

Selectmen's Meeting
Monday, June 11, 2018
Town Office Building
Attending: D. Pierce, S. Bergeron, T. Fydenkevez, Sherry Patch

Meeting called to order at 6:37PM.

PUBLIC INFORMATION SESSION North Main Street Project Peer Review

Lou Robito of Howard Stein Hudson (HSH) who performed a peer review of the 25% Highway Plans for the Rt. 47 (North Main Street) Reconstruction project gave a powerpoint presentation of the peer review conducted by his firm. The presentation is incorporated with these minutes. Options 3 & 4 require design exceptions and Option 3 results in best compromise. Option 4 was not included in the report as it would require a complete redesign. Residents in attendance offered comments regarding the designs offered including traffic calming options. The sidewalk design will need to be reviewed further. It was noted that tree disturbance, possible lighting changes, removal of utility poles and drainage permitting will be addressed in the future. There was also discussion regarding speed limit changes process as well. Next steps would be a 25% project review hearing.

Motion Mr. Pierce to accept the Minutes of June 4, 2018, Second Mr. Bergeron, Vote 3-0.

Mr. Fydenkevez gave an overview of the 300th weekend celebration events.

UPDATES

- Mr. Bergeron noted the Frontier Building Review Committee is narrowing the capital list.
- Mr. Pierce stated he participated in a call with the designers downstairs.
- At the ZBA meeting for 120 N. Main Street, abutters expressed care of the property. Requested mowing resume at the property. Other concerns were with people hanging out on the porch and property, request police patrol the area more. Parking designation will be in place for the 300th at the property next weekend.

Motion Mr. Bergeron to approve the additional One-day Temporary Alcohol Permit application for Hitchcock Brewing for June 17, 2018, Second Mr. Pierce, Vote 3-0.

Motion Mr. Bergeron to accept the Sludge Hauling MOU with the FCSWMD for FY19, Second Mr. Pierce, Vote 3-0.

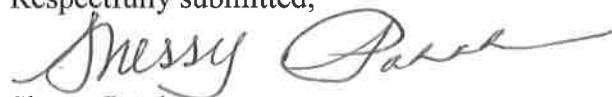
Bond for Sewer Relining Project for \$58,438, BAN with Greenfield at 1.89%. Motion Mr. Bergeron to accept, Second Mr. Pierce, Vote 3-0.

TOWN ADMINISTRATOR UPDATES

- Ms. Patch gave an update on the Complete Streets project.

Motion Mr. Pierce to adjourn at 8:30PM, Second Mr. Bergeron, Vote 3-0.

Respectfully submitted,



Sherry Patch
Town Administrator



To:	Town of Sunderland	Date:	June 21, 2018
From:	Lou Rabito Howard Stein Hudson	HSH Project No.:	2017263
		MassDOT File No.:	607245
Subject:	Route 47 (North Main Street) Reconstruction Project – Peer Review Public Information Meeting Meeting Notes of June 11, 2018		

Overview

Howard Stein Hudson (HSH) was brought on by MassDOT in coordination with the Town of Sunderland to perform a peer review of the 25% Highway Plans for the Route 47 (North Main Street) Reconstruction project. In this review, and a revision to the memorandum to add Option 3, HSH evaluated four concepts:

- Option 1: Sidepath (25% Highway Design) (8' sidepath, 11' lanes, 2' shoulders)
- Option 2: Bicycle Lanes (11' Lanes, 5' Bicycle Lane)
- Option 3: 10' Travel Lanes and 5' Bicycle Lanes
- Option 4: No Bicycle Accommodations (11' Lanes and 2' Shoulders)

As part of a regularly scheduled meeting of the Board of Selectmen, HSH was invited to present the findings of the peer review to the board and interested public. After the meeting was convened, **Lou Rabito, P.E.** of HSH presented an overview of the project and the peer review process, including details on potential benefits and challenges for each option evaluated; these are omitted here for brevity, and a .pdf of the presentation is provided in appendix to this document. The notes below summarize matters raised by the community and questions discussed throughout the meeting and centralize some resources that were mentioned during the course of conversation.

Community Concerns and Topics Discussed

- Visual impact of 8' shared use path, closer to roadway, versus existing conditions
- Request for engineering-based traffic calming in lieu of, or before, a speed study:

- HSH agrees with this approach, which may help reduce the risks of 85th-percentile speed negatively impacting the desired outcome, by reducing observed traffic speeds in advance of the statutory study.
- Anxiety regarding project timing and development process, and the procedures that will be utilized for abutter and stakeholder engagement:
 - This falls beyond the scope of the peer review but will be addressed throughout the Project Development process by the Town and its designer.
- Legibility of technical information, such as plan sets and the peer review memo:
 - HSH recommends preparing a visually intuitive plan set for the 25% Design Public Hearing to help provide context to abutters and stakeholders: plans can be colored to visually divide vehicle lanes, green space, sidewalks, etc.; supplemented with call-outs; and/or set over aerial/satellite orthography.
- Preserving current location of sidewalks within the historic linear common:
 - Anticipated tree impacts will require coordination with an arborist and Tree Warden to minimize and manage, and possibly additional removal of trees. It may also be possible to move the sidewalk gently to avoid some impacts.
- Requests to evaluate carrying sidewalk on one side only – north of North Silver Lane:
 - Requires a Design Exemption, which can be granted by MassDOT in cases where it makes sense, including the existence of logical termini for the sidewalk. North Silver Lane may provide such a terminus.
- Request for rendering of existing conditions:
 - Can be prepared by the project designer as the project continues to advance.
- Right of Way (ROW): Dealing with the legacy of abutter infringement onto public ROW – shrubs, fencing, tree planting, etc. – and balancing the transportation needs of the project with the legacy of public and neighborly work to maintain this space; heightened need for Design Exceptions as a result of the plentiful ROW.
- Request for more crossings along the corridor, especially at the school, Town buildings, and senior housing development
- Impacts on trees of road salt and country drainage:
 - This will be assessed as part of MassDOT Environmental process.
- Evaluation of need/opportunity to replace pedestrian-scale lighting, especially for a shared use path
- Truck traffic (cut-through) – noise, speeding, danger, and inconvenience
- Proposal for an island in the middle of the road at the entrance to South and North Main Streets, as a visual indicator that drivers are entering a village

FHWA Table: Operational Effects of Lane and Shoulder Width on Two-Lane Highways

Lane Width (ft)	Reduction in Free-Flow Speed (mph)			
	Shoulder Width (ft)			
	≥0' <2'	≥2' <4'	≥4' <6'	≥6'
9' <10'	6.4 mph	4.8 mph	3.5 mph	2.2 mph
≥10' <11'	5.3 mph	3.7 mph	2.4 mph [most like Option 3]	1.1 mph
≥11' <12'	4.7 mph	3.0 mph [most like Option 2]	1.7 mph	0.4 mph
≥12'	4.2 mph	2.6 mph	1.3 mph	0.0 mph

Source: https://safety.fhwa.dot.gov/geometric/pubs/mitigationstrategies/chapter3/3_lanewidth.cfm

The table above shows the reduction in free-flow speeds, measured against a baseline of travel lanes at least 12' wide, with shoulders at least 6' wide. A given cell shows the reduction against that baseline at the lane and shoulder widths listed; cells that indicate similar cases to Option 2 (11' travel lanes with 5' shoulder bike lanes) and Option 3 (10' travel lanes and 5' shoulder bike lanes). These result in minor (~0.6mph) differences in free-flow traffic speed.

Options for Traffic Calming via Physical Infrastructure

During the meeting, a question was asked regarding options for traffic calming and speed reduction that do not rely on a policy-change to posted speed limits in order to avoid the statutory speed study such an approach would entail. Below is a list of the options mentioned; it is by no means a comprehensive list of options available. For some further examples of speed management via roadway design, see NACTO's guide on Speed Reduction Mechanisms.¹

- Street crossings / crosswalks
- Pavement markings
 - Passive: do not force drivers to stop if no pedestrians are present
 - Changes in materials – e.g. width of marking – can be evaluated for impact
- Rectangular Rapid Flashing Beacons (RRFBs)
 - Passive: do not force drivers to stop if no pedestrians are present

¹ This National Association of City Transportation Officials (NACTO) guidance, published as part of the "Urban Street Design Guide", but still relevant when carefully applied in non-urban contexts such as Sunderland, is available online at: <http://nacto.org/publication/urban-street-design-guide/design-controls/design-speed/speed-reduction-mechanisms/>

- Low-cost and effective
 - Studies show driver awareness increases up to 85%
- Pedestrian Signal (if pedestrian volumes are high enough to warrant)
 - Unlikely to meet warrants for study here, based on informal observations
- Curb extensions (if curbs and associated drainage are added to the project)
- Speed feedback signs

TOWN OF SUNDERLAND

Route 47 (North Main Street) Reconstruction

Presented by
Lou Rabito, P.E.

Presented to
Town of Sunderland

June 11, 2018



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Engineers + Planners

Project Overview

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- **MassDOT Project No. 607245**
- **Resurfacing and Related Work on a Section of North Main Street (Route 47), from Route 116 to Claybrook Drive**
- **25% Design submitted by CHA in June 2017**
- **HSH performed a Peer review on 5/21/2018**
- **HSH revised Peer review on 6/5/2018 to reflect new District supported option**



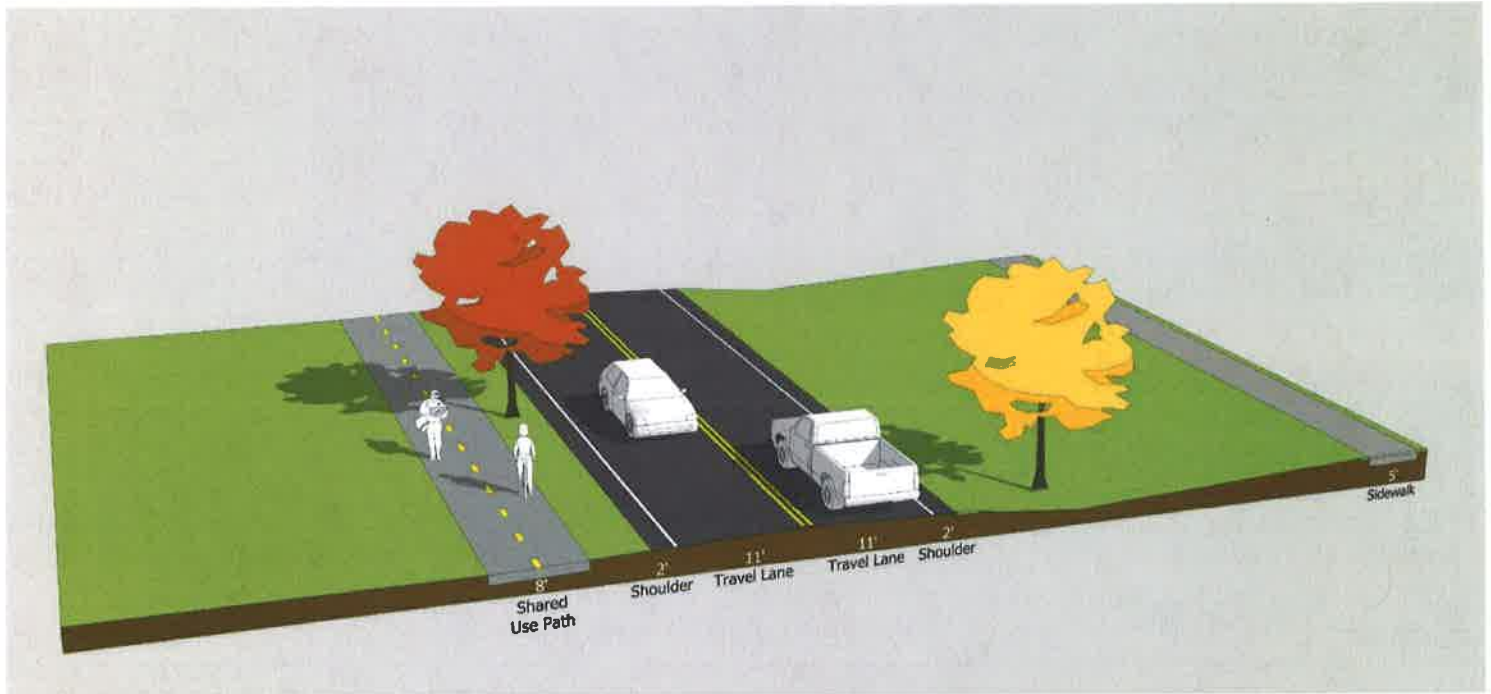
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- **25% Design Proposed:**
 - 11-Foot Travel Lanes
 - 2-Foot Shoulders
 - 8-foot Sidepath on the West
 - 5-foot Sidewalk on the East
- **Concern from Public**
 - Visual Impact of 8-foot sidepath
 - Request to compare bike lane option



Option 1: Sidepath (25% Design)

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Option 1: Sidepath (25% Design)

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- **8-Foot Sidepath Proposed vs. 10-Foot Shared Use Path**
 - Minimize impacts and low anticipated bike volumes
- **Narrow 2-foot shoulders assist with Traffic Calming**
- **Sidewalk on east side to be re-built**
- **Several large mature trees along corridor**
 - Care should be taken when working within the root zone of these trees.
 - Consult with MA Certified Arborist and Town Tree Warden
- **New sidewalk proposed north of North Silver Lane**
 - 5-foot sidewalk with 5-foot grass buffer
 - Utility pole placement should be evaluated as they are within the clear zone.



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Option 1: Sidepath (25% Design)

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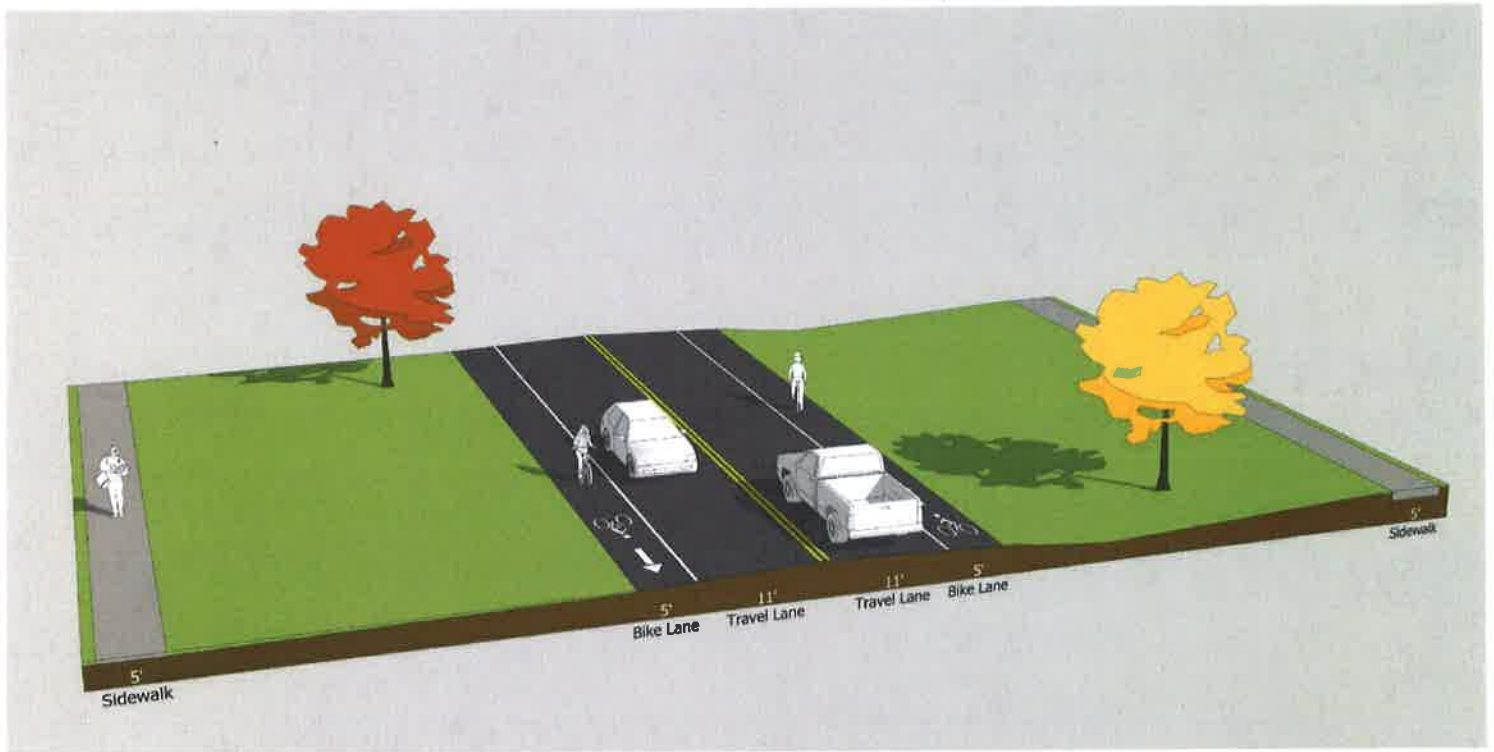
Item	Benefits	Challenges
Option 1 25% Design	Sidepath covers bike and ped accommodations in the same space.	Addition of sidepath reduces existing green space along the roadway.
	Minimal roadway widening	Potential for more tree impacts than what is shown on the plans
	A narrower roadway cross section can act as a traffic calming measure.	Concern about utility poles being too close to the edge of pavement.
	Proposed design fits without requiring the addition of vertical curb (and subsequent drainage system).	



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Option 2: Bicycle Lanes

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Option 2: Bicycle Lanes

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- **Standard 11-foot travel lanes with 5-foot bike lanes**
- **Widens road 3-feet on each side (32-feet curb to curb)**
- **Wider roadway may lead to higher operating speeds**
- **Visual Impact of wider roadway**
- **Still requires updated sidewalk on west side**
 - Potential for tree impacts when rebuilding sidewalk
- **Widening north of North Silver Lane:**
 - Sidewalk needs to be shifted to avoid need for curb
 - Additional permanent easements may be needed for grading
 - Utility poles should be relocated further from road



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Option 2: Bicycle Lanes

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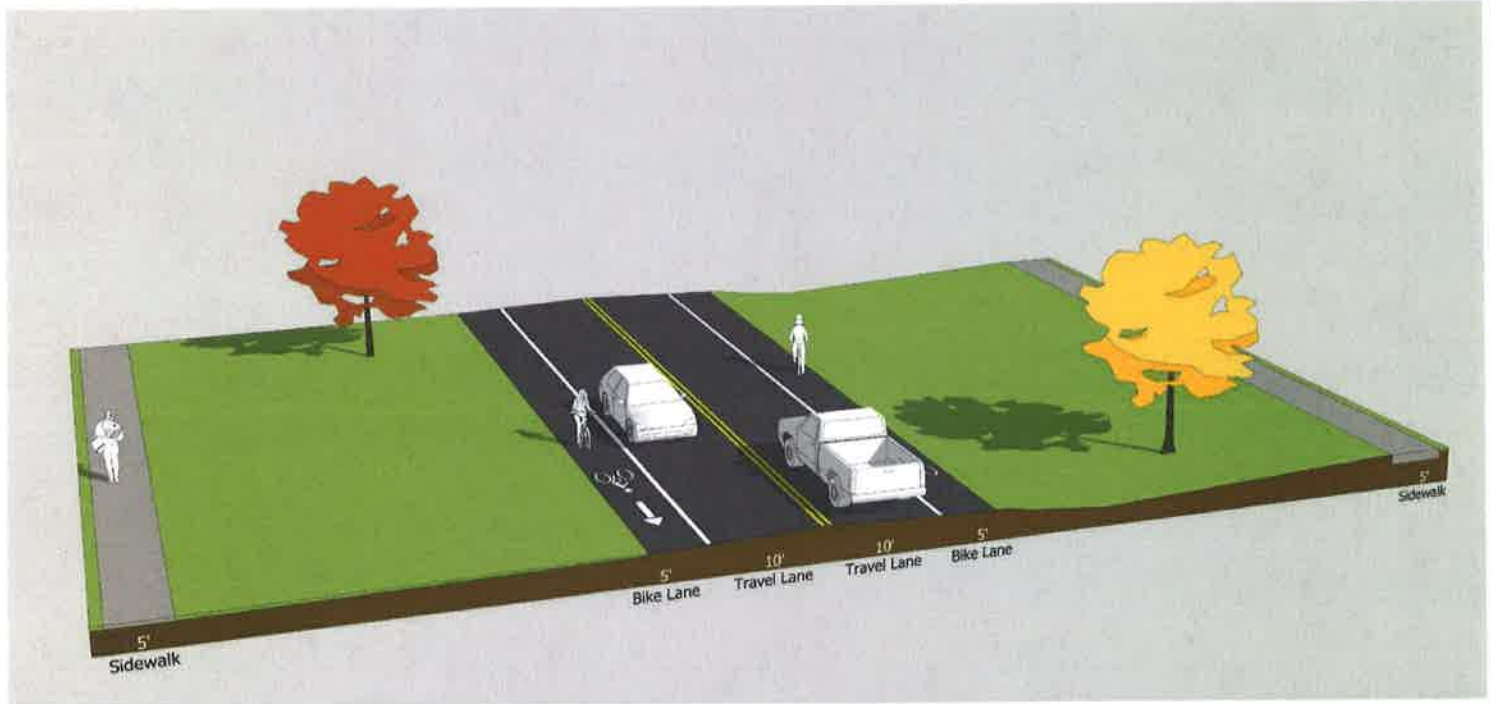
Item	Benefits	Challenges
Option 2: 11' Lanes & Bike Lanes	Dedicated on-street bike lanes	Requires the roadway cross section to widen by 3-feet on each side.
	Reduces the visual impact to green space caused by the sidepath.	Still requires a proposed sidewalk on the west side (unless a design exception was granted).
		Visual impact of a 32-ft vs. 24-ft wide road will be greater than that of an 8-ft path vs. 5-ft sidewalk.
		A widened roadway may require shifting of utility poles and the proposed sidewalk north of North Silver Lane unless curb is added.
		Potential tree impacts.
		Adds cost from additional full depth pavement. (Not including add utility pole relocations if needed).



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Option 3: 10-foot Lanes + Bicycle Lanes

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Option 3: 10-foot Lanes + Bicycle Lanes

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- **Narrow 10-foot travel lanes with 5-foot bike lanes**
 - Requires Design Exception
- **Widens road 2-feet on each side**
- **Narrow travel lanes help provide traffic calming**
- **Lesser visual impact**
- **Still requires updated sidewalk on west side**
 - Potential concerns for tree impacts
- **Widening north of North Silver Lane:**
 - Sidewalk needs to be shifted to avoid vertical curb
 - Additional permanent easements may be needed for grading
 - Utility poles should be relocated further from road



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Option 3: 10-foot Lanes + Bicycle Lanes

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Item	Benefits	Challenges
Option 3: 10' Lanes & Bike Lanes	Dedicated on-street bike lanes	Roadway would widen by 2-feet on each side.
	Reduces the visual impact to green space caused by the sidepath.	Still requires a proposed sidewalk on the west side (unless a design exception was granted).
	Narrow travel lanes act as a traffic calming measure	A widened roadway may require shifting of utility poles and the proposed sidewalk north of North Silver Lane unless curb is added.
		Potential for tree impacts from proposed sidewalks



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Option 4: No Bicycle Accommodations

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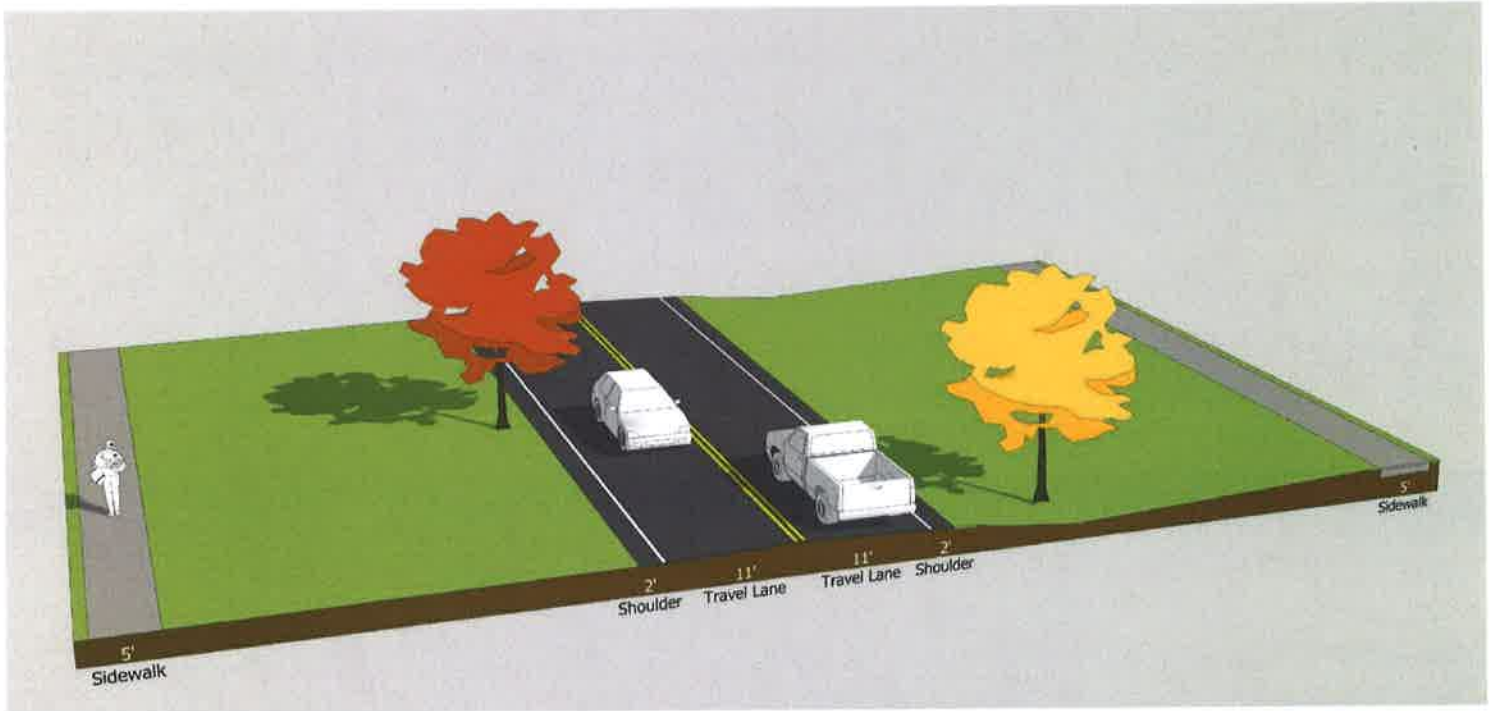
- **Removes the 8-foot sidepath**
- **Proposed 11-foot lanes and 2-foot shoulder**
- **Narrow roadway helps reduce speeds**
- **Least amount of physical and visual impact**
- **Still requires updated sidewalk on west side**
 - Potential for tree impacts
- **Requires Design Exception for not providing bicycle accommodations.**
 - Unlikely that MassDOT would grant this waiver given the size of the corridor and available ROW.



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Option 4: No Bicycle Accommodations

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Option 4: No Bicycle Accommodations

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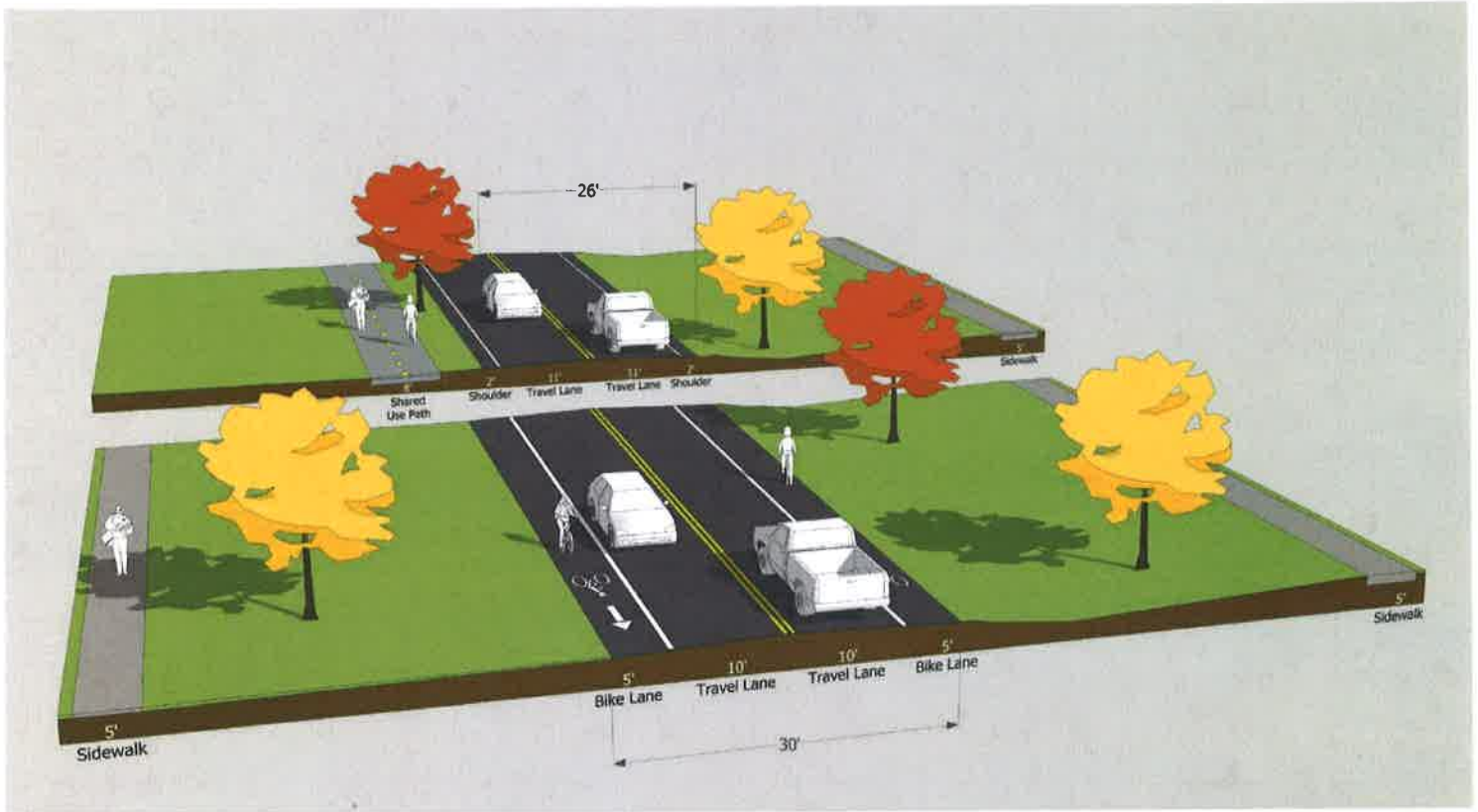
Item	Benefits	Challenges
Option 4 No Bike Accommodations	Minimal roadway widening & no sidepath reduces impacts (physical and visual).	Does not provide bike accommodations.
	Decreases costs a small amount by going from an 8-foot sidepath to a 5-foot sidewalk.	Still requires a proposed sidewalk on the west side (unless an additional design exception was granted).
		Design Exceptions req'd from MassDOT
		Potential for tree impacts from proposed sidewalks.



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Option 1 vs. Option 3

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Design Exception Process

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- **FHWA and MassDOT recognize 13 controlling criteria from AASHTO Policy. If not met, a formal Design Exception is required:**
 - Design Speed
 - Lane Width
 - Shoulder Width
 - Horizontal Alignment
 - Vertical Alignment
 - Cross slope
 - Stopping Sight Distance
 - Superelevation
 - Horizontal Clearance
 - Grades
- Other 3 criteria apply only to bridges: width, structural capacity, and vertical clearance



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Design Exceptions – Bike & Ped

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- **In 2014 Engineering Directive E-14-006 introduced new controlling criteria for pedestrian and bicycle accommodations to support the Healthy Transportation Policy.**
- **This Directive outlines minimum pedestrian and bicycle accommodations that must be met depending on the type of roadway and type of project.**
- **For the North Main Street (Route 47) project, bicycle and pedestrian accommodations would be required on both sides of the road in the form of:**
 - Sidewalks (min 5' wide) and
 - 5-foot bike lanes or protected bike facilities (sidepath/shared use path)



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Design Exception Process

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- If a Design Exception is being requested, a formal Design Exception Report (DER) along with MassDOT's Design Criteria Workbook is completed and submitted to MassDOT with the 25% Design.
- Each month MassDOT's Design Exception Review Committee meets to discuss each DER.
 - The committee will either approve, deny, or may submit comments that the applicant can address then re-submit for further review.



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Anticipate Design Exceptions

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- **Option 3:**
 - Lane Width – 10-foot lanes
 - *MassDOT has verbally okayed this design exception*
- **Option 4:**
 - Bicycle Accommodations

- **A Design Exception for Horizontal Offset appears to be needed for all options due to proposed utility poles closer than 4-foot from the edge of road north of North Silver Lane**



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- **Option 3 results in best compromise between what the Town is looking for and what MassDOT would allow.**
- **New sidewalk on west side does not need to be located next to roadway.**
 - The sidewalk can meander away from roadway where space allows
 - The goal would be to place in location that results in least amount of tree impacts.



Questions?



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