

Wednesday February 7, 2024

Canton Street Improvement Project



Working Group Meeting #2



Key Design Parameters



Design Parameter	25% Design Plan	Post-25% DPH MassDOT Minimum	Source/Policy
Travel Lane Width	11-feet	10-feet	MassDOT PDDG (Chapt 5)
Shoulder Width	2-feet	2-feet	MassDOT PDDG (Chapt 5)
Sidewalk Width	5.5-feet	Eliminated	Design Exception Required
Side Path Width	8' to 10'	Consistent 8'	MassDOT PDDG (Chapt 11)
Grass Buffer	0' to 5'	0' to 4'	MassDOT PDDG (Chapt 11) Design Exception Required for < 5'
Traffic Calming	Granite curb, raised medians, truck aprons	Granite curb, raised medians, truck aprons, narrow travel lanes, raised crosswalks, other (TBD)	MassDOT PDDG (Chapt 16) FHWA/ ITE Toolbox



Sidewalk - Options Available



Width

- Minimum 4' (with 5'x5' passing zones every 200')
- Typical 5'

Location/Alignment

- Adjacent to roadway
- Uniform offset from roadway (e.g. grass buffer)
- Meander around trees & stone walls (could trigger need for MAAB Variance)

<u>Material</u>

- Hot mix asphalt
- Cement concrete (could be tinted)
- Other firm/stable/slip resistant (e.g. decomposed granite, brick)



Bicycle Accommodations - Options Available

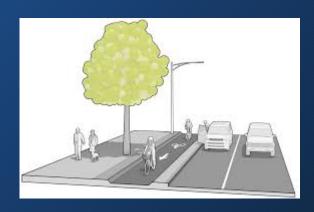


- On-Road Bike Lanes (with/without striped buffers)
 - Minimum widths: 5' lanes / 2' buffers



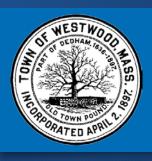


- On-Road Bike Lanes (with vertical & horizontal separation)
 - e.g. flex posts, raised curb or median





Bicycle Accommodations - Options Available



- Side Path (a.k.a. shared-use path) mixed bike/pedestrian use
 - Typical width ≥ 10′ (8′ in critically constrained locations)
 - Offset from roadway with 5' (typical) grass buffer
 - Could meander around trees & stone walls



- Sidewalk-level (or intermediate-level) separated bike lanes bikes only
 - Minimum width 5'





Considerations as Working Group Re-Thinks Project



- Which Side to Locate Side Path or Sidewalk (by Segment)
- Crossings
 - Number/Location
 - Safety Enhancements (e.g. signs/markings, refuge islands, RRFBs, lighting)
- Treatment at Side Street/Driveway Crossings
- Traffic Calming Elements
 - Raised Crossings
 - Other Measures per FHWA/ITE Toolbox

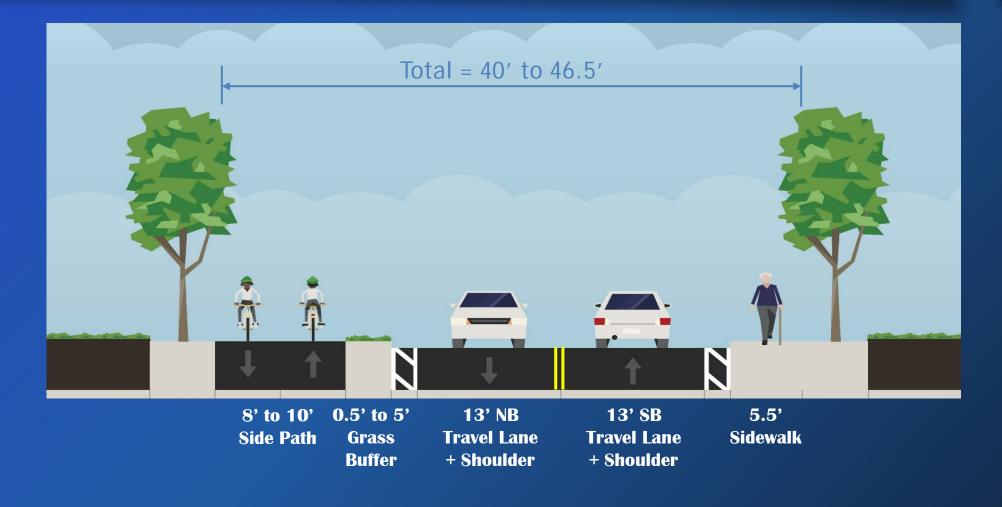


- Landscape/Streetscape Mitigation
 - Trees, Stone Walls, Other (e.g. tinted concrete side path)



Previously Proposed Typical Cross Section





Minimum Cross Section for MassDOT Funding





