

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: *14426*
 MEPA Analyst: *Aisling Eglinton*
 Phone: 617-626-*1024*

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: Reconstruction of Tyringham Road		
Street: Tyringham Road		
Municipality: Lee	Watershed: Housatonic	
Universal Transverse Mercator Coordinates: 4683890 N (start); 4681163 N (end), Zone 18 645172 E (start); 645607 E (end), Zone 18	Latitude: 42°17'38" N (start); 42°16'8.5" W (end) Longitude: 73°14'20.9" W (start); 73°14'3.5" W (end)	
Estimated commencement date: April 2010	Estimated completion date: November 2010	
Approximate cost: \$4,000,000	Status of project design: 25 %complete	
Proponent: Town of Lee		
Street: 32 Main Street		
Municipality: Lee, Massachusetts	State: MA	Zip Code: 01238
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Michael Gagnon		
Firm/Agency: Fuss & O'Neill, Inc.	Street: 78 Interstate Drive	
Municipality: West Springfield	State: MA	Zip Code: 01089
Phone: 413-452-0445 ext. 4432	Fax: 413-846-0497	E-mail: mgagnon@fando.com

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))	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Special Review Procedure? (see 301CMR 11.09)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Phase I Waiver? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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):
Massachusetts Highway Department (undetermined funding amount)

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

List Local or Federal Permits and Approvals:

Lee Conservation Commission Order of Conditions

Massachusetts Historical Commission and Lee Historical Commission Review

MESA Natural Heritage & Endangered Species Program Review

NPDES Construction Stormwater Permit

Dept. of the Army Programmatic General Permit (under Section 404 of the Clean Water Act)

401 Water Quality Certification

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

- | | | |
|---------------------------------|--|--|
| <input type="checkbox"/> Land | <input checked="" type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input checked="" type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> <u>Dept. of the Army Programmatic General Permit (under Section 404 of the Clean Water Act)</u>
Total site acreage	11.2			
New acres of land altered		2.53		
Acres of impervious area	5.17	0.05	5.22	
Square feet of new bordering vegetated wetlands alteration		11,894 (temporary) 1,195 (permanent)		
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	1,500	0	1,500	
Parking spaces	0	0	0	
WATER/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	

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

The National Heritage and Endangered Species Program (NHESP) mapping indicates areas of Estimated Habitat of Rare Wildlife and Priority Habitat of Rare Species along Tyringham Road on one 0.61 mile segment of the reconstruction work and, and a second along a 0.40 mile segment of the work area (see Attachment D). A request for review and identification of rare and endangered species habitat has been submitted to NHESP and correspondence documents are provided in Attachment D.

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 _____) No

See Attachment E for Correspondence with Massachusetts Historical Commission and Lee Historical Commission.

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

Yes (Specify _____) No

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.)

A) Project Site

The Tyringham Road Reconstruction Project is intended to improve the roadway and drainage on an approximately 1.85 mile section of Tyringham Road in Lee, Massachusetts (see USGS Locus Map as Attachment A and proposed plans as Attachment B) from the Goose Pond Brook Bridge south to the Lee/Tyringham town line. Tyringham Road runs in a northerly direction between the Town of Tyringham and Route 102 in Lee. Tyringham Road provides the primary access to the Massachusetts Turnpike (Interstate 90), Route 102 and Route 20 for the Town of Tyringham, as well as several residences located on Tyringham Road, providing local access to approximately 30 homes along the north end. The existing pavement cross-section varies from 21 to 23 feet. Shoulders are essentially nonexistent with the exception of a pull off (shoulder) area approximately 100 feet in length located along a section of the roadway near the Housatonic River. There are no sidewalks located on Tyringham Road.

The roadway improvements include pavement reclamation along the majority of the road segment length, with some short segments of full-depth reconstruction. The paved roadway will be widened in some places to a more uniform width of 22 feet. All work will be performed within the right-of-way which extends approximately 25 feet from the roadway centerline on both sides, although is variable along the length of the segment. It is also proposed that all existing drop-inlets and cross culverts be replaced. Minor drainage and safety improvements to the intersection with Meadow Street and other local street intersections are

proposed as well. Some gabion retaining walls are proposed for slope stabilization behind some guardrail sections and along the back of some roadside drainage channels.

The project consists of the following activities:

- Pavement reclamation or full depth reconstruction of approximately 1.85 miles of Tyringham Road.
- Gabion retaining walls along 5,373 linear feet in 18 sections to stabilize roadside slopes.
- Construction of stormwater management Best Management Practices (BMPs) in accordance with current Massachusetts Wetlands Protection Act (MAWPA) regulations and best engineering practices.
- Reconstruction of the intersection of Tyringham Road and Meadow Street.

The project site consists of the public roadway right-of-way within the area shown on the USGS site locus provided as Attachment A. The land uses in the area are forested, open space, and undeveloped. Wetland resource areas (e.g. Bordering Vegetated Wetlands) have been delineated and confirmed on both sides of the roadway, totaling 13,089 square feet. Permanent fill of wetlands will occur in a total of 1,195 square feet in areas where gabion wall is proposed, while the majority of the wetland impacts (11,894 square feet) are temporary and will occur during the construction-phase. These wetland areas are drainage channels along the roadside. Wetland boundaries are shown on the existing conditions plan provided in Attachment B. Additionally, portions of work will occur within the limits of mapped rare species habitat. Correspondence with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) is included in Attachment D.

The northern section of Tyringham Road where work is proposed is adjacent to the Housatonic River and is within the 100 year FEMA designated floodplain. Compensatory storage will not be necessary since the gabion wall that is proposed within the 100-year floodplain will not reduce flood storage volumes. The project will eliminate an estimated 28 Public Shade Trees along the right-of-way. Traffic is not expected to increase along the road segment due to the proposed resurfacing project.

The proposed reconstruction of Tyringham Road includes elements that minimize environmental impact. The design criteria selected for this project are based on information from the 2006 MassHighway "Project Development and Design Guide" and applied with engineering judgment. Pavement reclamation, a resurfacing technique which minimizes the use of imported road material by reclaiming the existing roadway, will be used for the sections of roadway that will be resurfaced.

The project proposes a minimum 2-foot shoulder (plus 2 feet offset to face of guardrail) on the west side. A design exception is needed for a proposed shoulder width less than 4 feet. The 2-foot minimum shoulder, one foot of which will be paved and 1 foot pavement millings, will be used on the west side (river side) of the road due to the significant cross-slope of the terrain. Further widening to accommodate a 4-foot shoulder on this side would result in significant impacts to the wetlands and river embankments that border Tyringham Road on this side. The east shoulder will be 2-feet minimum, 1 foot of which will be paved and 1-foot pavement millings. The new impervious pavement area will be 0.052 acres (approximately 2,248 square feet).

Current American Association of State of Highway Transportation Officials (AASHTO) standards require the 2-foot offset to the face of the guardrail, necessitating the installation of Gabion walls to secure the steep slope along certain sections. Wetland impacts could be avoided or reduced substantially by either not replacing the guard rail or by replacing it at the existing distance to the paved roadway.

B.) Alternatives

Alternative designs have been evaluated with respect to meeting the objectives of the proposed reconstruction project: The required mitigation measures for each alternative are provided in Section C below.

Alternative A: Widening and Full-depth Reconstruction

The proposed Alternative A is to widen the roadway to 12 foot travel lanes and provide full depth reconstruction along the entire 1.89 mile segment of Tyringham Road. The creation of new impervious surfaces due to the road widening would be 0.66 acres, and the land alteration would extend an additional

2 feet on both sides of the road, increasing wetland impacts and the need for additional segments of Gabion wall to retain the bank slope and increasing stormwater peak flow and volume, possibly requiring additional infiltration swales along the corridor. Significant volumes of gravel and asphalt would be required to complete the full depth road construction.

A number of environmental constraints are present, which limit this potential alternative for this project. Tyringham Road runs alongside the Housatonic River for a stretch of approximately a ½-mile at the northern end. The terrain along the east side of Tyringham Road varies from rolling to mountainous with the terrain sloping down from the hill area to the river valley area to the west. The right (east) side of the road is mainly forested with relatively steep slopes south of the residential section near Route 102. The left (west) side of the road drops off steeply in some sections where it runs along the Housatonic River area, as well as having a number of wetlands that are tributary to the Housatonic River. Any significant widening of the existing road cross section would result in significant fill sections along the west side of the road as well as cut sections on the east side. This would result in impacts to private property, embankment areas that would require significant retaining structures, wetland impacts, drainage impacts, and impact to mature trees.

Alternative B: Reconstruction without Guard Rail Replacement

Alternative B is the resurfacing of Tyringham Road using the proposed combination of full depth reconstruction and pavement reclamation without the replacement of the existing guardrail. Gabion walls would not be necessary in this alternative since the current bank grading is adequate past the width of the existing guard rails. Non construction-phase wetlands impacts would be avoided, permanent land alterations would be negligible, and the loss of some of the Public Shade Trees would be avoided. However, this alternative is not preferred since the existing guardrail is failing (unsafe) and does not meet current AASHTO standards, which specifies the guard rail must be at least 2 feet from the edge of pavement. These standards are followed to uphold the safety of persons traveling on the roadway.

Alternative C: No-Build

The current condition of Tyringham Road is generally poor, with evidence of pavement cracking and rutting on the road surface with areas of sheared and broken pavement edges. The drainage system and guardrails are failing in a number of locations. Typical current conditions along the segment of road proposed for improvements are provided in Attachment F. The “No Build” alternative would result in the section of road continuing to degrade and become increasingly unsafe for vehicle roadway travel.

C.) Potential Mitigation Measures

The following mitigation measures would be required for the alternatives described above:

Proposed Alternative

Drainage - The proposed reconstruction will require the replacement of existing stormwater drainage pipes and some system elements. The stormwater management system will be required to meet or exceed water quantity and quality requirements of the Massachusetts Stormwater Management policy/regulations. The system will address water quality, peak runoff rates, and groundwater recharge requirements.

Wetlands - A Notice of Intent submitted will be required to the Town of Lee Conservation Commission. The permanent wetlands impacts will be 1,195 square feet. The Final Order of Conditions requires a minimum of 1:1 replication of bordering vegetated wetlands in accordance with 310 CMR 10.55(4)(b). In-situ wetland restoration will be provided for the 11,894 square feet of temporary wetland impacts. An application will be submitted for a 401 Water Quality Certification and Army Corps of Engineers Programmatic General Permit in accordance with the requirements of Section 404 of the Clean Water Act.

Flood Storage - The proposed Gabion wall construction inside the 100-year floodplain will not decrease the flood storage and compensatory flood storage is not expected to be required in the Order of Conditions issued by the Lee Conservation Commission.

Construction-phase - Erosion and sedimentation controls will be implemented during construction in accordance with local, state and federal requirements, including implementation of a construction-phase

Stormwater Pollution Prevention Plan under the EPA Construction Stormwater General Permit.

Alternative A: Widening and Full-depth Reconstruction

Drainage - The proposed reconstruction would require the replacement of existing stormwater drainage pipes and some system elements. The stormwater management system would be required to meet or exceed water quantity and quality requirements of the Massachusetts Stormwater Management policy/regulations. The system would address water quality, peak runoff rates, and groundwater recharge requirements.

Wetlands - A Notice of Intent submitted would be required to the Town of Lee Conservation Commission. The wetlands impacts exceed 1 acre and an Army Corps of Engineers Individual Section 404 Permit would be required.

Flood Storage - The proposed road reconstruction will include the construction of additional Gabion retaining walls inside the 100-year floodplain compared to the proposed project. It is therefore anticipated that compensatory flood storage would be required as a condition in the Order of Conditions issued by the Lee Conservation Commission. The compensatory volume would be provided in equal volume to the flood storage lost from development, and constructed to not restrict flows or increase flood velocities in the Housatonic River. General performance standards of 310 CMR 10-57(4) would be met.

Alternative B: Reconstruction without Guard Rail Replacement

Drainage - The stormwater drainage for Alternative B would require the replacement of existing stormwater elements. The proposed system must meet or exceed water quantity and quality requirements of the Massachusetts Stormwater Management policy/regulations by addressing water quality, peak runoff rates, and groundwater recharge requirements.