

January 20, 2011

Frank A. Tramontozzi, P.E., Chief Engineer
MassDOT, Highway Division
10 Park Plaza, Boston, MA 02116-3973

Subject: I-93/Route 110/Route 113 Methuen Rotary Project (Project File No. 605181)
Attn: Environmental Services

Dear Mr. Tramontozzi:

LivableStreets would like to take this opportunity to provide comments regarding the 25% Design for the I-93/Route110/Route113 Methuen Rotary as presented to the community on January 11, 2011. This letter is accompanied by a modified version of MassDOT's alternative that attempts to illustrate our main points.

LivableStreets believes that transportation is a key element to making our cities more attractive, convenient, healthy places to live. By designing streets that are truly multi-modal, we provide citizens with more choices about how to get around, reducing our need for travel by private automobile, and providing more opportunities to improve our health through active transportation such as walking and bicycling.

The Methuen Rotary project is one that has the potential to greatly transform the area in which it sits. We expect MassDOT to develop a truly multi-modal design that not only reduces automobile crashes but also greatly improves and encourages the corridor for walking and bicycling. It is our understanding that this interchange has a very high crash rate compared to others throughout the state, and we applaud MassDOT for developing improvements that will indeed improve automobile safety. **However, we feel quite strongly that this project misses the mark in terms of adding safety and missing connectivity for pedestrians and bicyclists. In addition, it is disappointing that homes must be taken primarily for the sake of additional automobile lanes.**

Because of the large number of travel lanes, particularly through the main section of the project, we feel that this project may in some ways actually create as much of a barrier between the communities on either side of I-93 as the current rotary does. At the ends of the project, Route 110 and Route 113 are both one lane in each direction. However, through the middle, at one point the roadway fans out to a maximum of 8 lanes. Because of the sheer size of the roadway, plus the fact that it is missing key pedestrian and bicycle connectivity as we will describe, we feel that the current design is quite the opposite of a livable or complete street.

We thank MassDOT for including sidewalks, crosswalks, and pedestrian signals on all of the roads within the project limits, however we feel there is a significant gap in connectivity. **We think it is absolutely essential that the roadway through the middle of the project should have a sidewalk on the south side in addition to the north side of the roadway**, particularly because there will be sidewalks on the south side at either end of the project. With the current design, a pedestrian on the north side of Route 113 at Branch St wishing to continue eastbound across the interchange already has to cross 9 lanes of traffic. A pedestrian on the south side of Route 113 at Branch St wishing to continue eastbound across the interchange would have to cross a total of **22 lanes**. This is completely unacceptable.

We are glad that MassDOT attempted to accommodate bicyclists throughout the project. However particularly because of the heavy volumes of traffic and merging and weaving movements due to the on and off ramps to I-93, we feel that it is essential that bike lanes be provided on both Route 110 and Route 113. We have two key concerns for bicycle facilities through the area based on the current Alternative 3A design documents:

- 1) No bike lanes will be provided anywhere in the project area, and shoulders as designed provide little guidance to bicyclists at intersections
- 2) There are no provisions for safe bicycle accommodations across on- and off-ramps

With the current plan, for a bicyclist wishing to cross from west to east through the interchange, he or she would have to merge left across highway-bound traffic as the right lane turns into a dedicated lane onto I-93 southbound. He or she would then have to look for traffic on the right merging onto Route 110 from I-93 north and merge across that lane to reach the shoulder. For a bicyclist wishing to cross from east to west through the interchange, it is even worse. The exit/entry lane from I-93 north/to I-93 south appears to the bicyclist's right. The bicyclist would have to hold his or her position in the now middle travel lane and watch for merging traffic. *Both of these scenarios for bicyclists are intimidating and uncomfortable for all but the most experienced and traffic-tolerant bicyclists, particularly because of the heavy volumes of traffic.*

We believe that the omission of facilities that would allow cyclists to traverse the junction safely would have long-lasting consequences and prevent meaningful bicycle connectivity through this area and between cities. **We insist that you stripe dedicated bike lanes instead of shoulders for bicycle accommodation, including dashing the bike lanes across major intersections**, especially since bike lanes are the preferred accommodation specified in the MassDOT Design Guidebook. We recognize that there are no bike lanes to connect to currently, but as we have stated in the past, **bike lanes have to start somewhere**. An alternate solution would be to design the shoulders as you would design bike lanes, but omit the bicycle symbols and arrows. This is not ideal but certainly better than

the currently designed shoulders. The bicycle symbols and arrows could easily be added in the future by either the City of Methuen or MassDOT.

For most interchanges, we would recommend that the bike lane continue dashed to the left of on- and off-ramps, to help guide bicyclists straight ahead and alert motorists of where bicyclists are expected to be. The following diagram from the 2010 Draft AASHTO Bike Guide shows the general idea across a highway on-ramp. Note how the bike lane guide guides bicyclists across the on and off ramps and requires motorists to merge over the bike lane as opposed to requiring the bicyclists to merge over the travel lane.

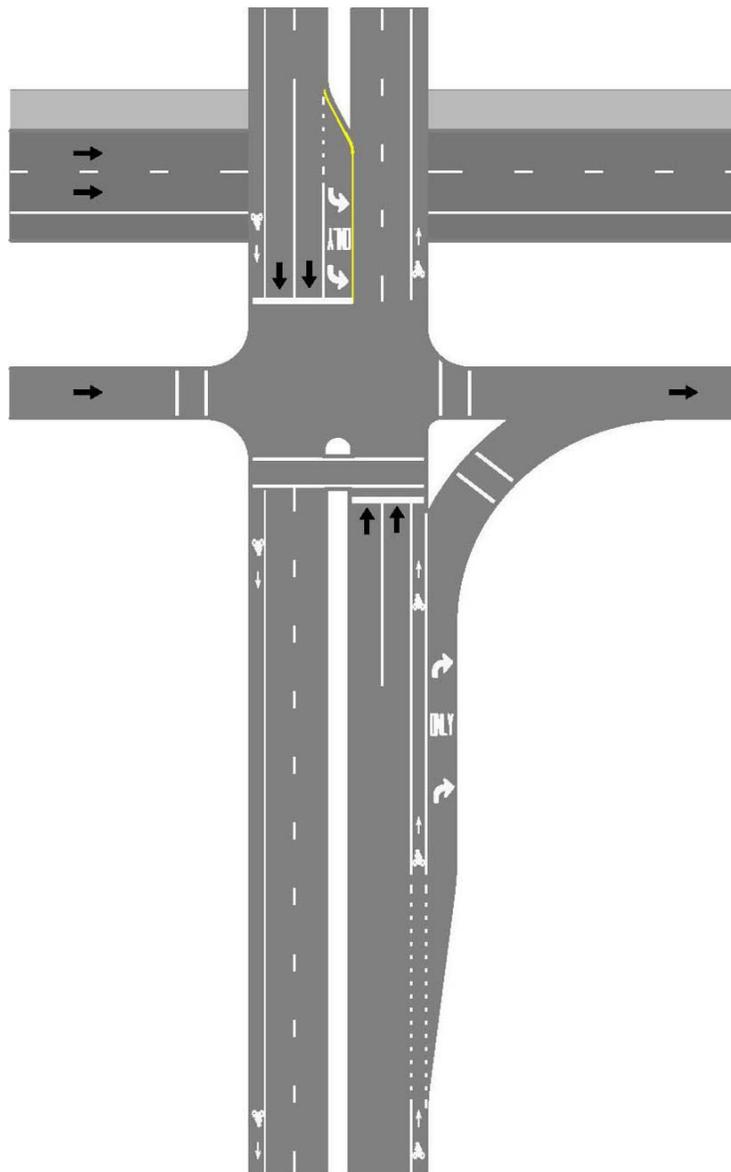


Exhibit 4.38. Example of Bike Lane and Freeway Interchange

However, because of the unique design of this project, we have some alternative recommendations.

Traveling eastbound, since the right-most travel lane as currently designed transitions into the exit-only lane for I-93 South, we recommend leaving the bike lane to the right of this lane and adding bicycle jug-handle at the entrance ramp to help guide cyclists across it, along with “Bicycle Crossing Ahead” signage for approaching vehicles. Here is one example of a bicycle jug-handle from Harvard Square in Cambridge, MA. This jug-handle is signal-controlled but for the I-93 ramp crossings we would expect them to have a yield sign for bicyclists, similar to the off-ramp crossing signage that we discuss next.



Continuing eastbound, since the exit from I-93 North going eastbound transitions into its own travel lane, we would recommend a treatment that guides bicyclists across this exit ramp at a right-angle as well. Here is an example this type of treatment from the Draft 2010 AASHTO Bike Guide (we would recommend that you continue the bike lane dashed across the ramp itself):

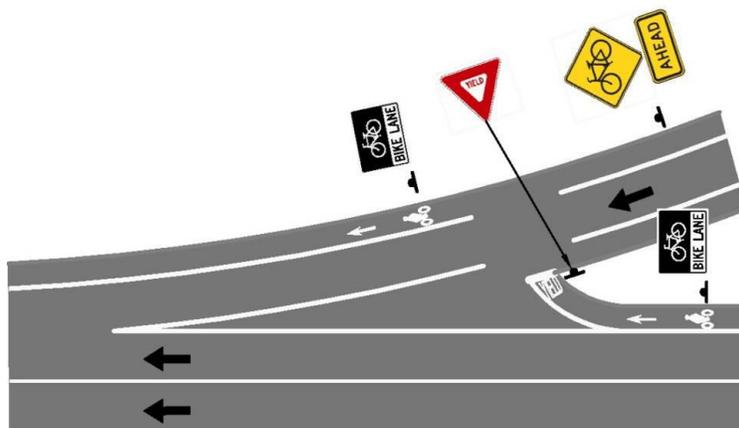


Exhibit 4.41. Option 2 – Bike Lane and Off-ramp

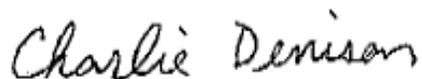
Going westbound, we would normally suggest that you place the bike lane in between the through lane and entrance/exit lane from/to I-93 North/I-93 South. However, because this lane is very long, we would recommend a similar treatment as for the eastbound direction, with a perpendicular crossing of the off-ramp and a jug-handle crossing of the on-ramp.

In addition to the specific recommendations we have made, **we strongly encourage MassDOT to think even more broadly about how to reduce the negative impacts of the project.** As we stated earlier, the sheer size of the roads being proposed here and the fact that homes must be taken will have serious long-term impacts towards the character of these streets and this community. We ask that MassDOT consider alternative designs that would reduce the number of additional travel lanes needed and that would eliminate the need to take any homes. For example, the rotary could be replaced with a dumbbell interchange with dual modern roundabouts, or a single modern roundabout interchange as is common at European motorway interchanges. These modern roundabouts would have a much smaller footprint than a traditional intersection, and could also be designed to be very friendly and accommodating for pedestrians and bicyclists. With \$75 million being spent on this project, it's absolutely essential that it do that best to serve not only the needs of today, but leads us into a future where more people are walking and bicycling.

Finally, we noticed that unlike the Boston MPO, the Merrimack Valley Planning Commission (MVPC) does not have pedestrian/bicycle criteria for evaluating TIP projects. Since this project falls under the jurisdiction of the MVPC, we suspect that this may be one reason why this project does not sufficiently accommodate pedestrians and bicyclists. **LivableStreets recommends that the MVPC adopt similar criteria for evaluating TIP projects based on pedestrian and bicycle accommodation.**

Thank you for considering our input as this project moves forward. If you have any questions on the above comments and suggestions, please contact Charlie Denison, Board Member & Advocacy Director, LivableStreets Alliance, who may be reached at 617.852.6125 and charlie@livablestreets.info.

Sincerely,



Charlie Denison,
Board Member & Advocacy Director

CC:

Tom DiPaolo, Assistant Chief Engineer, MassDOT
Lou Rabito, Bicycle/Pedestrian Engineer, MassDOT
Mayor William M. Manzi, III, Town of Methuen (via postal mail)