

To: Greg Frazier  
Project Manager  
MassDOT Highway Division  
10 Park Plaza, Suite 6340  
Boston, MA 02116

Date: March 12, 2020

Project #: 09393.01 (MassDOT Proj File No.  
607738)

From: Joshua Trearchis, PE

Re: Minuteman Bikeway Extension Public Hearing Comments

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VHB has reviewed the comments provided by residents and stakeholders, and as requested, has provided the following responses to the comments:

1. *Name: Pamela J. Brown  
Organization: Brown & Brown, PC  
Address: 12 Sorens Way*

*Your presentation 2/6/20 mentioned wide driveways at Railroad Ave, but your noted 'constraints' fails to even mention conflicts of large international trucks/ school buses entering and exiting onto Railroad Ave. Yet, you propose a separated bike/ driveway at the DPW facility at Hartwell Road that gets only a handful of vehicles per day. This separation appears unnecessary and costly as does a culvert under Concord Road. Even with kids, I've never had trouble crossing Concord. Unfortunately, we've moved beyond keeping our peaceful dirt trail that so many Bedfordites love. Those of us who like the trail the way it is will have to live with the wider paved surface that is less attractive for pedestrians, strollers, X-C skiing. We need to make sure that in all potential conflict locations both vehicles and trail users are cautioned of the conflict – caution/ stop signs, rumble strips, caution lights/ beacons. Prior discussions with the property owners/ business owners on Railroad have included significant concerns for safety in this area and few accommodations appear to be made.*

**Response:**

**Conflicts on Railroad Ave:**

The design team is aware of the potential conflicts and safety concerns posed by the presence of large commercial vehicles on Railroad Avenue. Because of the heavy truck volume on Railroad Avenue as well as the desire for continuity throughout the Minuteman Bikeway system, the design team chose to provide a separated shared use path along Railroad Avenue instead of on-road bike lanes. This separated facility provides a physical separation between the shared use path users and vehicular traffic. It reduces the number of conflict locations down to driveway and side street crossing locations rather than the entire length of Railroad Avenue. In order to address the conflict point at the crossing of Commercial Avenue, the design team has proposed advanced warning signage, a high visibility reflective crosswalk, a new vehicular stop sign on Commercial Avenue, bike stop signs on either side of the crossing, revised shared use path centerline



striping to draw attention to the crossing, and 'Bike Xing' advance pavement markings on Commercial Avenue. In order to address the conflict point at the Taylor & Lloyd access driveway on Railroad Avenue, the design team has proposed a high visibility reflective crosswalk, warning signs at the driveway entrance, 'Xing Ahead' pavement markings on the shared use path before the driveway crossing, and revised shared use path centerline striping to draw attention to the crossing. To address the conflict points at residential driveways, the design team has proposed revised shared use path centerline striping to draw attention to crossings. Based on engineering judgement, the designer has deemed the use of rumble strips and flashing beacons in these locations would not be appropriate. Rumble strips are not advised in shared use path applications because they could cause cyclists to lose control of their bicycles, and could also result in a noncompliant ADA surface. Per federal standards, flashing beacons should not be used in conjunction with Stop signs, and are only intended for use at roadway crossings, not residential or commercial driveway crossings.

**Water Department Access Drive:**

A separate facility is being proposed at the water department access drive because the intent of the project is to provide a continuous dedicated facility where vehicles are prohibited (except for the occasional sanctioned emergency or maintenance vehicle). The inclusion of this length of the path will not add any additional cost to the Town, as MassDOT will be paying for construction.

**Concord Road Culvert Crossing:**

Based on the findings of an alternatives comparison conducted by VHB, stakeholder input, and input from MassDOT, the Town selected the grade separated crossing (culvert) as the preferred alternative in 2017. The decision was also based on safety, the regional significance of the path, and the number of anticipated users calculated using a formula considering population density in the vicinity of the path. MassDOT will be paying for construction.

2. *Name: Bill Robichaud*

*Organization: Concord Trails Committee (Trail Steward for Reformatory Branch Trail)*

*Address: 25 Nancy Road, Concord, MA 01742*

*This is a request to maintain, as much as possible, the use of the trail during the construction phase. I and many others use this trail to connect from Concord to Bedford and beyond. Just as it is necessary to keep the roads open, it is also important to keep the connections open during this phase. For example:*

- Allow use of sections of the trail when they are not under active construction.*
- Allow use of sections of the trail that have been paved but not completely landscaped*
- Provide 'walk-arounds' to active construction areas*
- Provide detours to alternative trails and roadways while sections are under construction.  
Provide maps and signage to these detours.*

*Thanks*



*P.S. Thank you for the informative presentation on Feb 4*

**Response:** The design team, in conjunction with the Town can provide suggested staging operations, but is unable to dictate means and methods of construction to the contractor. The entire path will likely need to be shut down during construction. It is estimated that the construction duration may be approximately 2 years. The entire project site will be considered active and allowing pedestrians to enter it can create a liability issue. Signage will be provided for bike and pedestrian detours, and detour maps will be available on the Town website.

3. *Name: Karl Schwartz*  
*Address: 423 Concord Road*

*Greg: As you requested at initial 25% preliminary public hearing I have enclosed a list of questions/ actions for review:*

*Reformatory Recreational Trail*

- a) Updated plans showing current elevations of trail and Concord Road at the crossing.*
- b) Updated Plans showing the elevations of trail and Concord Road at the crossing as currently proposed.*
- c) Trail usage study for western end of the trail as it pertains to Concord Road crossing.*
- d) Concord Road traffic impact study.*
- e) Why can't height of tunnel be reduced to 8'? – Your garage is 7 ½ ft. and people routinely ride there bike in and out of their garage.*
- f) Present the at grade crossing plan at Concord road.*
- g) Update tunnel plans with trail elevation reduced facilitating no change to Concord Road elevation at crossing.*
- h) Updated plans replacing all steel guard rail with re-enforced field stone walls.*

*I look forward to working with all concerned members of the community in finding a reasonable engineering solution to the potential upgrade of the Reformatory branch trail crossing of Concord Road.*

**Response:**

- a) Please refer to the profile sheets included in the 25% submission that have been posted on the Town website. They provide both existing and proposed elevations of the trail and Concord Road at the crossing location.
- b) See response to a.



- c) Refer to information provided in the Project Initiation Form as well as the supporting calculations that have been posted on the Town website.
- d) Refer to the Functional Design Report included in the 25% submission that has been posted on the Town website.
- e) A culvert height of 10 feet has been proposed in order to allow for the passage of maintenance and emergency vehicles.
- f) The at-grade crossing plan was included in a previous public presentation from February, 2017, which is available on the Town website.
- g) The shared use path profile at the Concord Road crossing location was carefully designed in order to minimize impacts to existing wetlands to the west of the Concord Road crossing while maintaining positive drainage throughout the culvert. Lowering the path profile at the crossing location would result in a low point within the culvert structure, which would require the use of a pump system to discharge to the nearest outlet. This would be costly and would require frequent maintenance.
- h) The design team will review allowable barrier types and compare the associated costs. Steel guardrail with crashworthy ends would still be required to be placed on either side of the barrier.

4. *Name: Debbie Caban*  
*Title: Citizen/ Volunteer*  
*Organization: Charles River/ Ashland Bike Clubs*  
*Address: 4 Gleason Road*

*Whenever possible, it seems safer to construct a pedestrian/ runner section of softer surface materials outside the paved pathway. The Acton section of the Bruce Freeman Trail is a great example of a wide, safe multi-use trail. The two surfaces encourage runners/ walkers/ dog walkers and bicyclists to use separate appropriate sections of the pathway. This reduces the amount of accidents.*

**Response:** In many locations widening the path to accommodate an unpaved section for pedestrians and runners would require significant impacts to wetlands. Where feasible, unpaved level shoulders will be provided adjacent to the path.



5. *Name: Edward Lloyd  
Title: President  
Organization: Taylor and Lloyd  
Address: 8 Railroad Ave*

*We want to go on record regarding a bikepath on Railroad Ave. There are businesses such as commercial truck dealer, school bus company, electrical line construction company and a large landscaping company with a total estimated 100 plus medium and heavy-duty trucks. These companies use Railroad Ave to access their home base. In addition, this road is an active commuter route cut through to avoid Bedford Center. Therefore, this is not a well thought out plan.*

*It is common sense that small children on bicycles will not be seen by large commercial vehicles. Not to mention, adults on bicycles with ear pods that limit their hearing is a recipe for accidents to happen.*

*It is our belief that nowhere else on the Minuteman Bikeway does it run down a street in front of commercial businesses with the number of medium and heavy-duty trucks as Railroad Ave.*

*There is town owned land behind all these businesses where this bike path could be put with a boardwalk design, similar to the one already being built over a swamp in Bedford, MA. We ask why this was not proposed or investigated when abutters complained about this extension project? Numerous times abutters spoke of using the trails next to Elm Brook (behind the businesses and residents) to get to the extension. This would result in a safer and more scenic route and the excuse of wetlands is no longer valid.*

*When someone gets injured or killed on Railroad Ave, news crews will come from local, national and world news stations. We will be the first ones to interject our opinion on this extension. This is an unreasonable and poorly planned project that was rushed to completion without regards of the objectives and concerns of businesses and residents that have used this road for over 50+ years. As a result, putting lives at risk.*

**Response:**

Based on input from community members and stakeholders, during the initial design development phase between the years of 2011 and 2013 the design team was directed to investigate a potential alternative alignment along Elm Brook to connect the path from where it terminates today at Depot Park to the off-road section that begins at the existing gravel parking lot off of Railroad Avenue. Information regarding these alternatives have been posted on the Town website. Members of the Town Conservation Commission as well as the Board of Selectmen were not in favor of pursuing the alternative alignment due to several factors including right of way, environmental, and land-use constraints. The minutes from these meetings are a matter of public record. The design team is aware of the potential conflicts and safety concerns posed by the presence of large commercial vehicles on Railroad Avenue. Because of the heavy truck volume on Railroad Avenue, as well as because of the desire to maintain continuity throughout the Minuteman Bikeway system, the design team chose to provide a separated facility along Railroad Avenue instead of proposing on-road bike lanes. This separated facility provides a physical separation between the shared use path users and vehicular traffic in the road. It reduces the number of conflict locations from the entire length of Railroad Avenue down to specific driveway and side street crossing locations. In order to address the conflict point at



the crossing of Commercial Avenue, the design team has proposed advanced warning signage, a high visibility reflective crosswalk, a new vehicular stop sign on Commercial Avenue, bike stop signs on either side of the crossing, revised shared use path centerline striping to draw attention to the crossing, and 'Bike Xing' advance pavement markings on Commercial Avenue. In order to address the conflict point at the Taylor & Lloyd access driveway on Railroad Avenue, the design team has proposed a high visibility reflective crosswalk, warning signs at the driveway entrance, 'Xing Ahead' pavement markings on the shared use path before the driveway crossing, and revised shared use path centerline striping to draw attention to the crossing. To address the conflict points at residential driveways, the design team has proposed revised shared use path centerline striping to draw attention to crossings.

6. *Name: Craig Jackson*

*Title: Member*

*Organization: Bedford Bicycle Advisory Committee*

*Address: 5 Richard Road*

- a. I support the extension of the Minuteman Bikeway as proposed.*
- b. I respect the needs of runners for a running surface with more give than asphalt concrete, and I would even support narrowing the paved surface slightly to provide more area for gravel shoulders.*
- c. Audible pavement such as brick paving and detectable warning panels can reduce safety for users of small-wheeled devices such as inline skates. Also detectable warning panels need to be placed ahead of an intersection to allow bicycles to stop. Note that rumble strips on the rest of the Minuteman have been being removed.*
- d. The signaling and signage at the South Road connection to the existing Minuteman Bikeway should be designed to increase the safety of bicyclists entering the road, as well as continuing on the Extension.*
- e. Railings should be at elbow height for bicyclists (42-54 inches).*

**Response:**

- a. Noted.
- b. Due to the high volume of users on the Minuteman bikeway, the proposed 12' paved path width will be maintained. In many locations widening the path to accommodate an unpaved section for pedestrians and runners would require significant impacts to wetlands. Where feasible, unpaved level shoulders will be provided adjacent to the path.
- c. The only materials proposed along the shared use path are hot mix asphalt and cement concrete. Detectable warning panels are required to be placed directly adjacent to the roadway at all locations where the path crosses live traffic, per state and federal standards. The panels are intended to alert visually impaired persons that they are about to enter a live traffic zone, which is why they are placed directly adjacent to the roadway.



- d. The signal and signage design at the intersection of South Road will be designed to maximize safety while complying with federal traffic control standards.
- e. All safety railing proposed along the shared use path will be a minimum of 42 inches high, to meet federal design standards.

7. *Name: Michael Tecci, PE*  
*Title: Senior Project Manager*  
*Organization: SGH*  
*Address: 480 Totten Pond Rd Waltham, MA 02453*

*I agree with the majority of the proposed project. My concern is over the size of the parking lot at the end of Lavender Ln. This cuts down a section of woods near conservation area. Right now the spaces there are barely used and the parking lots on Railroad Ave and Concord Road are typically empty. Was there a study done showing a need for this lot? Has the upkeep of the lot such as rubbish pickup been studied? At this point the new lot will likely provide easier access to high school students to spend time in the woods after dark.*

**Response:** The parking lot has been included at the direction of the Town; it is part of the Town's long-term plan to provide a recreational facility on the adjacent town owned property. The Town will be responsible for maintenance and security of the parking lot.

8. *Name: Terry Gleason*  
*Address: 10 Lido Lane*

*General comments:*

- *Thank you for the extra design that went into the Railroad Ave sidepath, and the Concord Rd underpass. With those two additions, the Minuteman Extension went from likely the most dangerous 2 mile stretch to now one of the safest.*
- *Please incorporate the Toole recommendations (Navigating the Minuteman Bikeway, 2014) for the MM Bikeway adopted by all three MM Towns. For example, center striping should be dashed for normal unimpeded segments but solid where passing would be dangerous (curved sections, underpass, approaching road crossings.)*

*Specific comments:*

- *Please collect and log any railroad artifacts found along the railtrail and work with the Friends of the Bedford Depot to preserve them.*
- *Preserve the 'cow pass' as an historic point of interest.*
- *Minimize the negative impact of the numerous manhole covers on the trail. They are dangerous when wet and difficult to keep level with the pavement. Given that manhole covers are recognized*



*as a hazard for bicyclists, please continue to look until final design, for proven innovations that could mitigate their impact to the trail.*

- *The road crossing to the small parking lot serving bike path users at Lavender Ln would be the **only** such MM parking lot that creates an extra hazard for MM users.*
- *With a small shift of the path thru that area, road traffic to the parking lot need not cross the path. The parking lot abutting Thorndike Park in Arlington is a good example where the bike path was curved around a lot to avoid conflict with parking lot car traffic. As the MM Lavender Ln diagram shows, the path could easily be shifted to where the existing (small) parking lot now is, so that the parking lot could be moved to the north side of the path. Creating a parking lot for MM users that unnecessarily causes conflicts seems counter-intuitive.*

**Response:**

General Comments:

- The design team will review the 'Navigating the Minuteman Bikeway' document with the Town, and will incorporate any recommendations deemed feasible as part of this project.

Specific Comments:

- Language will be added to the contract documents instructing the Contractor to retain and protect any rail artifacts found within the path right of way. The Town intends to work with the Friends of the Bedford Depot to preserve any relevant artifacts.
- The design team will work with the Massachusetts Historic Commission and the Bedford Historical Society to determine what the appropriate actions should be regarding the existing cow pass.
- All existing manhole covers within the limits of the path shall be adjusted and made flush with the final pavement surface.
- The design team will review the Lavender Lane parking lot layout to determine if there is any opportunity to re-orient the lot to minimize conflicts. Right of way, existing terrain, environmental impacts, and sight lines will be taken into consideration.



9. Name: John Stella

*I am a Bedford MA resident and I am writing you a letter I strongly oppose proposed Minuteman Bikeway Extension project in West Bedford Massachusetts near the Concord MA town line. Many people who live in West Bedford are against proposed Minuteman Bikeway Extension in West Bedford. They do not want the State or the Town to build bike path near the homes of West Bedford. They do not want Bikeway Extension from the former Bedford train station to West Bedford near Concord Town line. We already have Minuteman Bikeway that runs from (Alewife Station) Cambridge MA to Bedford MA where the bike path stops at the Former Bedford train station known as Bedford Depot Station. The people of West Bedford do not want proposed Minuteman Bikeway Extension to build bike path near the backyard of West Bedford homes. They want privacy. Thank you for your consideration.*

**Response:** This comment has been noted.

10. Name: Nathaniel K. Brown

Organization: Brown & Brown, P.C.

Address: 110 Great Road

*I attended your public meeting in Bedford, Massachusetts on February 6, 2020 regarding the above referenced project. Although there are numerous caution signs on Hartwell Road, there are no signs on the bikeway. I take this opportunity to reemphasize the need for stop signs on the Rail Trail at the intersection of Hartwell Road. A stop sign on the Bikeway is urgently needed as cyclists fail to stop and often ignore oncoming traffic. I also encourage you to have a warning or stop sign on the Turfmeadow Road crossing as this is an increasingly active crossing. I am available to discuss further.*

**Response:** The proposed design includes stop signs on the Rail Trail at the intersection of Hartwell Road. It also includes a flashing beacon on the roadway, as well as additional advanced signage. The design team will review the crossing at Turf Meadow Road to ensure the most appropriate treatments are proposed.



11. Name: Erin Duffy Post

- *Will trucks be entering and existing off of Winchester and Richard Rd?*
- *It is a very kid busy neighborhood and would be concerned about heavy traffic and young kids on bike, scooters and rollerblades who are just gaining independence and a bit of freedom to go to their friends houses unsupervised. There are at least 15 kids on Richard and Winchester alone. Plus, being so close to the Middle School, there are always kids running track, doing workouts and conditioning on our streets. Could they use another way into the path?*
- *Will they do work on weekends? Will they stop work at like 5 pm?*
- *Will it impact the river and the pipe under the path that connects Richard Rd to the path?*
- *I personally like the path unpaved. I do get other people's perspective also, but having kids on there with us many times.. It forces the bikers to slow down. It is also nicer to walk and jog on, in my opinion. Good luck with this project and hope to see you soon.*

**Response (previously submitted via email by the Town):**

- No – we can modify the special provisions to control access points for the contractor. There is no need for the contractor to access the path from Winchester Drive/ Richard Road.
- We will coordinate with the JGMS and BHS Track coaches to understand their usage of the path and try to accommodate those events as best as we can. As for casual users of the path during the work day, we expect to limit the contractor to closing sections of the path at a time. Police details will be on site to detour residents away from the work zones.
- They will not do work on weekends, we can modify the special provisions to limit work to Monday – Friday, 7am to 3:30 pm, which is typical for both Town and MassDOT projects.
- The project requires a filing with both the Town and State environmental agencies. The Order of Conditions will prohibit any impacts to the Mongo Brook or the other wetland resource areas along the project. Hay bales, straw wattles and other means to control erosion will be set and maintained for the duration of the project.