Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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ACTON CONSERVATION COMMISSION

May 13, 2014

Richard K. Sullivan Jr., Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

Attn: MEPA Unit

RE: Westford, Carlisle, Acton
Bruce Freeman Rail Trail-
Phase 2A
EEA # 15196 (previously
EEA#12109)

Dear Secretary Sullivan:

The Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Environmental Notification Form (ENF) submitted by the Massachusetts Department of Transportation (MassDOT) to construct a multi-use trail link that is 4.88 miles long and 10 - 12 feet wide with one to two-foot graded shoulders (EEA# 15196). The trail link, which is Phase 2A of a six phase, multi-use trail project will cover about 50.44 acres. It will extend from the end of the Phase I trail, (at the intersection of Route 225 and 27 in Westford), for a distance of 700 feet in Westford and then through the town of Carlisle to the Acton line. The trail proceeds in a southerly direction through Acton for 4.5 miles to a point south of Wetherbee Street. This off-road trail would be sited within the existing right-of-way (ROW) of the former New Haven Railroad Framingham and Lowell line. The trail would cross about nine roadways, the Nashoba Brook five times, and Butter Brook two times. In addition to a steel truss bridge that will be installed to carry the path over Route 2A, six steel deck plate girder bridges and several stone box culverts will be rehabilitated, and timber rail fences will be installed in some areas. Benches and landscaping are proposed at various locations, and a parking lot is planned with a connecting path to the trail, near the Carlisle/Acton town line, in Acton. A six-foot wide stone dust trail alongside the paved path also is proposed where the terrain is suitable.

When all phases are completed, the multi-use trail will cross portions of the city of Lowell, and towns of Chelmsford, Westford, Carlisle, Acton, Concord, Sudbury, and Framingham.

**Wetlands**

It is estimated in the ENF that the project would alter 69 linear feet of inland bank, 4,069 sf of bordering vegetated wetlands (BVW), 383 sf of land under water, 260,090 sf of bordering land subject to flooding (BLSF) and 425,000 sf of Riverfront Area (RA). Unless access is provided entirely from upland areas, there may be additional wetlands alteration. If the total temporary and permanent impacts to BVW, and potentially land under water are greater than 5,000 sf, a 401 Water Quality Certification will be required. Similarly, if there are any BVW impacts within the Outstanding Resource Waters (ORW), then a 401 Water Quality Certificate will be required.

Wetlands impacts are limited to buffer zone areas in Carlisle and Westford. All other impacts are in the town of Acton. At the time of the MEPA ENF review, the proponent had submitted Notices of Intent to the conservation commissions in Carlisle (DEP File #125-0958), Acton (DEP File #085-1149), and Westford (DEP File #334-1588).

The Natural Heritage and Endangered Species Program (NHESP) has identified three priority habitat areas within the limits of the project. It is reported in the ENF that the MassDOT has been working with the NHESP, and has redesigned the trail and added signage and measures to avoid a potential "take" of priority habitat for rare and endangered species.

Bridges and Culverts

Although the ENF indicates that HEC-RAS hydraulic modeling was done to show the six proposed bridges would not encroach within the floodway of the affected streams to cause a rise in the base flood elevation, the ENF has no supporting information.

**Stormwater**

According to the ENF, the trail project would add about 7.28 acres of imperviousness. Although the rail bed is compacted, the plan to pave the trail with asphalt would render the area impervious. MassDEP requests that the amount of imperviousness be minimized to the extent feasible. It may be possible to use porous paving materials on at least in some portions of the trail, which still would allow for the inline skaters, bicyclists and improve ADA-accessibility.

The ENF indicates that ten foot wide filter strips are proposed in six locations along the trail. As proposed, runoff from the trail would flow over a one foot wide, six inch deep, crushed stone level spread at the edge of the pavement and onto a nine foot wide grass strip. Shallow swales and three leaching catchbasins (Wetherbee Street) also are proposed. Consistent with the *Stormwater Management Handbooks,* Volume 2, Chapter 2, page 17, vegetated filter strips must be at least 25 feet wide to be given total suspended solids removal credit and they are considered effective in drainage areas of up to an acre where slopes are less than six percent.

Although not explained in the ENF, this project would be required to meet the Stormwater Management Standards to the maximum extent practicable, pursuant to 310 CMR 10.05(6)(m) 6. Given the limited information in the ENF, it was not possible to evaluate the stormwater management for compliance with the stormwater management regulations applicable in 310 CMR 10.05(6)(o)(2).

Paved trails could exacerbate existing erosion and sedimentation problems, which should be addressed with erosion controls. By replacing the sections of riprap bank with modified embankment stabilization methods, it may be possible to avoid the problems associated with bank hardening such as an increase in stream velocities over time, which will place increased stress along downstream reaches. The US Army Corps of Engineers reports in the *Effects of Riprap on Riverine and Riparian Ecosystems,* (2003) that while riprap is a cost-effective bank stabilization technique, armoring generally induces local scour and there are negative ecological impacts with the potential for severe damage to riparian and instream habitats. Careful planning is necessary to minimize the construction impacts and to add features that will protect habitat value. In addition, a commitment should be made to stabilize steep slopes (3:1 and steeper) within a specified timeframe, and as soon as possible after the construction work is completed.

**Recycling**

The project includes demolition and reconstruction, which will generate construction and demolition (C&D) waste. The ENF has not made a commitment to recycling steel rails and properly disposing creosote impregnated railroad ties. In addition, the proponent is advised that demolition activities must comply with both Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. Chapter 40, Section 54, which provides:

> "Every city or town shall require, as a condition of issuing a building permit or license for the demolition, renovation, rehabilitation or other alteration of a building or structure, that the debris resulting from such demolition, renovation, rehabilitation or alteration be disposed of in a properly licensed solid waste disposal facility, as defined by Section one hundred and fifty A of Chapter one hundred and eleven. Any such permit or license shall indicate the location of the facility at which the debris is to be disposed. If for any reason, the debris will not be disposed as indicated, the permittee or licensee shall notify the issuing authority as to the location where the debris will be disposed. The issuing authority shall amend the permit or license to so indicate."

For the purposes of implementing the requirements of M.G.L. Chapter 40, Section 54, MassDEP considers an asphalt, brick, and concrete (ABC) rubble processing or recycling facility, (pursuant to the provisions of Section (3) under 310 CMR 16.05, the Site Assignment regulations for solid waste management facilities), to be conditionally exempt from the site assignment requirements, if the ABC rubble at such facilities is separated from other solid waste materials at the point of generation. In accordance with 310 CMR 16.05(3), ABC can be crushed on-site with a 30-day notification to MassDEP. However, the asphalt is limited to weathered bituminous concrete, (no roofing asphalt), and the brick and concrete must be uncoated or not impregnated with materials such as roofing epoxy. If the brick and concrete are not clean, the material is defined as construction and demolition (C&D) waste and requires either a Beneficial Use Determination (BUD) or a Site Assignment and permit before it can be crushed.

Pursuant to the requirements of 310 CMR 7.02 of the Air Pollution Control regulations, if the ABC crushing activities are projected to result in the emission of one ton or more of particulate matter to the ambient air per year, and/or if the crushing equipment employs a diesel oil fired engine with an energy input capacity of three million or more British thermal units per

hour for either mechanical or electrical power which will remain on-site for twelve or more months, then a plan application must be submitted to MassDEP for written approval prior to installation and operation of the crushing equipment.

The demolition activity also must conform to current Massachusetts Air Pollution Control regulations governing nuisance conditions at 310 CMR 7.01, 7.09 and 7.10. As such, the proponent should propose measures to alleviate dust, noise, and odor nuisance conditions, which may occur during the demolition. Again, MassDEP must be notified in writing, at least 10 days in advance of removing any asbestos, and at least 10 days prior to any demolition work. The removal of asbestos from the buildings must adhere to the special safeguards defined in the Air Pollution Control regulations, (310 CMR 7.15 (2)).

**Massachusetts Contingency Plan/M.G.L. c.21E**

Contaminated Soil and Groundwater: Although the ENF reports that there are no contamination sites regulated under the MCP/21E within the project limits, the proponent is reminded that excavating, removing and/or disposing of contaminated soil, pumping of contaminated groundwater, or working in contaminated media must be done under the provisions of MGL c.21E (and, potentially, c.21C) and OSHA. If permits and approvals under these provisions are not obtained beforehand, considerable delays in the project can occur. The project proponent cannot manage contaminated media without prior submittal of appropriate plans to MassDEP, which describe the proposed contaminated soil and groundwater handling and disposal approach, and health and safety precautions. If contamination at the site is known or suspected, the appropriate tests should be conducted well in advance of the start of construction and professional environmental consulting services should be readily available to provide technical guidance to facilitate any necessary permits. If dewatering activities are to occur at a site with contaminated groundwater, or in proximity to contaminated groundwater where dewatering can draw in the contamination, a plan must be in place to properly manage the groundwater and ensure site conditions are not exacerbated by these activities. Dust and/or vapor monitoring and controls are often necessary for large-scale projects in contaminated areas. The need to conduct real-time air monitoring for contaminated dust and to implement dust suppression must be determined prior to excavation of soils, especially those contaminated with compounds such as metals and PCBs. An evaluation of contaminant concentrations in soil should be completed to determine the concentration of contaminated dust that could pose a risk to health of on-site workers and nearby human receptors. If this dust concentration, or action level, is reached during excavation, dust suppression should be implemented as needed, or earthwork should be halted.

The MassDEP Northeast Regional Office appreciates the opportunity to comment on this proposed project. Please contact Heidi.Davis@state.ma.us, at (978) 694-5255 or for further information on the wetlands issues. If you have any general questions regarding these comments, please contact Nancy.Baker@state.ma.us , MEPA Review Coordinator at (978) 694-3338.

Sincerely,

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Heidi Davis, MassDEP-NERO
Stella Tamul, Martin Jablonski, Marianne DiPinto, MassDEP-CERO
Town of Westford, Carlisle, and Acton conservation commissions