Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 13824
MEPA Analyst: Holly Johnson
Phone: 617-626-1623

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Main Street Roadway Improvements Project**		
Street: **Main Street**		
Municipality: **Reading**	Watershed: **Ipswich**	
Universal Transverse Mercator Coordinates: **Start: 327241E, 4709787N** **End: 327434 E, 4710331N**	Latitude: **42.5212° N to 42.5261° N** Longitude: **71.1032° W to 71.1010° W**	
Est. commencement date: **October 2006**	Estimated completion date: **October 2008**	
Approximate cost: **$5,634,000**	Status of project design: **100% design**	
Proponent: **Massachusetts Highway Department**		
Street: **Park Plaza, Suite 4260**		
Municipality: **Boston**	State: **MA**	Zip Code: **02116-3973**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Matthew F. DeSorbo**		
Massachusetts Highway Department	Street: **Park Plaza, Suite 4260**	
Municipality: **Boston**	State: MA	Zip Code: **02116-3973**
Phone: **617.973.7882**	Fax: **617.973.8879**	E-mail: matthew.desorbo@mhd.state.ma.us

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐Yes ☒No

Has this project been filed with MEPA before?
☐ Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before?
☐ Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) 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

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):
80% Federal Highway Administration Funding, 20% Massachusetts Transportation Program.

Are you requesting coordinated review with any other federal, state, regional, or local agency?
☐Yes (Specify_____) ☒No

List Local or Federal Permits and Approvals: **Federal Highway Administration Categorical Exclusion Check List, U.S. Army Corps of Engineers Programmatic General Permit, National Pollution Discharge Elimination System Construction General Permit & Storm Water Pollution Prevention Plan**

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- ☐ Land
- ☐ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☐ Wetlands, Waterways, & Tidelands
- ☒ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	7.1		
New acres of land altered		5.08	
Acres of impervious area	6.1	0.05	6.15
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0	0	0
Number of housing units	0	0	0
Maximum height (in feet)	0	0	0
TRANSPORTATION			
Vehicle trips per day	18,550	0	18550
Parking spaces	140	(3)	137
WASTEWATER			
Gallons/day (GPD) of water use	0	0	0
GPD water withdrawal	0	0	0
GPD wastewater generation/ treatment	0	0	0
Length of water/sewer mains (in miles)	0	0	0

State Permits & Approvals

- ☐ Order of Conditions
- ☐ Superseding Order of Conditions
- ☐ Chapter 91 License
- ☐ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

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CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐Yes (Specify_____) ☒No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☒Yes (Specify: Reading Common Historic District) ☐No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify_____) ☒No

The Town Common is listed on the National Register of Historic Places and is the Town's cultural center. There are slight geometric modifications to the Common areas. The Massachusetts Highway Department's Cultural Resources Unit (CRU) has reviewed this project in accordance with the Federal Section 106 Programmatic Agreement and determined that the proposed project will not adversely affect the Historic District or any archaeological sites. On February 28, 2006, the Massachusetts Historical Commission concurred with MassHighway's affect finding. The Reading Historic Commission voted to support the project given the landscaping and streetscape amenities, including ornamental street lights and traffic signal poles, bollards, and street furniture (See letter attached).

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The Massachusetts Highway Department (MassHighway), in cooperation with the Town of Reading, is proposing geometric improvements to existing intersections, the installation of traffic signals and roadway reconstruction and minor widening along Main Street (Route 28) from Washington Street to Salem Street, a total length of 1,840 linear feet. The proposed project will improve existing safety and congestion issues within the project corridor.

Other specific design elements include the installation of curbing, new sidewalks, wheelchair ramps, traffic signals, pavement markings and signs and improvements to the existing drainage system. Specific streetscape enhancements such as street trees, brick pavers accents, ornamental mast arms and pedestal poles, brick paved crosswalks and period lighting have been added to the design to mitigate project impacts to the Reading Common Historic District.

The project is in conformance with the State's Fix it First and Communities First Policies.

Existing Conditions: Main Street (Route 28) is an Urban Arterial that serves as a local connection between Route 93 and Route 128. Average daily trips account for approximately 18,550 vehicles per day on Main Street.

The existing land use patterns within the project corridor, are predominantly commercial with a mixture of business, public/institutional, and residential type uses. This section of Main Street represents the heart of the commercial development in the Town of Reading. Public uses consist of the fire station located on Main Street and a police station located on Union Street. The project area is also the seat of local government for the community, with the Town Hall located at the northern terminus of the project limits at the intersection of Main Street and Salem Street. Residential uses include a mixture of apartments, two-family and one-family residences. The northern third of the project lies within the Reading Common Historic District that contains several National Register or

National Register eligible properties within the remainder of the project corridor.

The project corridor includes six major intersections that are controlled by traffic signals. These traffic signals are currently coordinated due to the short distance between intersections, which is typically less than 500 feet. The signal system promotes the high volume north-south traffic progression through the downtown. The following text provides a description of the project corridor on a segment-by-segment basis considering the varying roadway characteristics between each of the major intersections. Current traffic operations and intersection geometry are presented for each major intersection.

Main Street (Washington Street to Green Street) This section of Main Street typically provides one 14-foot southbound travel lane and two 10-foot northbound travel lanes, with a double yellow centerline for delineation. The southbound approach to the Washington Street intersection widens as parking is prohibited to provide an additional through travel lane to match the typical section south of the intersection. The roadway width in this segment is approximately 49 feet within a 66-foot wide right-of-way. On-street parking is provided on the western (southbound) side of the roadway immediately north of the Washington Street intersection. A 7.5 foot parking lane is provided that furnishes 6 parking spaces. Sidewalks currently exist on both sides of the street.

The Main Street/Green Street intersection is a minor un-signalized intersection with stop sign control on the westbound Green Street approach. The eastbound approach is designated as one-way in the westbound direction requiring no control. Crosswalks are provided on both Green Street approaches and on the southbound Main Street approach.

Main Street (Green Street to Haven Street) The section of Main Street between Green Street and Haven Street provides two10-foot travel lanes in the northbound direction, which is consistent with other segments of the project corridor. In the southbound direction, the travel lanes taper from two lanes at the Main Street intersection with Haven Street southbound approach, to a single 14-foot travel lane approximately 164 feet south of the intersection. The single southbound lane is carried for the short distance from Haven Street to south of Green Street, where two approach lanes are introduced at the Washington Street intersection. The right-of-way width along this segment is approximately 66 feet in width. One 7.5-foot wide parking lane is provided along both sides of the roadway in this section of Main Street.

The intersection of Main Street with Haven Street is controlled by a pre-timed traffic signal, which is coordinated with the adjacent signals. Crosswalks are delineated on each approach and an exclusive pedestrian phase is serviced every cycle.

Main Street (Haven Street to Salem Street) The Haven Street to Salem Street section includes four closely spaced signalized intersections in less than 985 feet. The first intersection north of Haven Street is the Main Street convergence of several streets including, Pleasant Street, Lowell Street and Harnden Street. The intersection is situated only 328 feet north of Haven Street forming a five-legged configuration at the beginning of Reading Square. Vehicles and pedestrians are controlled by a pre-timed traffic signal. The signal is mounted on an "island" in the center of Main Street forcing vehicles to drive around the obstruction. Harnden Street is designated one-way in the northbound direction until its intersection with Union Street at which point it becomes a two directional roadway approximately 30 feet in width. The right-of-way width on Harnden Street varies between 46 and 50 feet. Angle parking exists along the easterly curb line of Harden Street and a portion of Main Street in the vicinity of the Square.

The section of Main Street north of Pleasant Street to Salem Street consists of two 10-foot travel lanes in each direction and is approximately 40 feet in width with a one 7.5-foot parking lane in each direction. The existing right-of-way width is approximately 66 feet. There are two traffic signals on Main Street in this section. The intersection of Main Street with Woburn Street forms the second major junction north of Haven Street and is located only 246 feet north of Pleasant Street. Traffic is controlled by a pre-timed signal operation. Crosswalks are delineated on two of the four approaches with an exclusive pedestrian phase servicing each cycle. Woburn Street runs in an east/west direction, consisting of two travel lanes in a width of 30 feet of pavement. Parking is restricted on Woburn Street from Main Street to 98 feet west of the Lowell Street intersection.

The third traffic signal north of Haven Street is located at the intersection of Lowell Street and Woburn Street. The signal is immediately (50 feet), west of the Main Street/Woburn Street intersection. The proximity of these two signals forces the east/west movements to run simultaneously. The three-way intersection of Salem Street with Lowell Street located 200 feet north of the Lowell Street/Woburn Street intersection is stop controlled on the minor northbound Lowell Street approach. The westbound approach of Salem Street is 60 feet wide consisting of one 14-foot travel lane in each direction. The existing right-of-way width varies between 55 and 60 feet. Lowell Street's eastbound approach is 36 feet in width, within a 55-foot right-of-way, providing one 14-foot lane of traffic in each direction. Lowell Street changes from an east/west alignment to a north/south alignment at this point to provide one 14-foot lane of traffic in each direction on a pavement width of 40, within a right-of-way width of approximately 58 feet. Pavement markings consist of double yellow centerlines with crosswalks located on the eastbound and northbound approaches of Lowell Street.

The final and northernmost signalized intersection is located at Salem Street (Route 129). Salem Street is an east/west arterial, which provides a direct connection to Route 128 to the east of Reading. West of its intersection with Main Street, Route 129 becomes Lowell Street, and heading in a westerly direction, the roadway intersects I-93 via an interchange at the westerly Town limits. Route 129 is a two-lane roadway that forms the northern boundary of the downtown at its intersection with Main Street. The Main Street/Salem Street intersection is the most critical intersection within the project limits, in terms of traffic operation, due to the high volume of traffic serviced by the intersection.

Proposed Improvements: Proposed construction activities include roadway reconstruction consisting of cold planning existing roadway surface, and minor roadway widening. Curbing and pavement markings will be installed to delineate the roadway. Drainage structures will be replaced with new deep sump catch basins and connected to the existing closed storm water drainage system. Sidewalks within the project limits will be reconstructed to a uniform 5-foot width and to meet Americans with Disabilities Act (ADA) Standards. This project requires the removal of 12 public shade trees. The removed trees will be replaced according to the Massachusetts Highway Department Landscape Restoration Policy. All work associated with this project will take place within the existing roadway layout with the exception of two small sidewalk easements. This project will have no impact on any wetland resource or resource buffer zone.

Main Street (Washington Street to Green Street) The proposed cross-section on Main Street between Washington Street and Green Street consists of two 11-foot travel lanes with a 3-foot curb offset in the northbound direction. The southbound direction consists of one 11-foot travel lane and a 8-foot parking lane. As you approach the Washington Street intersection the parking lane is eliminated and a second 11-foot travel lane with a 3-foot curb offset is introduced. This cross-section matches the existing Main Street cross-section on the south side of the Main Street/Washington Street intersection.

Main Street (Green Street to Haven Street) The proposed cross-section on Main Street between Green Street and Haven Street consists of two 11-foot travel lanes and a 8-foot parking lane in the northbound direction and one 11-foot travel lane and an 8-foot parking lane in the southbound direction. The parking lanes are eliminated within the Main Street/Haven Street/Ash Street where the

proposed cross-section consists of two 11-foot travel lanes and a 2-foot curb offset in the northbound direction and one 11-foot travel lane and a 2-foot curb offset in the southbound direction.

Main Street (Haven Street to Pleasant Street/Union Street) The proposed cross-section on Main Street between Haven Street and Pleasant Street/Union Street consists of two 11-foot travel lanes with an 8 foot parking lane in each direction.

Main Street (Pleasant Street/Union Street to Salem Street) The proposed cross-section on Main Street between Pleasant Street/Union Street and Salem Street consists of two 11-foot travel lanes with a 2-foot curb offset in each direction.

Geometric Improvements The most significant geometric changes occur in the area surrounding Reading Square. The need for improvement to this area is necessitated by safety concerns of angular on-street parking and pedestrian access. These concerns are attributed to the lack of off-street parking and the need for more accessible and pedestrian-safe parking conditions. As a result, the proposed improvements are designed to be sensitive to vehicular and pedestrian safety issues by maximizing parking opportunities while reducing vehicle conflicts.

Lowell Street will be modified to provide one-way travel in the southbound direction. The current "free" right turn (or "through" movement) onto Lowell Street will be eliminated by creating a "T" intersection at the Salem Street/Lowell Street intersection. This will promote the use of Salem Street and Main Street for the through northbound/southbound traffic movements in the downtown area. In addition, a pedestrian actuated crossing signal is proposed at the reconfigured Lowell Street/Salem Street intersection.

The existing Main Street/Lowell Street intersection will also be reconfigured to create a more conventional four-way intersection opposite Pleasant Street. The existing traffic signal island at the intersection of Main Street and Pleasant Street will be removed and the traffic signal equipment upgraded at this location. In addition, the signal that currently exists at the Woburn Street/Lowell Street intersection will be removed to accommodate new parking and circulation patterns in the downtown area.

Streetscape Improvements Streetscape enhancements including: street trees, brick pavers accents, ornamental mast arms and pedestal poles, brick pavers crosswalks and period lighting are included among the proposed improvements. The recommended streetscape enhancements are required, in part, to mitigate the impacts to the Reading Common Historic District. The proposed improvements have been closely coordinated with the Reading Historic Commission to ensure the selected elements are consistent with the historic nature of the district and will adequately mitigate any project related impacts. The Reading Historic Commission voted to support the project given the landscaping and streetscape amenities. The Massachusetts Historical Commission has concurred with MassHighway's finding that the project will not adversely affect the Historic District or any archaeological sites.

Alternatives Analysis:

The proposed project is primarily a reconstruction project with minor widening which will result in a small increase in impervious surface area. One alternative is to cold plane and resurface the existing roadway in place. This alternative would not address the current safety and congestion issues along the route. The proposed geometric changes and installation of upgraded traffic signal equipment will decrease vehicle queues along the project corridor and intersecting side streets thus allowing for more efficient movement of traffic through the downtown area. Without the proposed changes, safety and operational deficiencies will continue to worsen in the project area.