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

# **Environmental Notification Form**

For Office Use Only EEA#: <u>16295</u>

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: Hadley - Route 9 Reconstruction (MassDOT Project #605032)							
Street Address: Route 9 (Russell Street)							
Municipality: Hadley, Massachusetts		Watershed: Connecticut					
Universal Transverse Mercator Coordinates: N2951636.9429, E361634.7778 (Begin) N2957522.4075, E372699.3155 (End)		Latitude: 42°20'31.9"N (Begin), 42°21'31.7"N (End) Longitude: 72°35'22.1"W (Begin), 72°32'55.8"W (End)					
Estimated commencement date: Winter 2022		Estimated completion date:					
Project Type: Roadway Reconstruction		Status of project design: <b>75</b> % complete					
Proponent: MassDOT Highway Divi	sion						
Street Address: 10 Park Plaza, Room	m 4260						
Municipality: Boston		State: MA	Zip Code: 02116				
Name of Contact Person: Muazzez C	G. Rearc	don, P.E.					
Firm/Agency: MassDOT Highway Di	ivision	Street Address: 1	0 Park Plaza, Room 4260				
Municipality: Boston		State: MA	Zip Code: 02116				
Phone: 857-368-9331	Fax: 8	357-368-0609	E-mail:				
			muazzez.reardon@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 301 CMR 11.09) ☐Yes ⊠No   a Waiver of mandatory EIR? (see 301 CMR 11.09) ☐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.d Alteration of 5,000 or more sf of bordering or isolated vegetated wetlands 301 CMR 11.03(3)(b)1.f Alteration of one half or more acres of any other wetlands 301 CMR 11.03 (6)(b)1.b Widening of an existing roadway by four or more feet for one- half or more miles 301 CMR 11.03(6)(b)2.b Cut five or more living public shade trees of 14 or more inches in diameter at breast height							

Which State Agency Permits will the project require? MassDEP - Wetlands Protection Act – Notice of Intent / Order of Conditions, Section 401 Water Quality Certification, MESA Project Review

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 the Massachusetts Department of Transportation – Highway Division will fund 20% of the construction costs and the Federal Highway Administration will fund the remaining 80% of the construction costs. There will be no land transfer from any agency of the Commonwealth.

Summary of Project Size	Existing	Change	Total
& Environmental Impacts			
LAND			
Total site acreage	37.48		
New acres of land altered		4.25	
Acres of impervious area	23.01	4.25	27.26
Square feet of new bordering		5,724 sf total	
vegetated wetlands alteration		3,832 st perm. 1.892 sf. temp.	
		,	
Square feet of new other wetland alteration		IVW: 78 sf total 68 sf perm. 10 sf temp.	
		Bank: 311 If total 217 If perm.	
		94 lf temp. LUW: 1.961 sf total	
		777 sf perm.	
		RA: 56,320 sf total	
		28,401 sf temp.	
Acres of new non-water dependent	-		-
use of tidelands or waterways			
STRUCTURES			
Gross square footage	N / A	N / A	N/A
Number of housing units	N / A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N / A	N/A	N/A
Parking spaces	N/A	N / A	N/A
WASTEWATER			
Water Use (Gallons per day)	N / A	N/A	N/A
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	N/A	N / A	N/A
Length of water mains (miles)	N / A	N/A	N/A
Length of sewer mains (miles)	N / A	N/A	N/A

Length of sewer mains (miles)	N / A	N / A	N / A				
Has this project been filed with MEPA before?							
Has any project on this site been filed	with MEPA before	?					

## **GENERAL PROJECT INFORMATION – all proponents must fill out this section**

#### PROJECT DESCRIPTION:

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

The Massachusetts Department of Transportation (MassDOT) – Highway Division proposes the reconstruction and widening of Russell Street (Route 9) in the Town of Hadley, Massachusetts (the Project). The Project limits begin west of the Middle Street (Route 47) intersection and extend 12,730 feet (2.41 miles) on Route 9 to a point east of the North / South Maple Street intersection. The Project limits also extend onto the following side streets: Middle Street (Route 47), East Street (north and south of Route 9), Pine Hill Road, Spruce Hill Road, Mill Valley Road, Lowe's Driveway, Home Depot Driveway, Mountain Farms Mall Driveway, North Maple Street, and South Maple Street for a total length of 17,135 feet (3.245 miles).

Within the Project limits Route 9 generally runs in an east-west direction and is classified as an *Urban Principal Arterial* under the jurisdiction of MassDOT. Through the Town of Hadley, Route 9 is known as Russell Street and serves as a major connection between the town and city centers of Northampton, Hadley, and Amherst. Route 9 also provides the only crossing of the Connecticut River between Sunderland and Holyoke, approximately 10 miles north and south, respectively, of the Route 9 crossing.

Land use within and adjacent to the Route 9 corridor is dominated by auto-oriented commercial retail, offices, lodging, and public institutional / uses interspersed with single family residential homes and agricultural uses. The western end of the Project area, in the vicinity of Middle Street, is anchored by the historic village center of Hadley, including the Town Hall, library, senior center, and high school. This development pattern results in frequent driveway curb-cuts along Route 9 through most of the corridor.

The eastern segment of the Project area, centered around North / South Maple Street, is generally developed as large retail centers including Hampshire Mall, Mountain Farms Mall, and Home Depot. These retail centers are a regional shopping destination and are accessed via large common driveways that form signalized intersections along Route 9 and North / South Maple Street.

Resource area delineations within the Project area were conducted in September 2015 and October 2019. State jurisdictional wetland resource areas identified within and adjacent to the Project area include Bordering Vegetated Wetlands (BVW), Isolated Vegetated Wetlands (IVW), Bank, Land Under Water, 200-ft Riverfront Area, and Bordering Land Subject to Flooding (BLSF). According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel No. 250163 0001 B dated June 1, 1978, the Project area is not located within the Zone A – Area of 100 Year Flood but does transverse a Zone B – Area of Moderate Flood Hazard.

There are no areas of Natural Heritage and Endangered Species Program (NHESP) Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife within the Project area. There is one area of NHESP Priority Habitat (PH 2064) located approximately 500 feet east of the Project limits on Mill Valley Road. The Project does not propose any work within or impacts to NHESP Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife.

### **Project Purpose & Need**

The purpose of this Project is to improve the functionality and safety of the Russell Street (Route 9) Corridor for both the motoring public and pedestrians / bicyclists. The existing configuration of Route 9 as well as the nature of the adjacent developments have resulted in numerous capacity and safety issues within the Project limits.

Within the Project limits, Route 9 consists of a variable width, two lane section with no dedicated left turn lane and no consistent pedestrian or bicycle accommodations. Russell Street is a major connection between the City of Northampton and Town of Amherst and serves a high volume of motorists during peak hours. Land use and development at the eastern end of the Project limits includes several large retail malls that are a regional shopping destination. These large malls are accessed by several shared driveways that form signalized intersections with Route 9. At the western end of the project limits there are numerous small businesses with individual driveways that operate without the benefit of dedicated left turn lanes. The signalized intersections along Russell Street are not coordinated resulting in excessive queue lengths. These factors all contribute to the capacity deficiencies and delays that exist along Russell Street in its current condition.

There are also a number of safety and accessibility deficiencies in the existing conditions of the Route 9 corridor. In 2012 a Road Safety Audit conducted at the intersection of Russell Street (Route 9) and Middle Street (Route 47). This intersection was identified in the top 5% of High Crash Locations within the Pioneer Valley Planning Commission (PVPC) area. The 2012 RSA identified several safety and accessibility deficiencies within the Project area and recommended several improvements that have been included in the scope of this project. These improvements included the coordination of traffic signals to improve traffic progression along the corridor, the addition of bicycle accommodations along both Russell Street and Middle Street, the relocation of bus stops, and the addition of bus pull-outs.

In 2014 an RSA at the intersection of Russell Street and North / South Maple Street. This intersection was identified as a High Crash Location within the Pioneer Valley Planning Commission (PVPC) area. The 2014 RSA identified several safety and accessibility deficiencies at the intersection and recommended several improvements that have been included in the scope of this Project. These improvements include the installation of new traffic signal equipment at the intersection, Modification of the intersection geometry to create more typical and predictable turning movements, the addition of pedestrian and bicycle accommodations at the intersection and throughout the project corridor, the relocation of existing signage and installation of new signage in the vicinity of the intersection, and the installation of additional lighting in the vicinity of the intersection to increase visibility after dark.

The Route 9 Corridor lacks consistent, safe, and accessible pedestrian, bicycle, and transit accommodations. A sidewalk is provided along the north side of Route 9 between East Street and Spruce Hill Road. The sidewalk has an asphalt surface and is separated from the road by a variable width landscape buffer. The sidewalk pavement is in very poor condition through much of its length. Short segments of sidewalks are provided at the Lowe's and Home Depot intersections. Beyond these intersections there are no connecting sidewalks and pedestrians have been observed walking along Route 9 and through the landscaped areas adjacent to the roadway. No bicycle lanes, paths, or shared lane markings are provided along Route 9. The majority of the bus stops along Route 9 are in-lane, creating traffic queues and safety concerns. Several of these bus stops are not Americans with Disabilities Act (ADA) / Architectural Access Board (AAB) compliant and are inaccessible to individuals with disabilities.

The Norwottuck Rail Trail (NRT) runs parallel to Russell Street through Hadley, and crosses beneath the roadway approximately 0.9 miles east of East Street. Though the NRT is in close proximity (0- to 1,600-feet) to Route 9, throughout the project area there is no formal connection and pedestrians and bicyclists have been observed accessing the Trail without the benefit of sidewalks, bike lanes,

paths or pavement markings and signals.

This project has been designed in accordance with MassDOT's Healthy Transportation Policy Directive to ensure that the public has access to safe and comfortable healthy transportation options. The project proposes to improve pedestrian and bicycle accommodations along Route 9 by constructing continuous sidewalks and shared use paths. The project also proposes to improve the safety and accessibility of public transit by providing bus pull-outs and ensuring all stops and shelters are ADA / AAB compliant.

#### Describe the proposed project and its programmatic and physical elements:

The primary programmatic and physical elements of the Project include pavement reconstruction by means of milling and hot mix asphalt (HMA) overlay or full depth construction / reconstruction as necessary; widening of the roadway to establish a consistent roadway cross section width and a two-way-left-turn-lane (TWTL); construction of ADA / AAB compliant wheelchair ramps, sidewalks and shared intersection reconstruction and improvements at the East Street, Lowe's Driveway, and North / South Maple Street intersections; traffic signal installations; installation of pavement markings and signage; construction of dedicated bus pull-offs; repairing, replacing, or cleaning drainage structures and pipes as necessary; installation of erosion and sedimentation control measures; grading, compacting, and the installation of landscape elements.

The Project proposes to improve pedestrian and bicycle safety and accessibility along Route 9 through the construction of an eight (8) foot HMA shared-use path on both sides of Route 9 from east of Middle Street to a point just west of Maple Street. The proposed path will be separated from the roadway by a

6.5-foot grass buffer. This proposed shared-use paths will be connected to the existing NRT at approximately Station 86+35) via proposed 8-foot HMA shared-use paths.

#### **Summary of Impacts**

#### Public Shade Tree Removal

The Project proposes significant widening of the roadway cross section as well as the construction of sidewalks and shared-use paths where they do not currently exist. The proposed widening will require permanent and temporary easements, takings, and the removal of a number of trees along the Route 9 corridor. The Project will require the removal of five (5) living public shade trees with a diameter at breast height (DBH) of greater than 14 inches. The Project also proposes to remove a total of 54 trees within and adjacent to the town, country, and state highway layout.

Existing trees that are in close proximity to the limit of work but are not being removed will be protected with either armoring or protective fencing. The Project proposes to plant 169 new trees throughout the Route 9 corridor to mitigate the proposed tree removal.

#### Wetland Resource Area Impacts

The proposed roadway improvements will involve temporary and permanent alteration of wetland resource areas within the Project limits. The project proposes impacts to wetlands and is subject to permitting under the Wetlands Protection Act as well as Section 401 and Section 404 of the Clean Water Act. All proposed impacts to Jurisdictional Wetland Resource Areas are depicted on the attached plans and described below.

The Project proposes impacts to IVW totaling 271 square feet (251 square feet permanent / 20 square temporary). Proposed permanent impacts are a result of grading and proposed temporary impacts are a result of construction phase site access and the installation of erosion and sedimentation control measures. These areas of IVW are not regulated under the Act as they are not large enough to qualify as Isolated Land Subject to Flooding (ILSF). These areas may be regulated under the Hadley Wetlands Bylaw, however, MassDOT is exempt from all local bylaws. Though these areas area not regulated under

the Act the applicant proposes to mitigate permanent impacts to IVW through the proposed wetland replication areas. All temporarily impacted areas will be restored in place with a wetland seed mix. Proper erosion controls will be installed prior to construction and remain in place through the duration of the Project.

The Project proposes impacts to BVW totaling 5,252 square feet (3,514 square feet permanent / 1,738 square feet temporary). Proposed permanent impacts are a result of roadway widening, shared-use path and sidewalk construction, and grading. Permanent BVW impacts are a result of roadway widening, shared-use path and sidewalk construction, culvert extensions, and grading. Proposed temporary impacts are a result of construct phase site access and the installation of erosion and sedimentation control measures. Portions of the Project and their subsequent impacts area eligible to be treated as limited projects subject to 310 CMR 10.53(3)(d), 310 CMR 10.53(3)(f), and 310 CMR 10.53(3)(k). 1,982 square feet (1,108 square feet permanent / 874 square feet temporary) of the proposed BVW impacts are associated with the limited project portions of the work. The Project will not result in a permanent loss of greater than 5,000 square feet of BVW. When the limited project impacts are taken into account, the Project's total permanent impact to BVW is 2,406 square feet. The Project will not require a Variance under the Act.

In order to mitigate for the proposed permanent BVW impacts, the Project will construct three (3) wetland replication areas totaling 3,826 square feet. Additional information regarding the proposed wetland replication areas is provided on the Inland Wetland Mitigation Plans submitted with the Environmental Notification Form Plans. All temporary impacts to BVW will be restored to existing conditions upon completion of the Project using a wetland seed mix. Proper erosion controls will be installed prior to construction and remain in place through the duration of the Project.

The Project proposes impacts to Bank totaling 316 linear feet (217 linear feet permanent / 99 linear feet temporary). Proposed impacts to Bank area a result of roadway widening and sidewalk / shared-use path construction, installation of retaining walls, culvert extensions, installation of a drainage vault, grading, and the installation of erosion and sedimentation control measures. The Project proposes 224 linear feet of Bank replication to mitigate the proposed permanent impacts. The Project proposes to regrade the areas adjacent to several existing stream crossings to provide a more meandering channel that will better mimic the natural condition. These areas of Bank replication have been designed to prevent erosion and scour as well as maximize shading and vegetation along the Banks. Additional information regarding the proposed Bank replication can be found on the attached plans. All temporary impacts to Bank will be restored to the existing conditions upon completion of the Project.

The Project proposes impacts to LUW totaling 2,023 square feet (1,234 square feet permanent / 789 square feet temporary). These impacts are a result of the proposed roadway widening and sidewalk / shared-use path construction, installation of retaining walls, culvert extension, installation of a drainage vault, grading, and the installation of erosion and sedimentation controls. The proposed Bank replication will also create an additional 963 square feet of LUW to mitigate for the proposed permanent impacts to LUW. All temporary impacts to LUW will be restored to existing conditions upon completion of the Project.

Riverfront Area within the Project limits is associated with four (4) unnamed perennial streams that are tributaries to the Fort River. The total Riverfront Area within the Project limits is 182,612 sf (4.19 acres). Of this area, approximately 99,303 square feet (54%) can be considered Previously Developed / Degraded. The Project proposes impacts to Riverfront Area totaling 56,320 square feet (27,919 square feet permanent / 28,401 square feet temporary). Of these proposed impacts to Riverfront Area, 28,556 square feet (12,690 square feet permanent / 15,866 square feet temporary) occur within the Inner RFA (0' – 100') and 27,764 square feet (15,229 square feet permanent / 12,535 square feet temporary) occur within the Outer RFA (100' – 200'). Permanent impacts to Riverfront Area are related to roadway widening, sidewalk / shared-use path construction, and construction of gravel utility access paths. Temporary impacts are related to grading, landscaping, installation of erosion and

sedimentation control measures, and construction phase site access.

#### Bordering Land Subject to Flooding

According to FEMA FIRM Panel No. 250163 0001 B dated June 1, 1978, the Project area is not located within the Zone A – Area of 100 Year Flood but does transverse a Zone B – Area of Moderate Flood Hazard.

#### Rare Species Habitat

The Project is not located within or adjacent to any NHESP Established Habitat of Rare Wildlife or NHESP Priority Habitat of Rare Species. Additionally, there are no NHESP Certified Vernal Pools within or adjacent to the Project limits. The Project will result in no impacts to rare species.

#### **Stormwater**

The Project proposes stormwater improvements including the installation of 55 deep sump catch basins, the installation of new drainage pipes, and the cleaning / repair of existing pipes and structures as necessary. The Project also proposes to replace and stabilize an existing outfall located at approximate Station 70+90 RT. The existing outfall consists of a 12" Reinforce Concrete Pipe (RCP) and concrete headwall. Both the pipe and headwall show significant signs of deterioration and flows from the outfall are causing scour and erosion of the adjacent wetlands. The Project proposes to replace the existing outfall with an 18" RCP and cement concrete headwall. The outfall will also be pulled back, further from the existing wetlands, and stone will be placed at the end of the pipe to prevent further erosion and scour.

#### **Construction Stage**

Best management practices for erosion and sedimentation control will be adhered to for all phases of construction to minimize potential impacts to wetland resource areas and receiving waterbodies. Compost filter tubes will be used to reduce migration of sediments, and all slopes will be stabilized with loam and seed or modified rockfill.

Erosion and sedimentation controls will be installed and maintained where activities are proposed within 100-feet of BVW, IVW, LUW, and Bank to prevent silt and sediments from migrating into or towards wetland resource areas. Inspectors will assess conditions and identify problems in the field during and after construction activities.

# 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:

During the initial planning and conceptual development, a number of alternatives were investigated for the reconstruction of Route 9. Traffic operations, right-of-way impacts, construction costs, environmental impacts, safety concerns, and accessibility all factored into the design and roadway improvements proposed in the preferred alternatives.

#### **Design Alternatives**

#### **Roadway Cross Section Alternatives:**

Two roadway cross section alternatives for Route 9 were evaluated during the development of this Project. Alternative 1 consisted of a three-lane section consisting of one through lane in each direction and a center two-way left-turn lane (TWLTL). Alternative 2 consisted of a four-lane cross section consisting of two through-lanes in either direction. The three-lane section was selected as the preferred alternative for the following reasons:

• The Federal Highway Administration (FHWA) has found that the three-lane configuration with a center TWLTL results in 19 to 47 percent fewer crashes (Road Diet Information Guide, FHWA Safety Program 2014). Given the extent of commercial driveways and side