route 151 roadway corridor experience an above-average crash rate compared to the MassDOT District 5 average as well as a substandard level of service (LOS) – a measure of vehicle delay through an intersection. The project site includes an existing shared-use path that runs parallel to Route 151 on the north side of the roadway, extending approximately 0.75-miles

from the intersection of Route 151 at Frank E. Hicks Drive/Jobs Fishing Road eastward to the Route 151/Old Barnstable Road intersection. The path is currently approximately 7.0- to 8.0-foot wide, and it is the only pedestrian/bicycle facility along the Route 151 corridor.

The project corridor contains several wetland resource areas, including: Bordering Vegetated Wetlands (BVW), Isolated Vegetated Wetlands (IVW), Riverfront Area (RFA), Land Under Water (LUW), and Bank. Two streams cross under Route 151 within the project corridor; the Childs River and Quashnet River. The project site contains a significant amount of Zone II Wellhead Protection Areas, as delineated by the Massachusetts Department of Environmental Protection (MassDEP). Portions of the project site are characterized as *Estimated and Priority Habitat of Rare Species* as delineated by the Natural Heritage and Endangered Species Program (NHESP) in the 14th Edition of the Massachusetts Natural Heritage Atlas; several certified- and potential-vernal pools are also present adjacent to the roadway, which are classified as Outstanding Resource Waters (ORW). The site does not contain any structures listed in the State Register of Historic Places or the Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth (Inventory).

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include the alteration of 24.2 acres of land (including creation of 3.61 acres of impervious area for a total of 15.41 acres), and alteration of the following wetland resource areas: BVW (2,034 square feet (sf) or 0.05 acres), RFA (84,393 sf or 1.94 acres), LUW (1,449 sf or 0.03 acres), IVW (186 sf), and Bank (116 lf). The project will result in impacts to mapped *Priority Habitat* and Zone II Wellhead Protection Areas. The project will require 4,562 cubic yards (cy) of fill, and the removal of 85 public shade trees. Approximately 92.6 cy of sediment will be dredged for culvert work.

Measures to avoid, minimize, and mitigate Damage to the Environment include the construction of retaining walls and rockfill embankments to reduce impacts to adjacent wetlands, implementation of an invasive plant management strategy, planting of 135 trees and 217 shrubs along the project corridor, stormwater management system improvements, restoration of temporarily impacted wetland resource areas to pre-construction conditions, construction of an 875-sf wetlands replication area, and utilization of erosion and sedimentation controls during construction.

Jurisdiction and Permitting

This project is subject to MEPA review and preparation of an ENF pursuant to 301 CMR CMR 11.03(b)(1)(f), 11.03(6)(b)(1)(b), 11.03(6)(b)(2)(a), and 11.03(6)(b)(2)(b) of the MEPA regulations because it requires a State Agency Action and will result in alteration of one half or more acres of wetlands, the widening of an existing roadway by four or more feet for one-half or more miles, the widening of an existing roadway that will alter the bank or terrain ten or more feet from the existing roadway for one-half or more miles, and the cutting of five or more living public shade trees of 14 or more inches in diameter at breast height (dbh), respectively. Comments from MassDEP indicate that the project will require the issuance of a Chapter 91 (c.91) License.

The Mashpee Conservation Commission issued an Order of Conditions (OOC) approving the project on September 16, 2020.¹ A Superseding Order of Conditions from MassDEP will be required in the case of an appeal. The project also requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (EPA).

Because the project is being undertaken by a State Agency and receiving Financial Assistance, MEPA jurisdiction for any future review would be broad in scope and extend to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

Review of the ENF

The ENF provided a description of existing and proposed conditions, preliminary project plans, wetland replication plan, correspondence with NHESP regarding rare species habitat, and identified measures to avoid, minimize and mitigate environmental impacts. To facilitate MEPA review the Proponent distributed supplemental information regarding the limits of Zone II Wellhead Protection Area impacted by the project; stormwater management infrastructure; volume of dredge and fill material; length of existing and proposed culvert and pipe; retaining walls; and details of phased construction work.

Comments from the CCC state the project was identified in the 2020 Cape Cod Regional Transportation Plan as a regional priority project and that it advances the Transportation goal of the Cape Cod Regional Policy Plan. The CCC further states Route 151 is a critical regional roadway link for all modes of transportation in the Upper Cape region, and that the project will address several existing safety and multi-modal deficiencies in the road network. Comments from State Agencies do not identify any significant impacts that were not reviewed in the ENF, note deficiencies in the alternatives analysis, or identify additional alternatives for further review.

Alternatives Analysis

As described in the ENF, alternatives were evaluated on their ability to best meet project goals while minimizing environmental, historic, and economic impacts to the area. Project goals include: improving traffic operations, creating improved accommodations for bicyclists and pedestrians, and improving safety within the project limits in accordance with MassDOT's HTP (which ensures that all MassDOT projects are designed and implemented in a way to include multimodal transportation options). The ENF evaluated the following alternatives: No-Build Alternative; Full-Width Roadway Alternative, and the Preferred Alternative.

The No-Build Alternative would not result in any environmental impacts; however, this Alternative was dismissed as it would also not involve any improvements to Route 151 and would not meet project goals. The Full-Width Roadway Alternative would include the reconstruction of Route 151 with a 40-foot wide cross-section that would include two 12-foot-wide lanes with 8-foot-wide shoulders on each side of the roadway for the entire corridor. The cross section of Route 151 would increase to approximately 64-feet wide at signalized intersections to provide 12-foot wide left/right-turn lanes. This

¹ Date of issuance of the OOC from the Mashpee Conservation Commission was stated in an email from Jill McLaughlin (Stantec Inc., LLC) to Eva Murray (MEPA Office) on September 18, 2020.

alternative also includes the construction of a 5.5-foot-wide sidewalk on the south side of Route 151 and construction of a 10-foot wide shared-use path on the north side of Route 151 both separated by a 5.0- to 7.0-foot wide grass strip. According to the ENF, this Alternative was dismissed as the larger roadway cross-section would result in greater impact to wetland resources and rare species habitat, as well as requiring the removal of more public shade trees (105 trees) and the creation of more impervious surface (6.1 acres) compared to the Preferred Alternative. The ENF states the Preferred Alternative (described herein), was selected as it satisfies the project purpose and need while minimizing impact to wetlands and rare species habitat, as well as reducing the number of public shade trees removed (85 trees) and resulting in the creation of less impervious surface (3.61 acres).

Wetlands and Stormwater

The project will impact BVW (607 sf permanent/1,427 sf temporary), RFA (± 1.56 acres permanent/ ± 0.38 acres temporary), LUW (125 sf permanent/1,324 sf temporary), IVW (186 sf permanent), and Bank (18 lf permanent/98 lf temporary). Approximately 92.6 cy of sediment will be dredged for culvert work. As noted above, the Mashpee Conservation Commission reviewed the project for its consistency with the Wetlands Protections Act (WPA), the Wetland Regulations (310 CMR 10.00), and associated performance standards including the Stormwater Management Standards (SMS) and issued an Order of Conditions approving the project on September 16, 2020. According to the ENF, erosion and sedimentation controls will be installed prior to construction and all temporary impacts to BVW will be restored in place. The project will create an 875-sf wetland replication area northwest of the Childs River to mitigate permanent wetland impacts. The project includes the construction of 10 retaining walls (totaling 2,025 linear feet) and two rockfill embankments to minimize impacts to adjacent wetland resource areas.

The project will create 3.61 acres of impervious area for a total of 15.41 acres within the project corridor limit, including 3.0 new acres of impervious surface in Zone II Wellhead Protection Areas. As a redevelopment project, the stormwater management system will be designed to meet the SMS to the maximum extent practicable. Existing stormwater management facilities located within the project limits are comprised of an open and closed drainage system consisting of overland flow, cross-culverts, catch basins, manholes, leaching basins, piping, and outfalls which ultimately discharge into various wetlands and wetland systems associated with both the Childs River and the Quashnet River. To improve stormwater quality, the project proposes the installation of 116 deep-sump catch basins (43 of which will replace existing catch basins), 16 leaching galleys, and 18 gutter inlets. An existing outfall currently located within a wetland will be removed and reconstructed approximately 50 feet from the wetland. The project also includes the construction of two new outfalls; stormwater will be directed through deep sump catch basins and leaching galleys prior to discharge. Comments from MassDEP state that any stormwater work that includes the conveyances of stormwater through underground stormwater infiltration structures may be subject to the jurisdiction of the MassDEP *Underground Injection Control (UIC)* program.

In order to accommodate the roadway widening/construction of the shared-use path and sidewalk, the existing culvert that channels Childs River under Route 151 will be lengthened. On the north side of the roadway 6 feet of existing pipe will be removed and 9 feet added; on the south side of the roadway, 11.5 feet of pipe will be removed and 10 feet added, and a new headwall will be constructed. In order to accommodate this work, 92.6 cy of sediment will be dredged from the Childs

River. According to the ENF, the dredged material will be stored in an upland area adjacent to the work area with appropriate erosion controls to prevent migration off site, and will be used as in-kind fill once construction work is complete. Comments from MassDEP indicate that the Childs River is a c. 91 jurisdictional waterway pursuant to the Waterways Regulations (310 CMR 9.04) and therefore, the extension of the culvert proposed within the Childs will require a c.91 license..

Rare Species

The project site includes mapped *Priority Habitat* for Water Willow Stem Borer Moth (*Papalpema sulphurata*), a threatened species in Massachusetts. The ENF acknowledged that the trees within the project corridor may provide roosting habitat for the Northern Long-eared bat (NLEB, *Myotis septentrionalis*), which is listed as Endangered under the Massachusetts Endangered Species Act (MESA). Though the project site is not mapped for this species by NHESP, due to the planned tree removal, the Proponent completed an acoustic bat survey to detect the presence of NLEB within 0.25 miles of the Route 151 project corridor. No NLEB were detected during the acoustic survey. The ENF states the project is not expected to have any impact on state-listed species. Comments from NHESP state the project, as currently proposed, will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species and will not result in a prohibited Take of state-listed rare species.

Marine Fisheries

The Quashnet River and Childs River both cross under Route 151 within the project corridor. Comments from the Massachusetts Department of Fish and Game (DFG), Division of Marine Fisheries (DMF) state this section of the Quashnet River currently provides passage habitat for blueback herring (*Alosa aestivalis*), alewife (*Alosa pseudoharengus*), and white perch (*Morone americana*) to Johns Pond, in addition to supporting American eel (*Anguilla rostrata*), Atlantic tomcod (*Microgadus tomcod*), and sea-run trout (*Salvelinus fontinalis*). The DMF recommends a time of year (TOY) restriction on any in-water work for the Quashnet River from April 1 to June 30 to protect river herring and white perch during their spring spawning migrations. As noted in the ENF and confirmed in comments from DMF, though the Childs River supports a variety of diadromous fish species, the portion within the project site does not currently function as migratory habitat due to a dam downstream. Comments from DMF do not identify TOY restriction recommendations. I refer the Proponent to comments from DMF which encourage the Proponent to coordinate with the Massachusetts Division of Fisheries and Wildlife (MassWildlife) to determine best management practices in relation to sea-run trout in both the Childs River and Quashnet River.

Public Shade Trees

The project will result in the removal of eighty-five (85) public shade trees, or trees that are located in a public ROW. According to the ENF, the planting of 135 trees and 217 shrubs is proposed along the Project corridor as mitigation. An invasive plant management strategy, designed to identify, remove, and control the spread of invasive plant species, will also be implemented.

Traffic

The project corridor includes 3 signalized intersections (Route 151 at Market Street/Mashpee Commons Drive, Frank E. Hicks Drive/Jobs Fishing Road, and Route 151 at Old Barnstable Road) which currently operate at LOS D or better. The project corridor also includes 6 unsignalized intersections with Route 151: at Algonquin Avenue, Ninigret Avenue, Massasoit Avenue, Old Brickyard Road, Winslow Drive, and at James Circle. According to a Roadway Safety Audits (RSA) completed by the CCC in 2014 and 2018, several of these intersections exhibited a higher-than-average crash rate compared to the MassDOT District 5 average. Additionally, the unsignalized intersections of Route 151 with James Circle/Winslow Drive, Ninigret Circle, and Algonquin Avenue were all found to operate at LOS F under current conditions.

To address substandard vehicle operation and safety, the project proposes the widening of the northbound and southbound approach of the Route 151/Old Barnstable Road intersection, and the eastbound approach of the Frank E. Hicks Drive/Job's Fishing Road intersection to provide 3 lanes, as well as the construction of a center/left-turning lane at the unsignalized intersections of Route 151 at Old Brickyard Road, Massasoit Avenue, Ninigret Avenue, and Algonquin Avenue. With these improvements, the signalized intersections will operate equal to or better than the No-Build conditions with the exception of Route 151 at Old Barnstable Road, which will degrade to LOS E during the evening peak hour. Left-turn movements at the unsignalized intersections of Route 151 at James Circle/Winslow Drive, Ninigret Avenue, and Algonquin Avenue would continue to operate at LOS F as currently occurs under existing conditions. According to the ENF, this LOS is forecast as a result of increased traffic volumes and modifications in the signal timing to allow greater time between traffic movements and increased time for pedestrian crossing. The ENF indicates that this change will significantly increase safety at these locations.

According to the ENF, there are no sidewalks located within the project corridor and there are limited bicycle accommodations. To address this deficiency, the project proposes widening the existing path to 10 feet and extending it a total of 1.45 miles such that it connects to the Mashpee Commons commercial area. A 5.0- to 7.0-foot wide grass strip would separate the shared-use path from the roadway. Additionally, the ENF states the proposed 5.0-foot wide shoulders on each side of the roadway would accommodate on-street bicycling throughout the corridor. The separated shared-use path is included in accordance with MassDOT's Engineering Directive E-20- 001 which requires construction of a separated bicycle lane for all roadways with a posted speed limit greater than or equal to 40 miles per hour (the posted speed limit on Route 151 is 45-50 mph), or for roadways with traffic volumes which exceed 10,000 vehicles per day (Route 151 traffic volumes exceed 22,000 vehicles per day).

The project will also construct a new ADA-compliant 5.0-foot wide sidewalk on the south side of Route 151, extending approximately 1.6 miles from Winslow Drive to Jobs Fishing Road. Crosswalks will be provided at several locations to provide a pedestrian connection between the shared-use path and sidewalks. A 5.0-foot wide grass strip will separate the sidewalk from the roadway. Upon completion of the project, pedestrians will have a continuous path of travel that is ADA-compliant throughout the corridor. Bicyclists will have a continuous path of travel from the Falmouth town line to the Mashpee Commons.

Climate Change Adaptation and Resiliency

Governor Baker's Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth (EO 569; the Order) was issued on September 16, 2016. The Order recognizes the serious threat presented by climate change and direct Executive Branch agencies to develop and implement an integrated strategy that leverages state resources to combat climate change and prepare for its impacts. The Order seeks to ensure that Massachusetts will meet GHG emissions reduction limits established under the Global Warming Solution Act of 2008 (GWSA) and will work to prepare state government and cities and towns for the impacts of climate change. I note that the MEPA statute directs all State Agencies to consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise, when issuing permits, licenses and other administrative approvals and decisions. M.G.L. c. 30, § 61.

The Northeast Climate Science Center at the University of Massachusetts at Amherst has developed projections of changes in temperature, precipitation, and sea level rise for Massachusetts. This data is available through the Climate Change Clearinghouse for the Commonwealth at www.resilientma.org. By the end of the century, the average annual temperature in the Cape Cod Drainage Basin is projected to rise by 4.62 to 8.15 degrees Fahrenheit (°F), including an increase in the number of days with temperatures over 90 °F from a minimum of 6.5 days and a maximum up to 23.63 days compared to the 1971-2000 baseline period. During the same time span, the average annual precipitation is projected to increase by a minimum of 1.51 to a maximum of 2.06 inches, which may be associated with more frequent and intense storm events. The Massachusetts State Hazard Mitigation & Climate Adaptation Plan (2018) may provide additional data and resources applicable to the project site.

The Town is a participant in the Commonwealth's Municipal Vulnerability Preparedness (MVP) program. The MVP program is a community-driven process to define natural and climate-related hazards, identify existing and future vulnerabilities and strengths of infrastructure, environmental resources, and vulnerable populations, and develop, prioritize and implement specific actions the Town can take to reduce risk and build resilience. Through the MVP program, the Town received funding to conduct a planning process for climate change resiliency and implementing priority projects. The results of the initial community-driven process were presented in the "Town of Mashpee Community Resilience Building Workshop Summary of Findings" (the Report), dated March 2020². The Report identified coastal and/or stormwater flooding of low-lying roads and culverts, development in vulnerable floodplain areas, effect of increasing heat on pollinators, and loss of native vegetation as top areas of concern in Mashpee. The Quashnet River is mapped as a Hurricane Surge Inundation Zone directly south of where it flows through the culvert under Route 151. I encourage the Proponent to consider future climate change conditions as the design of the project is finalized and proceeds to permitting.

Construction Period

The project will be constructed in two phases, with Phase 1 including all work from Old Barnstable Road to the Mashpee Rotary (1.1 miles) and Phase 2 including all work from Falmouth town line to Old Barnstable Road (1.1 miles). The exact timing and extent of work in each phase will be determined by the Town, CCC, and MassDOT. All construction activities should be managed in accordance with applicable MassDEP's regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban

² Report can be accessed from: <https://www.mass.gov/doc/mashpee-report/download>

provision at 310 CMR 19.017). The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11). Consistent with the GreenDOT policy directive, MassDOT requires that contractors install emission control devices in all off-road vehicles. MassDOT’s Revised Diesel Retrofit Specification also requires that emissions control standards must be met or technology must be used for non-road, diesel-powered construction equipment in excess of 50 horsepower. Contractors will be instructed to limit engine idling and use ultra-low sulfur diesel fuel. If oil and/or hazardous materials are found during construction, the Proponent should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.00). All construction activities should be undertaken in compliance with the conditions of all State and local permits.

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on review of the ENF and comments received on it, and in consultation with State Agencies, I have determined that an EIR is not required.

September 25, 2020
Date

K. Theoharides

Kathleen A. Theoharides

Comments received:

- 09/02/2020 Massachusetts Natural Heritage and Endangered Species Program (NHESP)
- 09/14/2020 Massachusetts Department of Environmental Protection (MassDEP), Southeast Regional Office (SERO)
- 09/15/2020 Cape Cod Commission (CCC)
- 09/15/2020 Massachusetts Department of Fish and Game (DFG), Division of Marine Fisheries (DMF)
- 09/16/2020 Board of Underwater Archaeological Resources (BUAR)

KAT/ELM/elm

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Via Email

September 15, 2020

Kathleen A. Theoharides, Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office, Eva Murray, Project Analyst
100 Cambridge Street, Suite 900, Boston, MA 02114

Re: *Environmental Notification Form – EEA No. 16261 (CCC File No. 20057)
Route 151 (Nathan Ellis Highway) Corridor Improvements, Town of Mashpee*

Dear Secretary Theoharides:

Cape Cod Commission staff provide the following transportation-related comments on the above-referenced project.

Route 151 is a critical regional roadway link for all modes of transportation in the Upper Cape region. The project will address several existing safety and multi-modal deficiencies in the road network including congestion, high crash clusters, poor pavement conditions, and lack of suitable bicycle and pedestrian accommodations. The project was identified in the 2020 Cape Cod Regional Transportation Plan as a regional priority project; advances the Transportation goal of the Cape Cod Regional Policy Plan; and is currently included in the Cape Cod Transportation Improvement Program, approved for inclusion by the Cape Cod Metropolitan Planning Organization. The project includes the extension of a shared-use path and the installation of new sidewalks and crosswalks, which will improve safety for pedestrians, bicyclists and transit users throughout the region. Finally, the area within the vicinity of the project is identified as a Community Activity Center in the Cape Cod Regional Policy Plan; the proposed improvements will support multi-modal connectivity and will advance transportation purposes associated with the Community Activity Center.

Thank you for the opportunity to provide comments on the above-referenced ENF. Cape Cod Commission staff is available to answer any questions you might have about these comments.

Sincerely,

Kristy Senatori
Executive Director

cc: Project File
Bryan Cordeiro, MassDOT via email
Rodney C. Collins, Town Manager, Town of Mashpee via email
Mashpee Cape Cod Commission Representative via email
Cape Cod Commission Chair via email
Cape Cod Commission Committee on Planning and Regulation Chair via email



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September 14, 2020

Kathleen A. Theoharides
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ATTN: MEPA Office
Boston, MA 02114

RE: ENF Review. EOEEA 16261
MASHPEE. Nathan Ellis Highway – MA
State Route 151 at MA State Route 151

Dear Secretary Theoharides,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Environmental Notification Form (ENF) for the Nathan Ellis Highway – MA State Route 151, Mashpee, Massachusetts (EOEEA # 16261). The Project Proponent provides the following information for the Project:

The Town of Mashpee and the Massachusetts Department of Transportation - Highway Division (MassDOT) are proposing to reconstruct and widen Nathan Ellis Highway (Route 151). The Project corridor extends approximately 2.2 miles from the Falmouth town line (approximately 400 feet east of the intersection of Route 151 with County Road/Ashument Road) east to the Mashpee Rotary at Route 28/ Great Neck Road (Appendix A, Figure 1). Although Route 151 has a State-route number, this section of roadway is Town-owned and maintained.

The proposed reconstruction will extend the service life of Route 151, improve traffic operations, create improved accommodations for bicyclists and pedestrians, and improve safety within the project limits in accordance with MassDOT's Healthy Transportation Policy (HTP). The purpose of the project is to fulfill these goals while minimizing environmental, historic, and economic impacts to the area.

The need for the project is directly related to the increase in mobility demands that have increased as commercial and retail uses, particularly at the Mashpee Commons development have increased. Improved bicycle/pedestrian facility along this corridor is desired to increase non-vehicular travel by providing an alternative means of mobility for residents, workers, and visitors traveling between these areas. There is also a need to rehabilitate the pavement, improve drainage conditions, upgrade intersection operations and road signs, provide pavement markings, and enhance streetscape conditions.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

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Bureau of Water Resources Comments:

Wetlands and Waterways. The Wetlands and Waterways Program offers the following comments on the ENF submitted by Mass DOT and the Town of Mashpee DPW for roadway improvements.

Wetlands

A Notice of Intent was filed on July 24, 2020. The Department issued comments and a file number (DEP File Number 043-3080) on August 13, 2020. The Department will review the Order of Conditions once issued to ensure it is consistent with the Wetlands Protection Act and Regulations. At this time, the Department does not have any significant concerns with the activities proposed in the Environmental Notification Form.

Waterways

The Public Waterfront Act, M.G.L. c.91 and its regulations at 310 CMR 9.00 regulates activities within waterways, including certain non-tidal rivers and streams. The ENF indicates that the Project site does not contain waterways that are subject to M.G.L. c. 91. However, the Childs River and Quashnet River both traverse below the roadway and are located within the Project bounds. Based on a review of USGS maps, aerial photographs, site photographs and plans accompanying the ENF, it appears that Childs River is a Chapter 91 jurisdictional waterway pursuant to the Waterways Regulations at 310 CMR 9.04. Therefore, the extension of the culvert proposed within the Childs River as part of the Project will require a Chapter 91 license. Alternatively, the Project Proponent may file a Request for Determination of Applicability pursuant to the Waterways Regulations at 310 CMR 9.06 and offer evidence to dispute this assessment. After review of the evidence presented, a formal determination will be made regarding the jurisdictional status of the waterway

Underground Injection Control. The Proponent details the uses of a comprehensive stormwater management system to collect, convey, treat, and control stormwater discharges associated with the Project. The Proponent should be aware that the conveyances of stormwater through underground stormwater infiltration structures may be subject to the jurisdiction of the MassDEP *Underground Injection Control (UIC)* program. These structures must be registered with MassDEP UIC program through the submittal of a BRP WS-06 UIC Registration application through MassDEP's electronic filing system, eDEP. The statewide UIC program contact is Joe Cerutti, who can be reached at (617) 292-5859 or at joseph.cerutti@state.ma.us. All information regarding on-line (eDEP) UIC registration applications may be obtained at the following web page under the category "Applications & Forms": <https://www.mass.gov/underground-injection-control-uic>.

Construction Stormwater Permit. The Project construction activities are scheduled to disturb 24.4 acres of land and therefore, will require a NPDES Stormwater Permit for Construction Activities. This permit is issued by the U.S. Environmental Protection Agency where the Proponent can access information regarding the NPDES Stormwater requirements and an application for the Construction General Permit at the EPA website: https://www.epa.gov/sites/production/files/2017-07/documents/cgp_flow_chart_do_i_need_a_permit2.pdf

The Proponent should also determine if any of the following U.S. EPA NPDES permits are necessary prior to commencing Project construction:

Dewatering General Permit - <https://www.epa.gov/npdes-permits/dewatering-general-permit-dgp-massachusetts-new-hampshire>.

Remediation General Permit - <https://www.epa.gov/npdes-permits/remediation-general-permit-rgp-massachusetts-new-hampshire>.

Additional information regarding these permits may be found at:

<http://www.epa.gov/region1/npdes/stormwater/assets/pdfs/CGP-DGP-RGP-Flow-Chart.pdf>

Bureau of Waste Site Cleanup Comments

ENF #16261 – The groundwater beneath the proposed Project location is impacted with per- and polyfluoroalkyl substances (PFAS) migrating from releases that have occurred at Joint Base Cape Cod (JBCC). However, given the depth to the contaminated groundwater in the vicinity of the proposed Project the contaminated groundwater should not impact the Project. In addition, the MassDEP Bureau of Waste Site Cleanup (BWSC) also determined that no infrastructure related to the assessment and cleanup of contaminated groundwater (subsurface piping, monitoring wells) are located within the Project location.

Based upon a search of the BWSC databases no other disposal sites are located at, or releases have occurred that might impact, the proposed Project. A disposal site is a location where there has been a release to the environment of oil and/or hazardous material that is regulated under M.G.L. c. 21E, and the Massachusetts Contingency Plan [MCP – 310 CMR 40.0000].

Interested parties may view a map showing the location of BWSC disposal sites using the MassGIS data viewer (Oliver) at: http://maps.massgis.state.ma.us/map_ol/oliver.php. Under “Available Data Layers” select “Regulated Areas”, and then “DEP Tier Classified 21E Sites”. MCP reports and the compliance status of specific disposal sites may be viewed using the BWSC Waste Sites/Reportable Release Lookup at: <https://eeaonline.eea.state.ma.us/portal#!/search/wastesite>.

The Project Proponent is advised that if oil and/or hazardous material (OHM) are identified during the implementation of this Project, notification to MassDEP may be required pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000). Any OHM encountered during this roadway Project could likely be addressed using the Utility-Related Abatement Measures provisions at 310 CMR 40.0460. A Licensed Site Professional (LSP) should be retained to determine if notification is required and, if need be, to render appropriate opinions and/or conduct response actions. The BWSC may be contacted for guidance if questions arise regarding cleanup.

Bureau of Air and Waste (BAW) Comments

Air Quality. Construction and operation activities shall not cause or contribute to a condition of air pollution due to dust, odor or noise. To determine the appropriate requirements please refer to:

310 CMR 7.09 Dust, Odor, Construction, and Demolition

310 CMR 7.10 Noise

Construction-Related Measures

MassDEP requests that all non-road diesel equipment rated 50 horsepower or greater meet EPA’s Tier 4 emission limits, which are the most stringent emission standards currently available for off-road engines. If a piece of equipment is not available in the Tier 4 configuration, then the Proponent should use construction equipment that has been retrofitted with appropriate emissions reduction equipment. Emission reduction equipment includes EPA-verified, CARB-verified, or MassDEP-approved diesel oxidation catalysts (DOCs) or Diesel Particulate Filters (DPFs). The Proponent should maintain a list of the engines, their emission tiers, and, if applicable, the best available control technology installed on each piece of equipment on file for Departmental review.

Massachusetts Idling Regulation

The ENF reports that “MassDOT requires that contractors install control devices in all off-road vehicles. MassDOT’s Revised Diesel Retrofit Specification states emissions control standards must

be met, or technology must be used for non-road, diesel-powered construction equipment in excess of 50 horsepower on MassDOT job sites.”

MassDEP reminds the Proponent that unnecessary idling (*i.e.*, in excess of five minutes), with limited exception, is not permitted during the construction and operations phase of the Project (Section 7.11 of 310 CMR 7.00). With regard to construction period activity, typical methods of reducing idling include driver training, periodic inspections by site supervisors, and posting signage. In addition, to ensure compliance with this regulation once the Project is occupied, MassDEP requests that the Proponent install permanent signs limiting idling to five minutes or less on-site.

Spills Prevention. A spills contingency plan addressing prevention and management of potential releases of oil and/or hazardous materials from pre- and post-construction activities should be presented to workers at the site and enforced. The plan should include but not be limited to, refueling of machinery, storage of fuels, and potential on-site activity releases.

Solid Waste Management. MassDEP Solid Waste staff has reviewed the ENF for the Mashpee Route 151 Corridor Improvements (“Project” or “Site”), EEA No. 16261, and offers the following comments regarding solid waste permitting pursuant to Massachusetts Solid Waste Regulations 310 CMR 16.00: *Site Assignment Regulations For Solid Waste Facilities*, 310 CMR 19.000: *Solid Waste Management*, and Asbestos Regulations 310 CMR 7.15.

The ENF indicates that construction activities will be performed as part of the Project and will potentially generate solid waste and recyclable materials.

Solid Waste/Asbestos Comments:

Compliance with Waste Ban Regulations: Waste materials discovered during construction that are determined to be solid waste (e.g., construction and demolition waste) and/or recyclable material (e.g., metal, asphalt, brick, and concrete) shall be disposed, recycled, and/or otherwise handled in accordance with the Solid Waste Regulations including 310 CMR 19.017: Waste Bans. Waste Ban regulations prohibit the disposal, transfer for disposal, or contracting for disposal of certain hazardous, recyclable, or compostable items at solid waste facilities in Massachusetts, including, but not limited to, metal, wood, asphalt pavement, brick, concrete, and clean gypsum wallboard. The goals of the waste bans are to: promote reuse, waste reduction, or recycling; reduce the adverse impacts of solid waste management on the environment; conserve capacity at existing solid waste disposal facilities; minimize the need for construction of new solid waste disposal facilities; and support the recycling industry by ensuring that large volumes of material are available on a consistent basis. Further guidance can be found at:

<https://www.mass.gov/guides/massdep-waste-disposal-bans>

Asphalt, brick and concrete (ABC) rubble, such as the rubble generated by the demolition of buildings or other structures must be handled in accordance with the Solid Waste regulations. These regulations allow, and MassDEP encourages, the recycling/reuse of ABC rubble. The Proponent should refer to MassDEP’s Information Sheet, entitled “*Using or Processing Asphalt Pavement, Brick and Concrete Rubble, Updated February 27, 2017*”, that answers commonly asked questions about ABC rubble and identifies the provisions of the solid waste regulations that pertain to recycling/reusing ABC rubble. This policy can be found on-line at the MassDEP website:

<https://www.mass.gov/files/documents/2018/03/19/abc-rubble.pdf>

If you have any questions regarding the Solid Waste Management Program comments above, please contact Mark Dakers at (508) 946-2847.

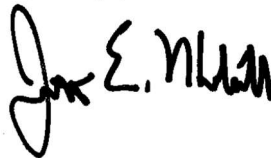
Proposed s.61 Findings

The “Certificate of the Secretary of Energy and Environmental Affairs on the Environmental Notification Form” may indicate that this Project requires further MEPA review and the preparation of an Environmental Impact Report. Pursuant to MEPA Regulations 301 CMR 11.12(5)(d), the Proponent will prepare Proposed Section 61 Findings to be included in the EIR in a separate chapter updating and summarizing proposed mitigation measures. In accordance with 301 CMR 11.07(6)(k), this chapter should also include separate updated draft Section 61 Findings for each State agency that will issue permits for the Project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

Other Comments/Guidance

The MassDEP Southeast Regional Office appreciates the opportunity to comment on this ENF. If you have any questions regarding these comments, please contact George Zoto at (508) 946-2820.

Very truly yours,



Jonathan E. Hobill,
Regional Engineer,
Bureau of Water Resources

JH/GZ

Cc: DEP/SERO

ATTN: Millie Garcia-Serrano, Regional Director
David Johnston, Deputy Regional Director, BWR
Gerard Martin, Deputy Regional Director, BWSC
Seth Pickering, Deputy Regional Director, BAW
Jennifer Viveiros, Deputy Regional Director, ADMIN
Daniel Gilmore, Chief, Wetlands and Waterways, BWR
Andrew Poyant, Wetlands and Waterways, BWR
David Hill, Wetlands and Waterways, BWR
Mark Dakers, Solid Waste, BAW
Alison Cochrane, Solid Waste, BAW
John Handrahan, Chief, Compliance and Enforcement, BWSC
Allen Hemberger, Site Management, BWSC



The Commonwealth of Massachusetts

Division of Marine Fisheries

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KATHLEEN A. THEOHARIDES
Secretary

RONALD S. AMIDON
Commissioner

DANIEL J. MCKIERNAN
Director

September 15, 2020

Secretary Kathleen Theoharides
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Eva Murray, EEA No. 16261
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Theoharides:

The Division of Marine Fisheries (MA DMF) has reviewed the Environmental Notification Form (ENF) by the Massachusetts Department of Transportation (MADOT) and the Town of Mashpee for the Route 151 Corridor Improvements Project. Proposed work includes the reconstruction and widening of 2.2 miles of Nathan Ellis Highway (Route 151) extending from the Falmouth town line to the Mashpee Rotary. The project includes improvements to stormwater treatment in the form of deep sump catch basins and subsurface infiltration best management practices. The ENF also notes that a Construction Period Pollution Prevention/Soil Erosion and Sediment Control Plan will be developed during the permitting process to minimize transfer of sediments and potential pollutants to bordering resource areas during construction. Proposed widening would permanently impact approximately 607 square feet of bordering vegetated wetlands (BVW), 186 square feet of isolated vegetated wetlands (IVW), 125 square feet of Land Under Water (LUW), and 142 linear feet of Bank. Anticipated temporary impacts to these resource areas are 1,427 square feet (BVW), 1,324 square feet (LUW), and 98 linear feet (Bank). Further impacts to bordering resource areas are proposed to be minimized through the construction of 2,025 linear feet of retaining walls and two rockfill embankments. Mitigation for permanent impacts is proposed in the form of an 875 square foot wetland restoration area northwest of the Childs River. Existing marine fisheries resources and habitat and potential project impacts to those resources are outlined in the following paragraphs.

The Quashnet River and Childs River both cross under Route 151 within the proposed project corridor. The section of the Quashnet River in the project corridor currently provides passage habitat for blueback herring (*Alosa aestivalis*), alewife (*Alosa pseudoharengus*), and white perch (*Morone americana*) to access Johns Pond. The Quashnet River also supports American eel (*Anguilla rostrata*), Atlantic tomcod (*Microgadus tomcod*), and sea-run trout (*Salvelinus fontinalis*) (Evans *et al.*, 2011). While the Childs River supports a variety of diadromous fish

species including alewife, white perch, American eel, and sea run trout (Evans *et al.*, 2011), the section of the Child River north of Barnstable Road in the Town of Mashpee does not currently function as migratory habitat due to a dam at Carriage Shop Road located downstream of the project area.

MA DMF offers the following comments for your consideration:

- A time of year (TOY) restriction is recommended on any in-water work for the Quashnet River section of the project corridor from April 1 to June 30 to protect river herring and white perch during their spring spawning migrations. MA DMF does not have any TOY restriction recommendations at this time for any in-water work within the Childs River section of the project corridor since downstream barriers currently prevent diadromous fish access to the project area. However, further coordination with the Massachusetts Division of Fisheries & Wildlife (MassWildlife) is recommended to determine best management practices in relation to sea run trout in both the Childs River and Quashnet River systems.

Questions regarding this review may be directed to John Logan in our New Bedford office at john.logan@mass.gov.

Sincerely,



Daniel J. McKiernan

Director

cc: Mashpee Conservation Commission
Bryan Cordeiro, MA DOT
Alison Verkade, NMFS
Robert Boeri, CZM
Ed Reiner, EPA
Bev Vucson, DFG
Caleb Slater, DFW
Eileen Feeney, Kathryn Ford, Ryan Nuttall, John Sheppard, Brad Chase, DMF

References

Evans, N. T., Ford, K. H., Chase, B. C., & Sheppard, J. (2011). Recommended Time of Year Restrictions (TOYs) for Coastal Alteration Projects to Protect Marine Fisheries Resources in Massachusetts. Massachusetts Division of Marine Fisheries Technical Report, TR-47.

DM/JL/JS/sd

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Comment Details

EEA #/MEPA ID* 16261	First Name David	Address Line 1 1 Rabbit Hill Road	Organization MA Division of Fisheries and Wildlife-NHESP
Comments Submit Date 9/2/2020	Last Name Paulson	Address Line 2 --	Affiliation Description State Agency
Review Due By 10/5/2020	Phone --	State MASSACHUSETTS	Status Opened
Reviewer Eva Murray eva.murray@mass.gov	Email david.paulson@mass.gov	Zip Code 01581	

Comments

Topic: Route 151 (Nathan Ellis Highway) Corridor Improvements ENF (13-32707, 16261)

Dear Secretary Theoharides: Route 151 (Nathan Ellis Highway) Corridor Improvements ENF (13-32707, 16261) The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") has reviewed the Environmental Notification Form (ENF) for the proposed "Route 151 (Nathan Ellis Highway) Corridor Improvements " and would like to offer the following comments regarding state-listed rare species and their habitats. On August 13, 2020, the Division issued the following determinations pursuant to the Wetlands Protection Act and the Massachusetts Endangered Species Act. WETLANDS PROTECTION ACT (WPA) 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, will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions. 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. MASSACHUSETTS ENDANGERED SPECIES ACT (MESA) 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, will not result in a prohibited Take of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project. We appreciate the opportunity to comment on this project. If you have any questions about this letter, please contact David Paulson, Senior Endangered Species Review Biologist, at (508) 389-6366 or david.paulson@mass.gov.

Attachments

[Mashpee_13-32707.pdf\(null\)](#)

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pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Emily Holt, Endangered Species Review Assistant, at (508) 389-6385.

Sincerely,

A handwritten signature in black ink, reading "Everose Schlüter". The signature is written in a cursive, flowing style.

Everose Schlüter, Ph.D.
Assistant Director

cc: Brian Madden, LEC Environmental Consultants, Inc
MA DEP Southeast Region