

MAX-2010031.00

October 25, 2012

Mr. Thomas F. Broderick, P.E.
Chief Engineer
Massachusetts Department of Transportation – Highway Division
Ten Park Plaza
Boston, MA 02116-3973

Attention: Ms. Marie Rose, P.E. – Director of Project Management

Subject: Bruce Freeman Rail Trail Phase 2A
Project File Number 604532
Project Manager – David Shedd, P.E.

Dear Mr. Broderick:

On behalf of the Towns of Acton, Carlisle and Westford, Greenman-Pedersen, Inc. (GPI) respectfully submits for your review and comment the 75% Highway Design Package for Phase 2A of the Bruce Freeman Rail Trail (BFRT). GPI has completed the enclosed work associated with the 75% Highway Submittal in accordance with the Project Development Design Guide, the appropriate Engineering Directives and the most recent Massachusetts Department of Transportation (MassDOT) Guidelines. Attached for your review and comment are the following documents:

- Four (4) full size sets of Plans with Cross Sections
- Five (5) full size sets of Plans without Cross Sections
- One (1) color set of construction plans marked for DUCE review (The DUCE will also receive one full set of plans with cross sections)
- One (1) half size set of Plans with Cross Sections (FHWA)
- One (1) copy of Special Provisions (FHWA)
- One (1) copy of the Construction Cost Estimate and Calculation Book (FHWA)
- Two (2) copies of the Horizontal Alignment Report
- Three (3) full size sets of Preliminary Right-of-Way Plans
- One (1) half size set of Preliminary Right-of-Way Plans
- Twenty-five (25) CDs with electronic files of the Plans for Utility Coordination
- One (1) CD with electronic files of the Plans and submission documents

It should be noted that a number of elements that would normally be included in a MassDOT 75% Submission have either been left out entirely or have been included but further information will be needed. The following sections provide a description of these elements along with an explanation of why they were not included or, if they were included, how a cost was developed.

The Environmental Notification Form (ENF) and Notice of Intent (NOI), although required, are not being submitted at this time. The Bridge Type Selection Worksheets were submitted to Mr. Thomas Donald of the MassDOT Bridge Project Development Section on July 6, 2012 and are still under review by MassDOT. In order to accurately quantify environmental impacts at the bridges, Sketch Plan approval is required. The ENF and NOI documents will be submitted as soon as Bridge Sketch Plans are approved.

Wetland replication and compensatory flood storage locations are also not shown on the project plans. The locations will be coordinated with the Acton Conservation Commission during preparation of the Notice of Intent application.

During this process, GPI will also coordinate with the Towns of Acton, Carlisle and Westford regarding the proposed drainage design with regard to known problem/wet areas within the rail right-of-way. Comments received on the 25% design submission indicated repairing some of the existing culvert headwalls and the submission has incorporated this request. However, additional investigation of the existing culverts will be required to determine the extent of the repair requirements and whether or not replacement is a better alternative.

During preparation of the 25% Design Submission for this project, correspondence from the Natural Heritage and Endangered Species Program (NHESP) indicated that the project fell within Priority Habitat 29 and Estimated Habitat 771 and that both the wood turtle and climbing fern which are state-listed rare species had been found in the vicinity of the site. NHESP also indicated that fisheries resources in the vicinity of the proposed project include Nashoba Brook and Butter Brook. The plans currently show three (3) proposed wildlife crossings in the vicinity of the Route 2A/119 crossing. The cost of these crossings has been incorporated into the cost of the Route 2A/119 bridge crossing and MSE walls. These crossings will be coordinated with NHESP and MassDOT Environmental Resources in addition to any other requirements. It is GPI's understanding that during review of this submission, the MassDOT Environmental Services Unit will coordinate with NHESP regarding the project.

The Concord Water Department has a pump station at the Route 2A/119 crossing. The project will impact their 6" PVC Storm Drain which is approximately 2.5 feet deep and their 16" Cast Iron watermain which is approximately 2 feet deep. The 16" main is a suction main from Nagog Pond to the treatment facility, and is approximately 6,136 feet in length and over 100 years old. The plans show that relocation of the pipes is necessary but further coordination will be required. Since the District Utility and Constructability Engineer (DUCE) meeting will be scheduled in the near future it would be our hope that the relocation of these utilities and the extent of the work could be addressed at that time. A cost for this item has been included in the submission but will be re-evaluated as additional details become available.

As stated earlier, a project DUCE meeting has not yet been held for this project. A contingency amount has been included for utility relocation and will be modified as additional details become available.

MassDOT Environmental Services Assessment and Remediation Unit is working with one of their consultants to do some research into the battery wells and a poisonous gas compartment tank located within the project limits. Items and costs are being carried in the contract for their removal at this time

but additional coordination with MassDOT will be needed to determine the extent of the work that will be required and the cost to complete this work.

A contingency quantity has also been included in the project estimate for screening/amenities/landscaping. Over the next few months, the Friends of the Bruce Freeman Rail Trail in conjunction with the Town of Acton and GPI are going to meet with project abutters to discuss access and screening. In addition, the project wide landscaping and amenities will be discussed in coordination with Phase 1 and Phase 2C to develop the appropriate details.

The Town of Acton with a consultant is in the process of designing drainage improvements in the vicinity of the Dunk & Bubble property at Route 27. The design should be completed in the spring of 2013. The drainage design for the BFRT will be coordinated with the town's proposed improvements.

The project will require the resetting of the electric fence at Rex Lumber. GPI is coordinating with Craig Forester of Rex Lumber and the Town of Acton regarding the resetting of this fence and additional information will be included in the next submission. A cost for this item has been included in the submission but will need to be re-evaluated as additional details become available.

The Town of Acton is currently developing plans for the East Acton Village Green which abuts the BFRT at Concord Road. A bump out has been included in this submission for connection to the proposed East Acton Village Green Project. Coordination with the Town of Acton will continue regarding this project.

Finally, GPI has included a design contingency of 15%. It is our intent that this contingency should cover the cost of any additional drainage, landscaping, amenities or miscellaneous project requirements as discussed in the preceding paragraphs.

GPI continues to look forward to receipt of MassDOT's Review Comments as well as comments from the Towns of Acton, Carlisle and Westford, FHWA and any other affected parties in order to move forward with the future design submissions.

Please do not hesitate to contact me directly at (978) 570-2980 if you have any questions or require additional information.

Sincerely,

Rebecca S. Williamson, P.E.
Senior Engineer / Project Manager

Enclosures

- c. Roland Bartl, Planning Director – Town of Acton w/two(2) full size sets of plans
- George Mansfield, Planning Administrator – Town of Carlisle w/two (2) full size sets of plans
- Paul Starratt, Westford Town Engineer w/two (2) full size sets of plans