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May 23, 2014

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

PROJECT NAME : Bruce Freeman Rail Trail Phase 2A  
 PROJECT MUNICIPALITY : Acton, Carlisle and Westford  
 PROJECT WATERSHED : Sudbury, Assabet and Concord (SuAsCo)  
 EEA NUMBER : 15196  
 PROJECT PROPONENT : Massachusetts Department of Transportation  
 DATE NOTICED IN MONITOR : April 23, 2014

Pursuant to the Massachusetts Environmental Policy Act (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** the preparation of an Environmental Impact Report (EIR).

As described in the Environmental Notification Form (ENF), the project consists of construction of Phase 2A of the Bruce Freeman Rail Trail (BFRT), a shared-use trail that runs through the communities of Lowell, Chelmsford, Westford, Carlisle, Acton, Concord, Sudbury, and Framingham. The completed BFRT will follow the 25-mile route of the former New Haven Railroad Framingham and Lowell line, the right-of-way of which is now owned by the Commonwealth of Massachusetts.

The project reviewed in the ENF includes the 4.88-mile segment (Phase 2A) of the BRFT located in the Towns of Westford, Carlisle and Acton. Phase 2A extends from the terminus of the 6.8-mile Phase 1 BFRT at the intersection of Route 225 and Route 27 in Westford to approximately 1,000 feet south of Wetherbee Street in Acton. Construction activities include the following:

- A paved 10 to 12-foot wide shared-use trail with one to two-foot graded shoulders on either side and an adjacent 6-foot wide stone dust trail (where right-of-way and terrain permit);
- Trail pavement markings and signage;
- Rectangular rapid flashing beacons at trail/roadway crossings;
- Roadway pavement markings and signage at trail crossings;
- Stormwater and drainage improvements;
- Construction of a wildlife crossing at Route 2A/119;
- Construction of a multiple span, curved steel girder bridge over Route 2A/119;
- Construction/repair/replacement of culverts;
- Rehabilitation of six simple span bridges that span Nashoba Brook and Butter Brook; and
- Earthwork, landscaping and establishment of parking facilities.

The trail alignment is centered on the existing rail ballast to reduce overall environmental impacts. The alignment has been re-routed in the vicinity of the Rex Lumber Yard near Ledge Rock Way in Acton to avoid right-of-way impacts to the lumber yard. Paved connector paths (8 to 12-foot wide) from behind Gould's Plaza near Brook Street (STA 187+50) and Powers Gallery at 144 Great Road (Route 2A/119) (STA 227+25) are proposed to provide additional access to the BFRT.

Approximately 700 linear feet (lf) of the project is located in Westford, 850 lf is located in Carlisle, and the remaining 4.5 miles runs southerly through Acton. The project will cross Nashoba Brook and Butter Brook in multiple locations and includes nine trail crossings along roadways at:

- Route 225 in Westford;
- Route 27 in Acton;
- Nashoba Sportsman's Club driveway in Acton;
- Route 27 (in vicinity of Ledge Rock Way) in Acton;
- Route 2A in Acton;
- Brook Street in Acton;
- Concord Road in Acton; and
- Wetherbee Street in Acton.

Bridge rehabilitation will allow the existing bridges to remain generally in their existing alignment with minor modifications for upgrades. These bridges are all located in Acton and are identified in the ENF as:

- Bridge No. 13.23 (40-foot simple span);
- Bridge No. 12.27 (35-foot simple span);
- Bridge No. 12.04 (48-foot simple span);
- Bridge No. 11.16 (30-foot simple span);
- Bridge No. 9.83 (21-foot simple span); and
- Bridge No. 9.65 (16-foot simple span).

The project area includes 19 culverts: four of which will be repaired, four will be abandoned, four will be replaced, four will be retained as is, and the remaining will be extended or require headwall reconstruction to meet slopes associated with the proposed trail.

The project will create 7.28 additional acres of impervious area, resulting in a total of 10.01 acres of impervious area within the 50.44-acre project site. The project includes a total of 33 new parking spaces to facilitate trail access, located in a parking lot near the Acton/Carlisle town line (STA 28+50).

The railroad right-of-way traverses through numerous wetland resource areas. While construction will be limited to work within and immediately adjacent to the railroad bed, unavoidable impacts to wetland resource areas will occur. The project includes temporary and/or permanent impact to Bordering Vegetated Wetlands (BVW), Bank, Land Under Water, Bordering Land Subject to Flooding (BLSF) and Riverfront Area. Work is also proposed within the 100-foot buffer zone to these various wetland resource areas. Portions of the project are located within the limits of *Estimated Habitat* of rare wildlife and *Priority Habitat* of rare species as identified by the Natural Heritage and Endangered Species Program (NHESP). While Certified Vernal Pools are mapped near the project area, no vernal pools are located within the trail right-of-way and no direct impacts are proposed. Finally, Nashoba Brook and Butter Brook contain fisheries resources with 12 different identified species and are stocked annually in the spring with Brook Trout, Brown Trout, Rainbow Trout, and/or Tiger Trout.

### Permits and Jurisdiction

The project is undergoing review pursuant to 301 CMR Section 11.03(1)(b)(2) of the MEPA regulations because it will be undertaken by a State Agency and result in the creation of five or more acres of impervious area. The project requires a Section 401 Water Quality Certificate (WQC) from the Massachusetts Department of Environmental Protection (MassDEP). The project also requires Orders of Conditions from the Towns of Westford, Concord and Acton, or in the case of an appeal, a Superseding Order of Conditions (SOC) from MassDEP.

Because the project will be undertaken by a State Agency and receive MassDOT funding, MEPA jurisdiction is broad in scope and extends 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 described the existing conditions within the project area and the proposed project and its programmatic and physical elements. The ENF included site plans depicting wetland resource areas, grading, stormwater improvements, bridge/culvert improvements and proposed wetland mitigation areas. The ENF identified proposed mitigation measures to effectively avoid, minimize and mitigate Damage to the Environment. The project is consistent with local, regional and State planning goals and has been programmed on the Transportation Improvement Program (TIP) with federal funding for fiscal year 2014.

MassDOT evaluated several project alternatives to achieve the project’s goals of providing a shared-use trail while avoiding, minimizing, and mitigating Damage to the Environment. A No-Build alternative was dismissed as it will not allow MassDOT to achieve its goals of establishing multimodal recreational facilities consistent with State policy directives while providing continuity to the BFRT Phase 1 segment. An On-Road alternative for BFRT Phase 2 was also considered, using existing roadway right-of-way within the project area. MassDOT dismissed this alternative as it was determined that a safe on-road non-motorized shared-use trail is not feasible unless significant land easements/purchases and widening occurs. MassDOT also considered the location of BFRT Phase 2A on other adjacent lots or lands within each municipality. There is currently no land of adequate area and configuration available to accommodate the long, linear corridor for a shared-use trail. Therefore, this alternative was dismissed.

*Wetlands and Stormwater*

The project includes the temporary or permanent alteration of wetland resource areas regulated under the Massachusetts Wetlands Protection Act (WPA). Work within the Towns of Westford and Carlisle is limited to the 100-foot buffer zone to BVW. Work within the Town of Acton includes:

| Wetland Type     | Temporary Disturbance | Permanent Disturbance |
|------------------|-----------------------|-----------------------|
| Bank             | 69 lf                 | 0 lf                  |
| BVW              | 2,309 sf              | 1,760 sf              |
| Land Under Water | 376 sf                | 7 sf                  |
| BLSF             | 94,575 sf             | 165,515 sf            |
| Riverfront Area  | 0 sf                  | 425,000 sf            |

Permanent BVW impacts will be replicated in two constructed wetland areas totaling 3,179 sf (a 1:1 ratio). Temporarily disturbed Bank areas will be fully restored in place following construction. Alteration to BLSF will result in a loss of approximately 2,565 cubic feet (cf) of flood storage. To mitigate for this loss, a total of 2,901 cf of compensatory storage will be provided in three separate areas along the project corridor: 1,259 cf at STA 45+25; 660 cf at STA 147+25, and 982 cf at STA 233+00. MassDOT noted at the MEPA consultation session that the requirement to provide flood storage mitigation at equivalent one-foot elevation increments may not be met in the final design. The ENF indicated that proposed alteration to Riverfront Area is limited to historically impacted and degraded areas which may influence the amount and type of Riverfront Area impact mitigation required under the WPA. It is anticipated that compliance with applicable performance standards will be determined during the local Notice of Intent (NOI) review process with the Town of Acton.

Replication areas should be constructed in conformance with MassDEP inland wetland replication guidelines. Bridge and culvert replacement design and construction will meet the *Massachusetts River and Stream Crossing Standards* (2004), as applicable.

Stormwater from the project area discharges to Butter Brook and ultimately to the Nashoba Brook, a Category 5 waterbody impaired by low flow alterations and fish

bioassessments. In the ENF, MassDOT indicates that the project is a redevelopment project and will provide stormwater treatment to the maximum extent practicable. Stormwater Best Management Practices (BMPs) include the placement of 10-foot wide filter strips in six locations in Acton and one location in Westford where the trail intersects with uncurbed roadway and parking areas. Water quality swales are also proposed along the trail to prevent ponding of stormwater. These shallow swales will terminate at existing low points along the trail. Three leaching catch basins are proposed at the south end of the trail near its crossing at Wetherbee Street, where the trail abuts non-vegetated areas. As noted by MassDEP, vegetated filter strips must be at least 25 feet wide to receive total suspended solids (TSS) removal credit under the MassDEP Stormwater Management Standards. MassDOT should reevaluate the feasibility of providing wider vegetated filter strips to improve TSS removal. The proposed parking areas will be paved to facilitate maintenance by the Town. I encourage MassDOT to consider the use of porous pavement in the parking areas, as they will limit the concerns about maintenance or plowing, but provide a positive stormwater benefit. To reduce erosion and sedimentation, the trail operation and maintenance plan will include sweeping, seeding and mulching. MassDOT should also review the comments from MassDEP regarding the use of riprap for embankment stabilization and evaluate the use of alternative methods or design options to reduce potential impacts to riparian resources.

### *Rare Species*

The project area includes mapped habitat for Wood Turtle and Climbing Fern. Through coordination with the NHESP, MassDOT has proposed a number of design and operational mitigation measures to avoid an adverse effect on rare species habitat and minimize and mitigate potential impact during and post construction. The project area includes three focus areas characterized by strong rare species habitat susceptibility to construction activities:

- Focus Area 1: STA 143+50 to 602+00;
- Focus Area 2: STA 188+50 to 195+00 and 203+00 to 225+00; and
- Focus Area 3: STA 55+75 to 68+00.

To minimize impacts to habitat, the proposed trail cross-section narrows within the three Focus Areas to a 10-foot path with 1-foot shoulders in areas that do not include the stone dust path and a 10-foot path with a 6-foot soft trail and 2-foot shoulders in areas that include the stone dust trail. A restoration area seed mix approved by the NHESP will be applied to land immediately adjacent to the trail.

MassDOT will also implement a series of operational and design measures to avoid turtle mortality. These include:

1. Performance of turtle sweeps on-site during construction;
2. Installation of signs indicating the presence of an “Environmentally Sensitive Area” on each side of the trail at both ends of the Focus Areas;
3. Installation of approximately 13,130 lf of Wood Turtle Barrier consisting of straw bales and silt fence; and

4. Construction of an 8-foot by 6-foot wildlife crossing with a 2-foot deep embedment at STA 167+50 near the proposed location of the bridge spanning Route 2A/119 in Acton.

On April 9, 2014, the NHESP issued a “No Adverse” determination pursuant to the WPA (310 CMR 10.58(4)(b), 10.59) and a “Conditional No Take” determination pursuant to the Massachusetts Endangered Species Act (MESA) (321 CMR 10.18).

### *Historic Resources*

The project crosses the Issac Davis Trail, a historic resource listed on the National Register of Historic Places (ACT.900). The crossing is located within privately owned land. MassDOT has coordinated with the property owner and the actual location of the crossing of the Issac Davis Trail will not be identified on the BFRT and “private property” signs will be located in the vicinity of the Issac Davis Trail. A proposed connector path from Route 2A/119 to the BFRT will be constructed on the property of the John Robbins House (also known as the Powers Gallery)(ACT.41). The John Robbins House is listed on the National Register of Historic Places. The proposed work is not anticipated to negatively impact the preservation of this property.

The ENF also identified the presence of an archaeological site listed on the Inventory of Historic and Archaeological Assets of the Commonwealth. The visible remains of a 19<sup>th</sup> century Pencil Factory complex and dam are located adjacent to the BFRT near Harris Street. Work proposed in the area of this archaeological site will be confined to the rail bed and no archaeological impacts are anticipated. The site will be designated as a Sensitive Resource Area on project plans and the contractor will be required to erect temporary fencing to protect mill-related features during the construction period.

MassDOT’s Cultural Resource Unit will continue to review the project through the final design stage in accordance with Section 106, as amended, of the National Historic Preservation Act.

### *Hazardous Waste*

While the project area has not been, or is currently, regulated under M.G.L c.21E or the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000), the historic rail uses increase the likelihood of encountering hazardous materials during the construction process. If oil and/or hazardous material are identified during the implementation of the project, notification pursuant to the MCP must be made to MassDEP, if necessary. A Licensed Site Professional (LSP) should be retained for this project given the potential impact of MCP-regulated sites on the proposed construction activities.

### *Construction Period*

All construction should be managed in accordance with applicable MassDEP Solid Waste and Air Pollution Control regulations pursuant to M.G.L. c.40, §54. MassDOT should review the MassDEP comment letter for guidance and recommendations for managing construction and

demolition (C&D) waste and recycling of asphalt, brick and concrete (ABC). Erosion and sedimentation control during the construction process is critical. Proposed erosion and sedimentation control measures (ECMs) should be implemented, inspected, and maintained throughout the construction period, and repairs to these ECMs should be made in a timely and effective fashion, as necessary.

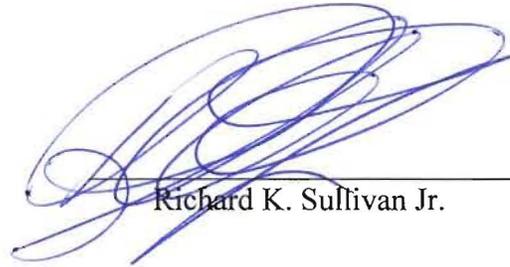
In accordance with MassDOT's GreenDOT Policy Directive, contractors will be required to install emission control devices in all off-road vehicles. MassDOT's Revised Diesel Retrofit Specification states that emission control standards must be met or technology must be used for non-road, diesel powered construction equipment in excess of 50 horsepower. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD).

### Conclusion

The ENF has sufficiently defined the nature and general elements of the project for the purposes of MEPA review and demonstrated that the project's environmental impacts will be avoided, minimized and/or mitigated to the extent practicable. Based on review of the ENF and comments received, and in consultation with State Agencies, I have determined that no further MEPA review is required.

May 23, 2014

Date



Richard K. Sullivan Jr.

### Comments received:

|            |                                                 |
|------------|-------------------------------------------------|
| 04/24/2014 | Board of Underwater Archaeological Resources    |
| 05/02/2014 | Anne McCarthy Forbes                            |
| 05/06/2014 | Natural Heritage and Endangered Species Program |
| 05/11/2014 | Stephen D. Van Hooser                           |
| 05/11/2014 | Caroline Partridge                              |
| 05/11/2014 | Rebecca Chizzo                                  |
| 05/12/2014 | Dean Sullender and Suzanne Knight               |
| 05/12/2014 | Frank McGillin                                  |
| 05/12/2014 | Bill Smith                                      |
| 05/12/2014 | Ray and Julie Fryer                             |
| 05/12/2014 | Donald Galya                                    |
| 05/12/2014 | Ann Grace                                       |
| 05/12/2014 | Isabel Bailey                                   |
| 05/12/2014 | Thomas Hollocher                                |
| 05/12/2014 | Gary Webster                                    |
| 05/12/2014 | Nancy Kerr                                      |
| 05/12/2014 | Rosanne Pehowich                                |
| 05/12/2014 | Alan Mertz                                      |

05/12/2014 David Clarke  
05/12/2014 Thomas Bailey  
05/12/2014 David Hutcheson  
05/12/2014 Bobbi McCoy  
05/12/2014 Rick Conti  
05/12/2014 Joyce Carter  
05/12/2014 Ann Shubert  
05/12/2014 WalkBoston  
05/12/2014 Seteven Ledoux, Acton Town Manager  
05/12/2014 Town of Westford Planning, Zoning, Conservation and Building Departments  
05/13/2014 Massachusetts Department of Environmental Resources – Northeast Regional  
Office (NERO)  
05/13/2014 Northern Middlesex Council of Governments  
05/13/2014 Friends of the Bruce Freeman Rail Trail  
05/13/2014 Fred Rust  
05/13/2014 Tim Fohl  
05/13/2014 Matthew Garrigue and Mary Alice McCann  
05/13/2014 Rick Fallon  
05/14/2014 Robert White  
05/14/2014 Clyde Newton

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