

January 5, 2011

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

**Subject: Route 105 (North Main Street) at I-495, Middleborough
Traffic Signals and Intersection Improvement Project
Project File No. 602603**

Dear Mr. Tramontozzi:

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 we provide more opportunities to improve their health through active transportation such as walking and bicycling.

LivableStreets would like to take this opportunity to provide comments regarding the 25% Design for the Route 105 (North Main Street) at I-495 project in Middleborough as presented to the community on January 5, 2011.

We would like to thank you for including 5.5' sidewalks on both sides Route 105 within the project limits. This includes adding sidewalks where there currently are none, which will certainly be an improvement for pedestrian access. We ask that you reduce the curb radii of the entrance and exit ramps to I-495 as much as possible to encourage traffic to enter and exit at a speed that is safer for pedestrians, particularly if there are lanes to cross for which pedestrians do not have a pedestrian signal. In addition, we ask that clearly marked zebra-striped crosswalks be included throughout. Finally, we ask that at unsignalized crossings that "sharks teeth" yield lines be painted on the roadway prior to the crosswalk, and that "Yield Here to Pedestrians" signs be posted on either side just prior to the crosswalk.

We also thank you for your attempt to accommodate bicycles with a 4' shoulder through most of the project. **However, the fact that these shoulders go down to zero under the I-495 overpass is unacceptable in our opinion.** Thankfully, we think we have a solution to this problem. In the project description, it says that Route 105 is currently 4 lanes (2 in each direction), with no dedicated left turn lanes to access the I-495 on-ramps. This project plans to add turn lanes, but also preserve the 2 travel lanes in each direction. Since the new dedicated left turn lanes will increase

traffic capacity by removing left turning traffic from the general travel lanes, we suspect that two lanes in each direction may no longer be needed, and that one general travel lane in each direction would suffice. This would eliminate the need for roadway widening and would allow 5.5' shoulders to be added in each direction within the existing cross-section (including under the I-495 overpass). The space occupied by the left turn lanes on either side of the overpass would simply be a striped median along the center part of the project.

A comparison of the cross-sections under the I-495 overpass:

	MassDOT 25% Design	LivableStreets Proposal
Sidewalk	5.5'	5.5'
Shoulder	4'	5.5'
Travel lane	11'	11'
Travel lane	11'	
Striped median		11'
Travel lane	11'	
Travel lane	11'	11'
Shoulder	4'	5.5'
Sidewalk	5.5'	5.5'
TOTAL	63'	55'

(The striped median noted above would be the space allocated to the left-turn-only lanes for the I-495 on-ramps further north and south of the overpass.)

We would prefer that you stripe dedicated bike lanes instead of shoulders for bicycle accommodation, especially since bike lanes are the preferred accommodation specified in the MassDOT Design Guidebook. However, we have heard in the past that MassDOT is hesitant to provide bike lanes on projects where there are not already bike lanes to connect to or where there are not bike lanes planned in the near future. **We feel very strongly that when it comes to striping bike lanes, you have to start somewhere.** Therefore, most projects should include bike lanes instead of shoulders for bicycle accommodation, even when there are not yet other bike lanes to connect to. Often times that initial section of bike lanes will motivate a city or neighboring city to restripe other existing segments of roadway with bike lanes in order to connect to the new ones. For example, when Boston striped bike lanes on Beacon Street up to the Newton City Line, the City of Newton responded by continuing these bike lanes into Newton within a matter of months.

If you do decide that bike lanes will not be striped as part of this project, we ask that you design the shoulders as you would design bike lanes, but simply omit the bicycle symbols and arrows. This would help to prevent a common problem of shoulders guiding bicyclists onto the on-ramps instead of across

them, as well as shoulders tapering off unnecessarily. The bicycle symbols and arrows could easily be added in the future by either the City of Middleborough or MassDOT.

For example, the shoulder would be dashed across the on-ramps and off-ramps, and to the left of right-turn-only lanes (for example if there is one at the Rhode Island Rd intersection), to help guide bicyclists and alert motorists. The following diagram from the 2010 Draft AASHTO Bike Guide shows the general idea across a highway on-ramp. In this case, the bicycle symbols would be omitted.

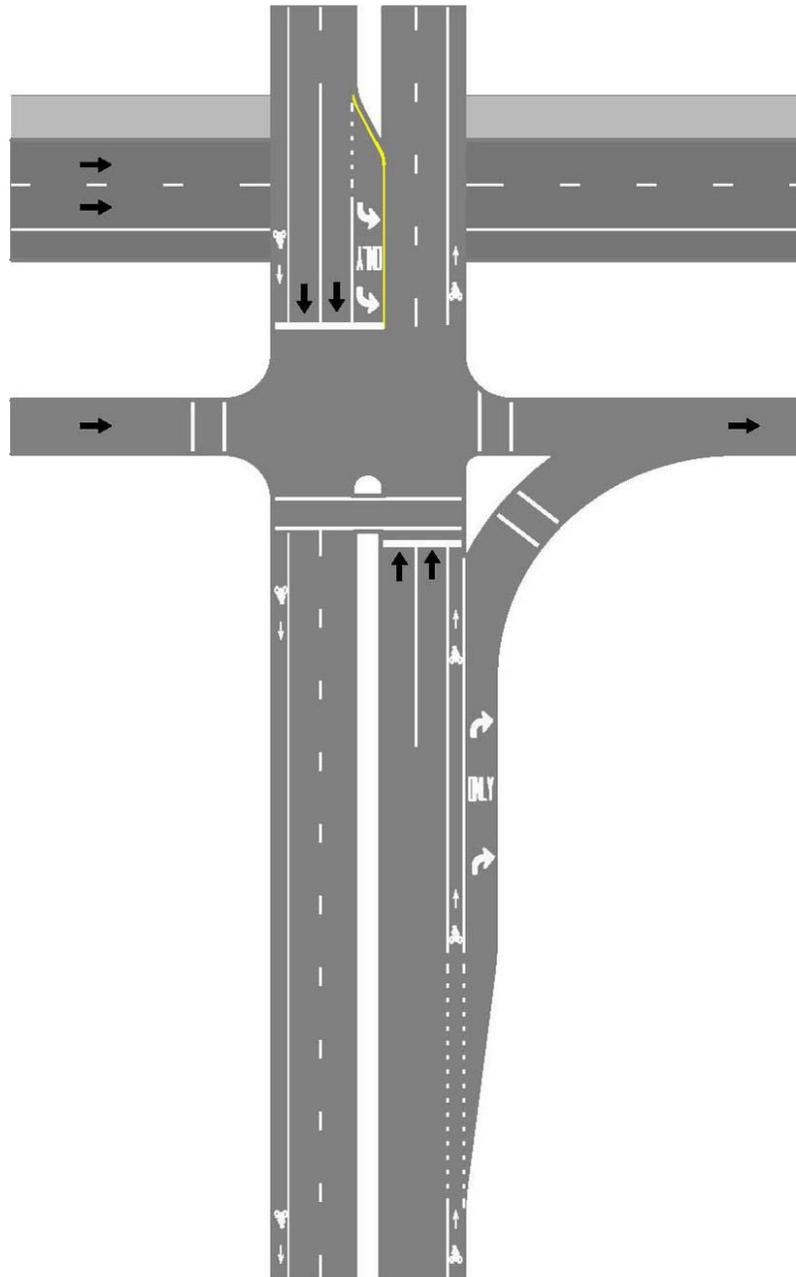


Exhibit 4.38. Example of Bike Lane and Freeway Interchange

It is not clear from the project description whether there will be dedicated turn/merge lanes prior the entrance (or exit) ramps, as shown in the diagram above. In the case where there are not dedicated turn lanes, we ask that the shoulder be dash striped across the ramp entrances/exits, similarly to the striping at the beginning of the right turn lane to the entrance ramp in the diagram above.

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,

A handwritten signature in black ink that reads "Charlie Denison". The signature is written in a cursive, slightly slanted style.

Charlie Denison,
Board Member & Advocacy Director