

TO: David Anderson, P.E., Director of Project Management

ATTN: Michael Papadopoulos, Project Manager

FROM: Thomas J. Waruzila, District 3 Highway Director

DATE: February 22, 2007

SUBJECT: Maynard Estimate: \$893,744.00
Assabet River Rail Trail (partial 25% Submission) (with 25% contingencies)
File No: 604531 (Not PRC Approved)
25% Review
Designed by Earth Tech, Inc
Contact: Brian Dunn, (978) 371-4372

The District has reviewed the partial 25% Submission for the above-mentioned project. Comments are noted in red on the plans and as follows:

1. The project should not be advanced beyond the 25% submission stage until PRC approval has been received.

Response: PRC approval received.

2. Is the proposed 100' span bridge absolutely necessary when Great Road could be crossed at Winter Street?

Response: Bridge eliminated and plans revised.

3. The parking lot at Station 21+50 is near a hazardous material release site. Are there any environmental concerns? Also, the parking lot only accommodates 4 to 5 cars. This does not seem adequate. Can more parking spaces be provided?

Response: This site is old and been tracked, cleaned, and controlled. The Town of Maynard believes it is contained and will not affect the project area. This is one of many parking areas provided along the trail. Additional spaces are not possible at this time as there is an abutting active DPW facility.

4. No excavation will be allowed in the railroad bed except for the removal of the existing tracks and ties and the careful removal of the organic ground cover.

Response: That is the intent of the current design.

5. Stations 29+00 to 31 +50 have profile slopes that exceed 5%, which is undesirable as per Section 11.4.8. of the Project Development and Design Guide. If the grades cannot be reduced to 5%, these areas must be designed as ramps that comply with 521 CMR 24.00: Ramps.

Response: Profile adjusted to keep it below 4.50% where possible. There are a few areas where the path is adjacent to existing roadways that are steeper than 5%. The path will have the same profile as the adjacent roadway.

6. There should be a 3' - 0" minimum clearance between the edge of the trail and an obstruction. The "White Edge Line at Trailside Object" detail should show 5'-0" to the SWEL, 1' - 0" to the edge of the paved surface, and 2'-0" minimum to the obstruction.

Response: Detail changed to reflect this information.

7. Identify and number any/all wheelchair ramps within the limits of the proposed sidewalk. All ramps and driveways must be individually designed to comply with AAB/ ADA rules, regulations and standards. Refer to Engineering Directives E-97 -008 & E-04-007. The wheelchair ramp schedule and Special Provisions should include a notation that detectable warning panels are required on all the proposed wheelchair ramps and are to be installed in accordance with Construction Standard M/E 107.6.5R (December 2004).

Response: Will be detailed and designed at 75% Design.

8. The limit of grading extends beyond the proposed easement from Station 50+50 to 52+50.

Response: Easement is - existing not proposed.

9. Proposed takings and easements should be shown on the construction plans. Right of Way Plans must be provided. Refer to Section 18.5 - "Right of Way Plans" of the Project Development and Design Guide.

Response: Added to plans. Right of Way plans included in this submittal.

10. The locations of the proposed infiltration trench should be shown on the plans. Does the infiltration trench include a perforated pipe? Where does it discharge? Refer to Section 18.2.2.2 - "Construction Plans" of the Design Guide.

Response: Infiltration trenches removed from trail.

11. Drainage ditches should also be shown on the plans, as well as the location of the proposed 4-foot metal pipe rail fence and guardrails.

Response: Drainage ditch shown in critical sections. Pipe rail fence and guardrails detailed at 75% Design.

12. What is/are the proposed shoulder treatment(s)? The estimate calls for crushed stone while the typical sections show gravel.

Response: Shoulders are now loam and seed. Plans and Estimate match.

13. Show the locations of the erosion and sediment control on the plans.

Response: Detailed at 75% Design.

14. Square off the access point on Winter Street. Include a traffic management plan for work adjacent to roads. Refer to Engineering Directive E-06-002 - "Standard Drawings and Details for the Development of Traffic Management Plans".

Response: Area has been revised – no longer applicable.

15. Horizontal curve data should include the Delta angle and the Tangent length.

Response: Detailed at 75% Design.

16. Use Standard Nomenclature for all items on the drawings and in the estimate. The 25% design cost estimate should have included a preliminary estimate of quantities and recent bid prices to readily indicate that the estimate is reasonable.

Response: Agreed – done in this submittal.

SURVEY INFORMATION

1. Sufficient survey information must be included in the plans so that the construction centerline can be physically established in the field. This is as directed in the 2006 MassHighway Project Development and Design Guide on page 18-24 under "Center Line".

Response: Added at 75% Design.

2. The 100% plans must show the traverse points, list the coordinates for the traverse points, and show the ties to the traverse points. Coordinates must be listed for all the limits of work, centerline intersection points, PC's, PT's, PCC's, and angle points.

Response: Will be done at 100%.

3. A plan showing the traverse with bearings and distances and giving angles (or bearings) and distances to all the limits of work, centerline intersection points, PC's, PT's, PCC's, and angle points is also acceptable. Ties to the traverse points must be included.

Response: Will be developed at 75% Design.

4. Benchmarks must be shown on the profiles as directed on page 18-11 of the 2006 Project Development and Design Guide.

Response: Added at 75% Design.

5. The latest available information on the location, suitability, and known condition of Massachusetts Geodetic Survey (MGS) and National Geodetic Survey (NGS) control is available at the MHD Survey Office at 10 Park Plaza, Boston. That office should be consulted before survey work requiring geodetic control is undertaken.

Response: Noted.

If you have any questions or require additional information, please call Tapsi Bhatt, Project Reviewer, at (508) 929-3887 or Mickey Splaine at (508)-929-3808. For traffic related questions, please call Mark Johnson, P.E., Acting District Traffic Engineer, at (508) 929-3831.

TO: Michael Papadopoulos - Project Manager
FROM: David Phaneuf - Highway Design Section
DATE: December 1, 2006
SUBJECT: **Maynard** - Assabet River Trail - Segments MD I & II
EWO No. P604-531-P11 (1)
Project File # 604531
AAB/ ADA Accessibility Review

The following review is based on the 25% submission plans of October 2006. These plans have been marked and contain comments which have been highlighted on the title sheet. These review plans **must** be returned with the next submission.

PROJECT COMMENTS:

The typical sections of the path (Sheet 3) must indicate the construction tolerance for the cross slope (1.5 % \pm 0.5%).

Response: Added to typical sections.

A section of the path profile (Sheet 7) shows grades exceeding 4.5%. Since it is designated for pedestrians use, finished construction must comply with AAB and ADA requirement of a "running slope not to exceed 5%". Therefore, the maximum design running slope should be 4.5 % with a \pm 0.5% variance for construction.

Response: Profile adjusted to keep it below 4.50% where possible. There are a few areas where the path is adjacent to existing roadways that are steeper than 5%. The path will have the same profile as the adjacent roadway.

Detectable warnings panels on the path, in advance of street crossings will be required. In addition, the consultant should provide details to show how the sidewalks, trail and street being constructed for accessibility.

Response: Detailed at 75% Design.

Visually impaired pedestrians may confront difficulties entering the trail with vehicles (bicycles) running at speeds. The detectable warning serves notice a visually impaired person is in the trail and needs to turn to follow the trail.

Response: Detailed at 75% Design.

For the High Street/Sudbury Street intersection (Sheet 8), the designer must address the Program Accessibility Requirements for the project. This requires any all reconstructed sidewalks within the project and all curb cut wheel chair ramps within a reasonable distance of the project to meet

AAB requirements for accessibility. The "within a reasonable distance" requirement is to prevent arbitrary projects limits set with the intent of avoiding AAB required work. Pedestrian accessibility at this intersection is required.

Response: Detailed at 75% Design.

If existing wheelchair ramps are to remain in the project area, the designer is responsible to verify they conform to current AAB regulations. Please provide a statement that this field verification has been performed and locate those existing wheel chair ramps that are to remain on the construction drawings.

Response: All wheelchair ramps along the trail alignment of the path are new.

The 75% submission should include schedules for wheel chair ramp curb cuts, which are cross-referenced with the plans. The schedules should include the referenced roadway baseline, station and offset to the center of the opening at the gutter line, gutter profile slope, opening width at the gutter, left transition length, right transition length, depth from the gutter to the back of the sidewalk, and depth of level landing or width of path of travel across driveways.

Response: Agree.

OVERALL COMMENTS:

We are attaching a copy of a more complete detail table for driveways and wheelchair ramps from an in-house project. The table can be modified slightly but should form the basis of tabular information used to layout and construct driveways and wheel chair ramps.

The wheelchair ramp schedule plan should include a notation, on the sketches, that detectable warning panels are required on **all** the proposed wheelchair ramps and are to be installed in accordance with Construction Standard M/E 107.6.5R (December 2004)