

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: 16192

MEPA Analyst: Purvi Patel

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Project Description (brief): NORTHAMPTON– BRIDGE REPLACEMENT, N-19-059, I-91 OVER US ROUTE 5 AND B&MRR, BRIDGE REPLACEMENT, N-19-060, I-91 OVER HOCKANUM ROAD AND IMPROVEMENTS TO I-91/INTERCHANGE 18

Street Address: I-91 and US Route 5 (Mt. Tom Road)

Municipality: Northampton	Watershed: Connecticut River
Universal Transverse Mercator Coordinates:	Latitude: 42°18' 23.89" Longitude: 72°37' 22.66"

Estimated commencement date: June 2020 **Estimated completion date: June 2022**

Project Type: Transportation **Status of project design: 75 %complete**

Proponent: Massachusetts Department of Transportation

Street Address: 10 Park Plaza

Municipality: Boston **State: MA** **Zip Code: 02116**

Name of Contact Person: Bryan Cordeiro

Firm/Agency: MassDOT- Highway Division **Street Address: 10 Park Plaza**

Municipality: Boston **State: MA** **Zip Code: 02116**

Phone: 857-368-8813 **Fax:** **E-mail: Bryan.Cordeiro@state.ma.us**

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

Yes No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8)) Yes No

a Special Review Procedure? (see 301CMR 11.09) Yes No

a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No

a Phase I Waiver? (see 301 CMR 11.11) Yes No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

- 301 CMR 11.03(3)(b)(1)(e): alteration of 5,000 or more sf of bordering or isolated vegetated wetlands. (exceeded because project will have 8,688 sf temporary impacts; permanent impacts are only 174 sf);
- 301 CMR 11.03(3)(b)(1)(f): alteration of one half or more acres of any other wetlands. (exceeded because over ½ acre impacts to Bordering Land Subject to Flooding [BLSF]).

Which State Agency Permits will the project require?

- Section 401 WQC (MassDEP)

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

It is anticipated that MassDOT will fund 20% of the construction costs and the Federal Highway Administration (FHWA) will fund 80% of the construction costs. (Reference; State Transportation Improvement Program (STIP) for Federal Fiscal Years 2020 – 2024 < <https://www.mass.gov/service-details/state-transportation-improvement-program-stip> >)

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	55.6		
New acres of land altered		2.2	
Acres of impervious area	14.79	0.71	15.50
Square feet of new bordering vegetated wetlands alteration		174 perm 8,688 temp	
Square feet of new other wetland alteration		33,688 BLSF	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	44,380	9,720	54,100
Number of housing units	0	0	0
Maximum height (feet)	40	--	40
TRANSPORTATION			
Vehicle trips per day (2015, Sum of I-91NB & SB and Route 5; refer to traffic threshold section, below)	72,677	0	72,677
Parking spaces		0	
WASTEWATER			
Water Use (Gallons per day)		0	
Water withdrawal (GPD)		0	
Wastewater generation/treatment (GPD)		0	
Length of water mains (miles)		0	
Length of sewer mains (miles)		0	

Has this project been filed with MEPA before?

Yes (EEA # _____) No

Has any project on this site been filed with MEPA before?

Yes (EEA # _____) No

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

Roadway conditions

Interstate 91 (I-91) and US Route 5 are maintained by MassDOT in serviceable condition. Hockanum Road is a local road that is also maintained in serviceable condition. US Route 5 and Hockanum Road exhibit moderate cracking.

Regional Significance of the infrastructure within the project area

I-91 is a limited access highway and is the primary North-South travel corridor in western Massachusetts. Its functional Classification is Interstate Highway. It connects points north (Vermont/New Hampshire & north-central Massachusetts (the Greenfield area)) with points south (greater Springfield, MA, and Connecticut). US Route 5 in the Project area is a State Route classified in MassGIS as ‘Other Numbered Highways’; it has a Functional Classification of ‘Minor Arterial’, and it is also designated part of the National Highway System (NHS). South of the Project, US Route 5 is non-NHS. Hockanum Road is a Class 5 (Minor Street or Road).

Predominant land uses within the project area

The project area is located approximately three-quarters of a mile south/southeast of downtown Northampton, in an area zoned Special Conservancy (SC).

The area around Bridge 059 consists of a mix of:

- commercial development on US Route 5 north and south of the project limits;
- transportation infrastructure associated with the Interstate, ramps, US Route 5, a MassDOT maintenance yard, and the rail line;
- vegetated areas including mowed lawn (in the NB I-91 ramp infield) and natural wooded areas;
- wetlands and a wildlife refuge (the Silvio O. Conte National Fish and Wildlife Refuge) adjacent to the highway right-of-way (ROW) east of the bridge; and
- a wastewater treatment plant located north of the US Route 5 project limits.

The area around Bridge 060 (Hockanum Road) consists of predominantly agriculture, with residential development limited to areas west of the levee.

The existing roadway has various deficiencies. US Route 5 SB lacks dedicated right-turning lanes at the I-91 southbound (SB) and northbound (NB) on-ramps, and lacks sidewalks and dedicated bike lanes within the project limits.

Existing roadway and bridge cross sections (including width)

Roadways

The existing I-91 NB and SB roadways each consist of two 12-foot through lanes, a 4-foot inside (median) shoulder, and a 10-foot outside shoulder. In the vicinity of the ramp junctions at Interchange 18, acceleration/deceleration lanes are provided that taper into the standard section. The roadway generally lacks curbing, except at the bridges.

The existing US Route 5 roadway provides one 12-foot through lane in each direction, plus a dedicated left-turn lane for US Route 5 NB travelers at each the signalized intersections at the ramp termini. The US Route 5 SB travel lane widens at the approaches to the signalized intersections to allow right-turning traffic from US Route

5 SB to the I-91 Ramps to pass to the right of queued SB through traffic at the signalized intersections. The widths of the outside shoulders on US Route 5 range from approximately 10 feet wide (just south of the I-91 bridge) to as little as approximately 1-foot, where line-striping near the intersections allocates more of the pavement width to NB turning lanes and SB lane widening for right-turn movements. The overall existing paved dimension of US Route 5 through the project area varies from approximately 43 feet to approximately 49 feet. Curbing is present along portions of both sides of the road. A sidewalk is present on the west side of US Route 5 at the northern limit of the project and at the southern limit of the project. Within the project limits sidewalks are absent. There is no designated bike lane presently.

Hockanum Road is approximately 20 feet wide – a rural 2-lane road with no line striping to define lanes vs shoulders. Curbing exists on both sides of the road.

Bridges

The existing I-91 NB bridge 059 has a total out-to-out width (total width including concrete parapet walls) of 46'-2", and carries two 12-foot travel lanes, a 12-foot auxiliary lane/outside shoulder, and a 4-foot inside shoulder. The existing I-91 SB bridge 059 has a total out-to-out width of 44'-2", and carries two 12-foot travel lanes, a 10-foot outside shoulder, and a 4-foot inside shoulder.

The existing I-91 NB and SB bridges 060 each have a total out-to-out width of 44'-2", and carries two 12-foot travel lanes, a 10-foot outside shoulder, and a 4-foot inside shoulder.

Typical bridge sections are included in Attachment A.

Significant environmental land uses. MassDOT operates a maintenance facility ('The Depot') just north of the I-91 bridges, along the east side of US Route 5. Refer to 'Massachusetts Contingency Plan' and 'Solid and Hazardous Waste' sections, below).

Describe the proposed project and its programmatic and physical elements:

The Project includes two bridge replacements and substantial upgrades to US Route 5. Specifically, the Project proposes to replace two existing Interstate 91 (I-91) bridges: N-19-059 over US Route 5 and the Boston & Maine RR; and N-19-060 over Hockanum Road. On US Route 5 SB, dedicated right-turning lanes will be added at the I-91 SB and NB on-ramps, and a sidewalk will be added within the project limits on the west side of US Route 5, and bike lanes added to both sides of US Route 5. The proposed improvements on Route 5 will require expanding the roadway's embankment on the west side of Route 5.

On US Route 5 SB, dedicated right-turning lanes will be added at the I-91 SB and NB on-ramps, and a 5'-6"-wide sidewalk will be added within the project limits on the west side of US Route 5, and 5-foot-wide bike lanes added to both sides of US Route 5. The project will result in the permanent fill of 174 square feet of BVW (at Wetland 2B; refer to Figure A-1 in Attachment A) in order to widen the US Route 5 roadway section to provide right turn lanes, bike lanes, and a sidewalk. These impacts will be mitigated as described in Section 6. The project will temporarily disturb an additional 651 square feet of temporary disturbance at the same wetland (Wetland 2B) during construction.

For Bridge 059 (I-91 over US Route 5 and the RR), the existing multi-span Bridge will be replaced to address structural deficiencies and functional obsolescence on the bridges and associated roadway elements within the project limits. A new superstructure will be constructed on new abutments and piers, on the same alignment as the existing bridge. The new pier foundations will be located in the same configuration as the existing foundations, but with more widely-spaced columns to support the additional width (the NB and SB I-91 bridges will each be widened from a total out-to-out width of 46'-2" (NB) and 44'-2" (SB) to new out-to-out widths of 51'-10.5"; please refer to the typical sections in Attachment A.) Since the columns located within the wetland will have the same diameter as the existing columns, the reconfigured pier columns will have a net 0 s.f. permanent impact in Wetland 1 (refer to Figure A-1 in Attachment A). Timber matting to support construction

equipment under the bridge will have an 8,037 s.f. temporary impact on Wetland 1, for a duration of 2-3 years.

Bridge 060 (I-91 over Hockanum Road) will be replaced including foundations and superstructures, on the same alignment as existing. The I-91 pavement width will be increased by 4 feet on NB and 4 feet on SB (the shoulder widths will be increased by 2 feet on both shoulders). On both the NB and SB bridges, the two travel lanes will remain 12 feet wide, the inside shoulder will increase to 6 feet wide, and the outside shoulder will increase to 12 feet wide. Hockanum Road lane widths will match existing. A bituminous path will be provided on the north side of Hockanum Road. The work will be staged the same as described above for bridge 059.

All aspects of the project will be maintained by MassDOT.

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Purpose and Need for the Project

The purpose of the project is to address structural deficiencies and functional obsolescence on the bridges and associated roadway elements within the project limits.

- Bridge N-19-059 is structurally deficient. In addition, I-91 shoulder widths on the approach roadways and bridge do not meet MassDOT's guidelines. The I-91 SB deceleration lane to the US Route 5 off-ramp, and I-91 NB acceleration lane from the US Route 5 on-ramp, also do not meet MassDOT standards. On US Route 5 SB, no dedicated right-turning lanes exists at the I-91 SB and NB on-ramps, and no sidewalk exists within the project limits on US Route 5. The clearance under the SB bridge over the B&M Railroad 22-9"; 23' is desirable. Per MassDOT's Healthy Transportation Policy Directive P-13-0001, the minimum number of sidewalks on US Route 5 should be 2 (one on each side of the road). The project will include a sidewalk on the west side of the road only. Therefore a design exception has been requested as the proposed design will not provide a sidewalk on the east side of US Route 5. The project will address the other deficiencies.
- Bridge N-19-060 is functionally obsolete because the SB bridge has inadequate clearance over Hockanum Road. In addition, I-91 shoulder widths on the bridge do not meet MassDOT's guidelines. A design exception has been requested as the proposed design will not fully address the clearance over Hockanum Road, and no sidewalk is proposed on either side of Hockanum Road. A gravel path will be provided. The project will address the shoulder width deficiencies.

A second purpose is to improve multimodal accommodations, reduce vehicle congestion, and improve safety for all modes of transportation through the U.S. Route 5 (Mount Tom Road) corridor in Northampton.

The project is needed due to the following:

Multimodal Accommodations

- US Route 5 in the project limits presently lacks sidewalks and bicycle accommodations, therefore this section of US Route 5 does not meet MassDOT's Healthy Transportation Policy.

Congestion