



Public Facilities Committee Report

City of Newton In City Council

Wednesday, January 20, 2021

Present: Councilors Leary (Chair), Norton, Laredo, Kelley, Crossley, Gentile, Danberg and Kalis

Also Present: Councilors Downs, Malakie, Bowman, Wright, Markiewicz and Grossman

City Staff Present: Commissioner of Public Works Jim McGonagle, City Engineer Lou Taverna, Chief Operating Officer Jonathan Yeo, Director of Transportation for the Planning Department Nicole Freedman, Director of the Transportation for Public Works Jason Sobel, Director of the Planning Department Barney Heath, Captain Jeffrey Boudreau and Sergeant Dan Devine

Referred to Public Facilities and Finance Committees

#39-21 **Appropriate \$256,000 from the Washington Place Special Permit Mitigation Fund**
HER HONOR THE MAYOR requesting authorization to appropriate and expend the sum of two hundred and fifty-six thousand dollars (\$256,000) from the Washington Place Special Permit Mitigation Fund for the purpose of pedestrian enhancement design on a portion of Washington Street including design and bid preparation for fence replacements, fence artwork, landscaping and sidewalk installation on the south side of the street from Lowell Avenue to Walnut Street.

Action: **Public Facilities Approved 8-0**

Note: Jim McGonagle, Commissioner of Public Works and Lou Taverna, City Engineer presented the request for \$256,000 from the Washington Place Special Permit Mitigation Fund. Commissioner McGonagle explained that these funds are for sidewalk curbing repair and replacement along with design services and preparing bid documents to replace the fence. The estimates for this project are attached.

Mr. Taverna explained that they will be removing and replacing the old sidewalk with a cement concrete sidewalk on the south side of Washington Street from Lowell Avenue to Walnut Street. The existing curbing will also need to be removed and set back in place. There is also need for funds for the design of the new fence and the new landscaping/streetscape along the fence. The department is proposing that the design be done by the Environmental Partners Group who designed Newtonville Square and other projects throughout the City.

Committee members asked the following question:

Q: Who owns the chain-link fence along this area of Washington Street?

A: Mr. Taverna explained that MassDOT does own this fence and the Law Department has been working with Public Works to determine who owns the rest of the land. The new fence will be on City of Newton property and Mr. Taverna noted that MassDOT should not have an issue with them taking down the old fence.

Councilor Norton motioned to approve which passed unanimously.

Chair's Note: *Public Safety & Transportation joined the Committee to discuss the following 3 items.*

#22-21 **Request for approval of Commonwealth Ave/Auburn Street Concept Design**
COMMISSIONER OF PUBLIC WORKS requesting, on behalf of Mass DOT, approval of the concept redesign plan for the intersection of Commonwealth Avenue and Auburn Street.

Action: **Public Facilities Approved 7-0-1 (Councilor Gentile abstaining)**

Note: Nicole Freedman, Director of Transportation for the Planning Department, Jason Sobel, Director of Transportation for Public Works, and members of MassDOT's team were present to discuss the approval of the concept redesign plan for the intersection of Commonwealth Avenue and Auburn Street. Jim McGonagle, Commissioner of Public Works explained that this intersection project is a part of the reconstruction of the Route 30 Bridge over the Charles River.

Ms. Freedman introduced Rob Antico, MassDOT, Matthew Jasmin and Bob Stathopoulos from Howard Stein Hudson. The attached presentation was also given at a public meeting on January 14, 2021.

Ms. Freedman noted that the MassDOT bridge project is essential and through that project MassDOT discovered they will need to repair the intersection of Commonwealth Avenue and Auburn Street. MassDOT would usually just put the intersection back to its original structure but they have decided to work with Newton to have a better and safer intersection built. Ms. Freedman thanked MassDOT for working with the City on this intersection. She also noted that the Commonwealth Avenue/ Auburn Street intersection project is connected to the Carriageway project that the City is working on to make the roadway safer for all. The Town of Weston is also working on their own project that is connected to MassDOT's bridge project.

Ms. Freedman explained that the vision for the Commonwealth Avenue area includes creating a safer roadway, creating more open space and working on the bike and pedestrian paths. The existing intersection and the challenges of this intersection are shown attached. MassDOT is working with the City to address the current issues of the existing intersection in the proposed design.

MassDOT did consider alternatives to the proposed mixed lane modern roundabout design and those are shown attached. The Continuous Green T-Intersection is an example of how the City

could just improve the existing intersection. Ms. Freedman explained that this alternative would create crosswalks going across Commonwealth Avenue and the cars east bound on Commonwealth Ave and Auburn Street will be subject to the traffic signal. The west bound vehicle would not be subject to the traffic signal except if there is a pedestrian trying to cross. Ms. Freedman explained that all of the options have approximately the same traffic throughput. MassDOT did rule out this intersection plan due to the lack of statistics showing this design is safe and because the west bound vehicles do not need to stop unless there is a pedestrian crossing there may be higher speeds on the road and vehicles may not stop for the pedestrians.

Another alternative was the Traditional T-Intersection which fits the design of a normal intersection. There would be three travel lanes east and bound and there would be a need for crosswalks. MassDOT did acknowledge this was a safe intersection design but does not go along with the City's vision for this area. Ms. Freedman explained that this plan minimizes the green space.

The preferred option is the Mixed Lane Modern Roundabout. Ms. Freedman noted that this option maximizes the green space on the north side, and it allows the City to have a continuous bike and pedestrian path. Ms. Freedman explained that vehicles will be lined up before entering the roundabout so there will not be a need to change lanes in the roundabout. The design of a roundabout will also cause traffic calming. The speeds within the roundabout will be closer to 20 mph approaching the pedestrian crosswalk. There is a comparison of all the alternatives attached along with simulations of the modern roundabout and the continuous green intersection.

Mr. Jasmin noted that the simulation shows the future traffic volumes up to 20 years out. The data that was collected was from before the pandemic.

Committee members asked the following questions:

Q: Is there enough time for a car on the opposite side of the roundabout to stop for a pedestrian?

A: Mr. Jasmin explained that they designed the departures by putting at least 50 ft between circulating traffic. The roundabout also manages speeds better than a normal intersection. Mr. Jasmin explained that they have measured that cars will be traveling between 10-15 mph within the roundabout.

Q: For the roundabout option how many lanes will be moving east bound?

A: Ms. Freedman explained that there are two lanes of travel with a continuous flow except when a pedestrian is trying to cross.

Q: Will cars be stopped in the roundabout when there is a pedestrian crossing?

A: Mr. Jasmin explained that currently it is designed to handle two cars in each lane to limit the back-up of cars within the roundabout.

Q: What can be done about problems that may occur after the roundabout is built?

A: Mr. Jasmin explained that they do plan for traffic flows 20 years in the future to help avoid these issues.

Q: Was any thought given to get bicyclist to use the crosswalks instead of going through the roundabout?

A: Ms. Freedman explained that bicyclists will most likely not want to ride through this busy intersection. Bicyclists should be using the shared used paths and the crosswalks. Ms. Freedman noted that they can't make it a rule that bicyclists can't enter the roundabout.

Q: How many seconds does the light at the pedestrian crossing last?

A: Mr. Jasmin explained that they use the average pedestrian walking speed to make sure that pedestrians of all ages and abilities will be able to cross safely. Pedestrians would have approximately 10 seconds to cross.

Q: How many cars per minute would be going through the intersection during peak hours?

A: Mr. Antico noted that there is a simulation that shows the que of cars due to the pedestrian crosswalk. The link is shown in the attached presentation.

Q: What is the maximum sized truck that can travel down Commonwealth Ave?

A: Mr. Jasmin explained that they need to design the intersection to be able to handle the largest trucks because of the proximity to the interstate. There are truck aprons there for support.

Q: How would a vehicle get to Oakland Ave if you are on Commonwealth Ave coming from Auburndale heading west?

A: Mr. Jasmin explained that will be exploring the safest way to get to Oakland Ave.

Q: Was there an attempt to include the traffic moving in and out of the Speedway gas station?

A: Mr. Jasmin explained that this was not included in the simulation but will make sure that there would be safe access in and out of the gas station. This is an issue that MassDOT and their team will continue to evaluate.

Q: Why was the decision made to put the crosswalk near the Speedway in that area?

A: Mr. Jasmin explained that the crosswalk was placed in between both access points to be able to provide enough space between the stop bar and the crosswalk. It was noted that it would be better if the entrance for the gas station was 100 ft to the east but MassDOT will continue to investigate the location of the crosswalk to ensure safety for all.

Q: Do the roundabout examples in Worcester also have crosswalks going across multiple lanes?

A: Mr. Jasmin explained that there are pedestrian crosswalks at the Worcester roundabout. The Newton project will have the pedestrian hybrid beacons to be able to get better compliance from pedestrians, bicyclists and cars.

Q: How frequently is it estimated for the pedestrian hybrid beacons will be activated?

A: Mr. Stathopoulos explained that they have estimated there would be 5 calls per hour per side of the street, but they have also increased that frequency to plan for the future.

Q: If a new intersection design is not agreed upon, will MassDOT just put back the existing configuration?

A: Ms. Freedman explained that this is what could occur.

Q: Will this intersection project need to come back to the City Council for a further vote?

A: Ms. Freedman explained that this is the last vote on the design of this intersection project. She noted that they can come back to explain the changes that are made based on tonight's comments. MassDOT will also be doing another public hearing once they reach 25% design.

Committee members made the following comments:

There is a concern that during heavy traffic flow, the traffic coming east bound will cause a problem for vehicles coming out of Auburn Street trying to enter the roundabout. The simulation did not show the right amount of traffic coming from west to east at peak hours.

Ms. Freedman noted that there are similar roundabouts in the state that handle this amount of traffic. These examples are attached. Mr. Jasmin noted that they have been working with these communities who have said that there are not significant back-ups. Mr. Stathopoulos noted that area around the bridge is also being reconfigured which will help with the traffic flow.

The free flow of traffic coming from Auburndale Square will no longer exist which may cause a back-up from the roundabout to the Square.

There should be proper signage so bicyclists and vehicles know which path or lane they should be traveling in.

Cars may still change lanes once in the roundabout. This could occur when vehicles are heading west bound which starts out with one lane of traffic then merges to two and there is not much time to decide which lane they need to be traveling in.

It may be difficult for cars leaving Auburn Street to enter the roundabout during peak hours of traffic.

The simulation did not include vehicles traveling in and out of the Speedway which is a heavily used gas stations especially by large gas trucks. There is also a safety concern on the position of the crosswalk near the Speedway.

The proposed modern roundabout is an improvement from the current intersection regarding safety for all traveling on the road, sidewalks and paths. This roundabout also helps with the traffic flow.

In the past seven years there have only been eleven incidents at the existing intersection. In ten of those incidents there were no injuries and in the last incident there was one minor incident. There are other intersections in the City that are less safe than this existing intersection. The City should do a peer-review with one of their traffic consultants on this proposed modern roundabout.

Councilor Kelley motioned to approve which passed 7-0-1 with Councilor Gentile abstaining.

**Referred to Public Safety & Transportation, Zoning & Planning Committees and
Public Facilities Committees**

#506-20 **Discussion with Police, DPW and Inspectional Services on sidewalk obstructions**
COUNCILORS DOWNS, LEARY, ALBRIGHT & BOWMAN requesting a discussion with Police, Public Works and Inspectional Services regarding sidewalk obstruction, enforcement, regulation, and operating procedures during construction used to ensure safety for nonmotorized road users.

Public Safety & Transportation Held 5-0 on 01/20/21

Action: **Public Facilities Held 8-0**

Note: Jim McGonagle, Commissioner of Public Works and Lou Taverna, City Engineer were present to have a discussion with councilors regarding sidewalk obstruction, enforcement, regulation, and operating procedures during construction used to ensure safety for nonmotorized road users.

Mr. Taverna explained when the City bids any road reconstruction project the department always references MassDOT guidelines for pedestrian crossing during construction. It was noted that since it is a construction zone the city does its best to provide safe crossing which can involve moving to the other side of the street. The contractor is supposed to work on one side of the

street at a time. Mr. Taverna noted that the City also uses architectural guidelines to help with provide a safe alternative to pedestrians.

Councilors asked the following questions:

Q: Where are the requirements for creating an alternative safe crossing listed and which department enforces this?

A: Mr. Taverna explained for a homeowner who is doing work on their home those requirements would be shown on Engineering's street opening permit where is required for the contractor to have a plan for safe pedestrian crossing. That plan is reviewed by the Engineering Department and members of the Police Department. These sites are also expected. Mr. Taverna noted that for a larger development that Engineering should work to have a condition on creating safe passage during the special permit process.

Q: Is the 311 service a good way to report this issue?

A: Mr. Taverna know that this is the best way to report this issue.

Councilors made the following comments:

Contractors must have a plan on where and how they will have a safe crossing for pedestrians before starting the project. There are examples throughout the City where councilors or residents had to report that there is no safe alternative to crossing during a construction project.

Councilor Bowman motioned to hold item #506-20 which passed unanimously in Public Safety & Transportation.

Councilor Danberg motioned to hold item #506-20 which passed unanimously in Public Facilities.

Referred to Public Facilities and Public Safety & Transportation Committees

#533-20 **Requesting a discussion regarding snow clearing, operations and enforcement**
COUNCILORS DANBERG, MARKIEWICZ, BOWMAN, DOWNS AND NOEL requesting a discussion with the Department of Public Works and the Police Department regarding residential and commercial sidewalk snow clearing, operations and enforcement.

Public Safety & Transportation Held 5-0 on 01/20/21

Action: **Public Facilities Held 7-0 (Councilor Gentile not voting)**

Note: Jim McGonagle, Commissioner of Public Works was present to have a discussion with councilors regarding residential and commercial sidewalk snow clearing, operations and enforcement. Commissioner McGonagle explained that commercial enforcement falls under the Police Department and Public Works has taken over the enforcement of the residential sidewalks.

Commissioner McGonagle explained that the first storm this winter did not produce enough snow to require enforcement. The second storm produced approximately 543 complaints. These are then broken down into complaints that were cancelled, duplicates or reported too early. Additionally, these can be broken down to ones that have not yet been inspected, those that are in the process of being inspected and no problem found. There are also exemptions to this ordinance. The department also has data on if a fee or warning was issued. Commissioner McGonagle explained that the second snowstorm was a major snowstorm and with the other responsibilities of DPW it can be difficult to have employees go out to inspect the complaints. The inspectors are able to look into the 311 system to see if a resident has already received a warning.

Committee members asked the following questions:

Q: How will enforcement be handled on the weekends?

A: Commissioner McGonagle explained that weekends would require overtime but there hasn't been a need for that yet. Normally residents have 24 hours from when the snow stopped to clear the sidewalk. If there is a storm on a Friday night, then enforcement would not start until Monday morning when engineering staff is in.

Q: What will DPW staff not be doing if they are spending time on enforcement?

A: Commissioner McGonagle explained that the engineer inspections are the main part of enforcement and this complicated when construction is ongoing.

Q: When someone reports too early is it explained to wait 24 hours after a storm to report snow obstructions?

A: Commissioner McGonagle explained that they will receive notice that this was reported to early through the 311 system. If the person speaks with customer service then they will let them know what time they can report this issue again if the area has still not been cleared. Commissioner McGonagle explained he will get more information on this issue for the committees.

Q: Were any complaints closed out before the sidewalk is clear?

A: Commissioner McGonagle explained that there were 176 that were not inspected due to staffing issues.

Q: What training is done with the city contractors that plow the corners?

A: Commissioner McGonagle explained that there are new contractors every year and the first few storms are always a challenge. There are three major contractors, but they do not have the

bandwidth to hold all of the vehicles required so there subcontractors that come in. The department meets with the contractors every snow season and talk them through the requirements which includes rounding the corners.

Q: How many miles of sidewalk is the City clearing?

A: Commissioner McGonagle explained that this at about 90 miles. There are conversations with schools to review these sidewalks.

Q: Has the department learned anything from the second snowstorm that they wish to improve on?

A: Commissioner McGonagle noted that improvements can always be made. He also noted that this is the first year the City did not have a sidewalk contractor which means the City is doing the work in-house. They did put this out to bid twice and they can't get anyone to place a bid.

Q: On the commercial side, why were 14 areas not inspected?

A: Officer Boudreau explained that there were approximately 60 different complaints for commercial areas. He explained that 8 of there were given warnings and other areas were already cleaned or in the process of being cleaned once officers showed up. Officer Boudreau explained that majority of the calls they got were from people calling the traffic bureau and not from 311. He did not have the 311 information in front of him for this meeting.

Q: How is compliance once an officer warned a commercial business?

A: Officer Boudreau explained that approximately 90% are compliant. There is also an issue of who is at fault because plows do push into commercial areas.

Committee members made the following comments:

There should been data sharing, so all the sidewalk complaints are in one spot regardless of if it is residential or commercial.

There should be more work to educate residents and commercial properties on the City's ordinance on snow removal.

Committee members thanked DPW and the Police Department for their work on snow clearing operations and enforcements.

Councilor Bowman motioned to hold item #533-20 which passed unanimously in Public Safety & Transportation.

Councilor Danberg motioned to hold item #533-20 which passed 7-0 with Councilor Gentile not voting in Public Facilities.

The Committees adjourned at 9:35 p.m.

Respectfully Submitted,

Alison M. Leary, Chair



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Office of the Mayor

39-21

Telephone
(617) 796-1100

Fax

(617) 796-1113

TDD/TTY

(617) 796-1089

Email

rfuller@newtonma.gov

January 11, 2021

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

Honorable City Councilors:

I respectfully submit this docket item to this Honorable Council requesting the authorization to appropriate and expend the sum of \$256,000 from the Washington Place Special Permit Mitigation Fund for the purpose of pedestrian enhancement design on a portion of Washington Street including design and bid preparation for fence replacements, fence artwork, landscaping and sidewalk installation on the south side of the street from Lowell Avenue to Walnut Street.

My request was developed in collaboration with the Ward Two City Councilors and the Washington Place Liaison Committee members.

Please see the attached memo from DPW Commissioner James McGonagle and Planning & Development Director Barney Health regarding the project. To date, there have been no appropriations or expenditures of this \$700,000 project mitigation fund.

Thank you for your consideration of this matter.

Sincerely,

Mayor Ruthanne Fuller

RECEIVED
2021 JAN 11 11:30 AM
CITY CLERK
NEWTON, MA

City of Newton

DEPARTMENT OF PUBLIC WORKS

39-21

Ruthanne Fuller

Mayor

OFFICE OF THE COMMISSIONER

1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

To: Maureen Lemieux, Chief Financial Officer
Jonathan Yeo, Chief Operating Officer

From: James McGonagle, Commissioner of Public Works
Barney S. Heath, Director of Planning and Development

Subject: Request to Appropriate \$256,000 from the Washington
Place Special Permit Mitigation Funds

Date: January 8, 2020

We write to request that the Mayor docket the following request to appropriate and expend two hundred fifty-six thousand dollars (\$256,000) from the Washington Place Mitigation Fund for design of pedestrian enhancements and sidewalk installation on the south side of Washington Street between Lowell Avenue and Walnut Street.

The request was developed in consultation with the Ward Two Councilors and the Washington Street Liaison Committee. Attached is the quote for design services for pedestrian enhancements including fence design and landscaping. In addition, a cost estimate for sidewalk installation is attached.

Thank you for your consideration of this matter.

James McGonagle
Commissioner

Telephone: (617) 796-1009 • Fax: (617) 796-1050 • jmcgonagle@newtonma.gov

6/10/2020

This is an Order of Magnitude construction cost estimate for a new cement concrete sidewalk along the north side of Washington St from Lowell Ave to Walnut St.

Prices were based on MassDOT Weighted Average Bid Prices for District 6 area.

Sidewalk construction includes the following:

- Removal and resetting of the existing granite curb
- New cement concrete sidewalk

Other

Areas for quantities taken from CAD files.

This estimate does not consider:

1. Right of Way acquisitions
2. Construction year or increases in costs due to inflation
3. Underground utility relocations

CONCEPTUAL COST ESTIMATE - WASHINGTON ST SOUTH SIDE SIDEWALK

4/6/2020

<u>Description</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Total Cost</u>
Cement Concrete Sidewalk	\$178.00 /SY	525 SY	\$93,450.00
Existing Granite Curb R&R	\$45.00 /FT	800 FT	\$36,000.00
Erosion Control	\$9,700.00 /LS	1 LS	\$9,700.00
Police Detail	\$8,000.00 /ALL	1 ALL	\$8,000.00
		SUBTOTAL:	\$147,150.00
		Mobilization (3%)	\$4,414.50
		Temporary Traffic Control (5%)	\$7,357.50
		Contingencies (25%)	\$36,787.50
		TOTAL:	\$195,709.50
		SAY:	\$196,000

4/6/2020

UNIT COSTS**Cement Concrete Sidewalk**

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
Cement Concrete Sidewalk at Driveways (Item 701.1)	N/A	N/A	\$136.43 /SY	\$136.43
Gravel Borrow (Item 151)	8.0	0.0278 Yd/in	\$50.00 /CY	\$11.12
Unclassified Excavation (Item 120.1)	12.0	0.0278 Yd/in	\$45.00 /CY	\$15.01
Fine Grading and Compacting (Item 170)	N/A	N/A	\$15.00 /SY	\$15.00
			<u>per SY Total=</u>	<u>\$178.00</u>

4/6/2020

UNIT COSTS

Erosion Control

Silt Sacks	\$250.00 /EA	3 EA	\$750.00
Compost Filter Tubes	\$10.00 /FT	895 FT	\$8,950.00
		<u>Total Erosion Control =</u>	<u>\$9,700.00</u>

ENVIRONMENTAL PARTNERS

November 13, 2020

James McGonagle, Commissioner of Public Works
Department of Public Works
1000 Commonwealth Avenue
Newton, MA 02459

RE: Pedestrian Enhancements along Washington St. from Lowell Ave. to Walnut St.

Dear Mr. McGonagle:

Environmental Partners (EP) and Klopfer Martin Design Group (KMDG) are pleased to submit the following proposal for professional engineering and landscape architectural design services for the Pedestrian Enhancements along Washington Street from Lowell Avenue to Walnut Street project. The project is anticipated to consist of the following:

- Fence replacement along the southern side of Washington Street from east of Lowell Avenue to approximately 170 feet east of Walnut Street
- Landscape zone including planting and possible paved surfaces and furniture along the southern side of Washington Street from 270 feet west of Walnut Street to approximately 170 feet east of Walnut Street
- Opportunities for the integration of fence artwork will be identified, although neither the creation nor selection of artwork selection is included in the below Scope of Services
- Any previously discussed gateway treatments (at the Walnut Street intersection) are not included in the below Scope of Services
- Opportunities for locating way-finding signage will be identified but the below Scope of Services does not include involvement with a way-finding consultant or the design of the wayfinding

The project is anticipated to be reviewed through the City only. For budgeting purposes, no reviews or coordination is anticipated with MassDOT and/or MBTA. Likewise, it is anticipated that the City will handle all MassDOT/MBTA coordination, right-of-way, permitting and public outreach; this Scope of Services does not involve right-of-way or permitting assistance.

Scope of Services

The proposed project includes preparation of conceptual design and engineering design, and preparation of bid documents (plans, specifications, and estimate) in an efficient manner.

1. Base Plan Review / Site Visits

- a. The City will perform topographic survey and prepare/provide a base plan adequate for the design of the subject project in AutoCAD Civil3D. This will include the sidewalk and the area south of the sidewalk and south of the existing fence including topography, trees

and shrub areas. All trees greater than 3" caliper shall be captured in the survey. This shall include the extent of canopy and the type of tree. EP and KMDG (the Team) will perform a site visit to verify major visible conditions are reflected; any noticeable lacking information will be reported to the City for further survey and base plan correction. This Scope of Services does not include field measurements, or verifying accuracy of the base plan.

2. *Conceptual Design*

- a. The Team will attend one initial virtual conference call with the City which will include any individuals who will be involved in the review of the subject project in order to identify design and treatment parameters and expectations.
- b. The Team will provide up to three (3) alternatives for a fence treatment to be presented in cut-sheet format. Potential opportunities for the integration of art on the fences will be identified.
- c. One planting strategy will be drawn conceptually in plan-view and colored and will also provide images of selected plants
- d. The above fence alternatives and the conceptual planting strategy will be provided to the City for the City coordinate with city boards/departments and the public. This Scope of Services assumes the Team will not be involved in city or public coordination/meetings. Two-dimensional and three-dimensional rendering are not included in this Scope of Services.
- e. The City will inform the Team of the selected fence treatment and any minor comments on the conceptual planting plan as a result of their internal meetings and public outreach. This Scope of Services assumes that only limited changes will be required and that new concepts will not be required.

3. *Final Design*

- a. The Team will address minor review comments provided by representatives of the City and advance the plans from Conceptual Design phase to Final Design phase incorporating the City-selected fence and minor refinements on the conceptual planting plan. It is anticipated that only minor changes will be made to the design as it advances. For budgeting purposes, regressing in the design process and significant changes in design are not anticipated.
- b. In this phase, the Team will prepare a general plan set including construction plans, landscape plans, details, and also provide a preliminary construction cost estimate.

4. *Bid Document Preparation*

- a. The Team will prepare adequate bid documents for bidding purposes including plans, specifications, and estimate. Also, ENVIRONMENTAL PARTNERS will prepare

supplementary specifications to the Massachusetts Department of Transportation "Standard Specifications for Highways and Bridges" (latest edition) in the form of Special Provisions which shall incorporate relevant sections of the City's standard specifications where applicable. This work includes the preparation of the bid tabulation and technical specification sections of the contract bid documents. Standard bidding requirements, general conditions, agreement or other information associated with procurement requirements and procedures will be provided by the City.

- b. This Scope of Services presumes that guard rail or available reinforced fence will be available options to address crash loading; the custom structural design of a fence for crash and/or wind loads is not anticipated or included nor is geotechnical exploration or borings.
- c. The Team will provide a final construction cost estimate. The final construction cost estimate will include the quantity, unit price, and estimated cost of all pay items. The estimate will be based on prevailing prices established by MassDOT and recently advertised and awarded projects completed by the City and ENVIRONMENTAL PARTNERS. A bid tab will be prepared and included in the Measurement and Payment section of the bid document providing the quantity for each bid item.
- d. This Scope of Services does not include bid phase or construction phase services.

5. *Meetings / Coordination*

- a. For budgeting purposes, this Scope of Services assumes input from any City departments or boards will only be provided during the below noted meetings and additional discussions and concepting will not be required. Should additional meetings and/or coordination be requested, additional budget will be negotiated.
- b. The Team will attend up to three (3) video conference meetings with representatives of the City. This Scope of Services assumes that all meetings will be via Zoom or another similar platform and that the City will manage public outreach and planning technical coordination/setup.
- c. This Scope of Services assumes the Team will not attend public meetings or meetings with City boards or departments, nor will the Team prepare graphics, renderings or PowerPoint presentations.
- d. No additional coordination time is anticipated outside of the above meetings.

Fee

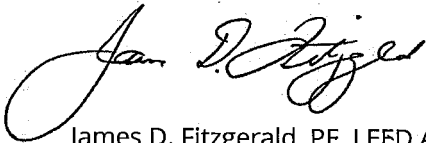
ENVIRONMENTAL PARTNERS proposes a lump-sum budget of **\$59,300** total based on the above outlined Scope of Services and below Fee Schedule.

Fee Schedule

1. <i>Base Plan Review/Site Visits</i>	\$ 6,430
2. <i>Conceptual Design/Renderings</i>	\$ 8,200
3. <i>Final Design</i>	\$24,620
4. <i>Bid Document Preparation</i>	\$ 9,770
5. <i>Meetings/Coordination/Presentation Materials</i>	<u>\$10,280</u>
TOTAL	\$59,300

We appreciate the opportunity to be of service to the City of Newton and look forward to discussing this proposal with you. In the meantime, please do not hesitate to contact me with any questions.

Sincerely,
Environmental Partners Group, Inc.



James D. Fitzgerald, PE, LEED AP
Principal
P: 617.657.0256
E: jdf@envpartners.com

Auburn St @ Commonwealth Ave

Proposed MassDOT intersection improvements

*January 14, 2021
Public Information Meeting*

Contact: Nicole Freedman
Director of Transportation Planning
City of Newton
Nfreedman@newtonma.gov

Agenda

1. Introduction
2. Alternatives Analysis
3. About Roundabouts
4. Preliminary Questions Answered
5. Timeline & Next Steps
6. Questions & Comments



1. Introduction

MassDOT Bridge Project Limits





City Vision

- Safety
- New open space
- Bike & ped accommodations
- Network connectivity
- Increased access to river & boathouse

MassDOT Goals

- Bridge Rehabilitation
- Safety
- Multimodal accommodations & connectivity
- Vehicular access & operations
- City vision



Existing Challenges

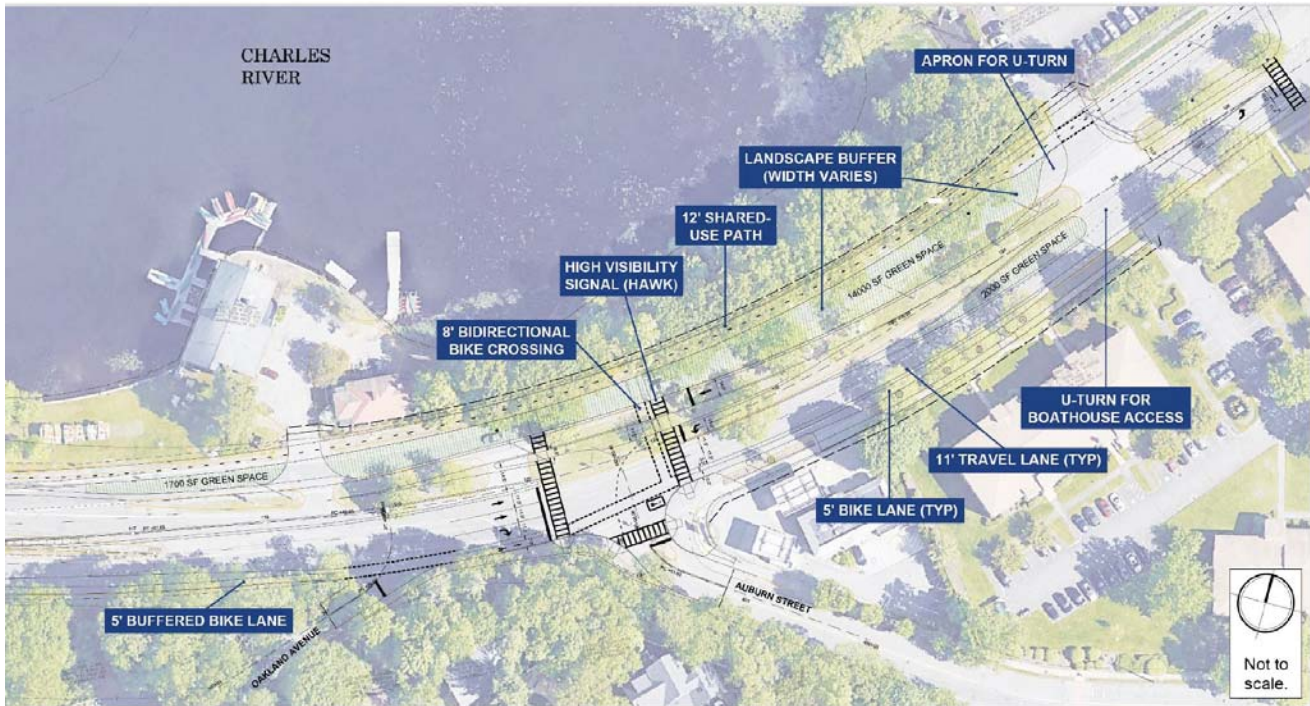
22-21

- Safety
- Crossings
- Multimodal accommodations
- Speeding
- Network connectivity

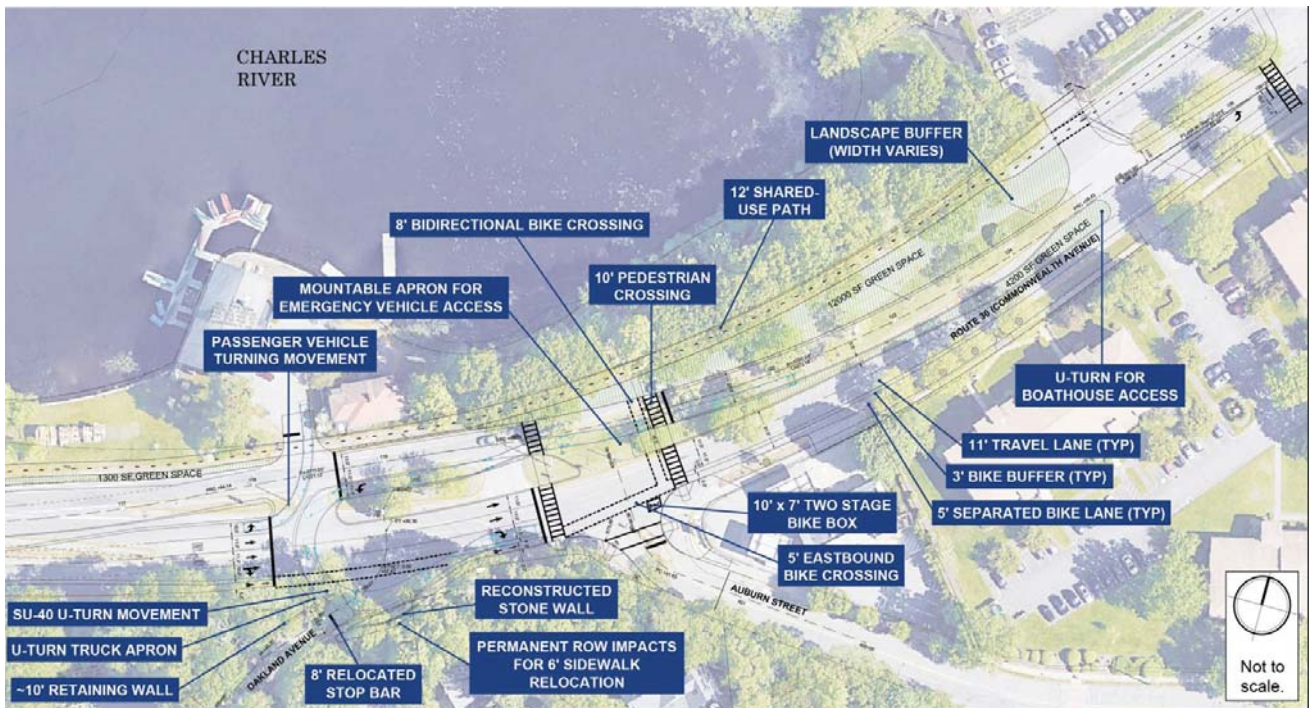


2. Alternatives Analysis

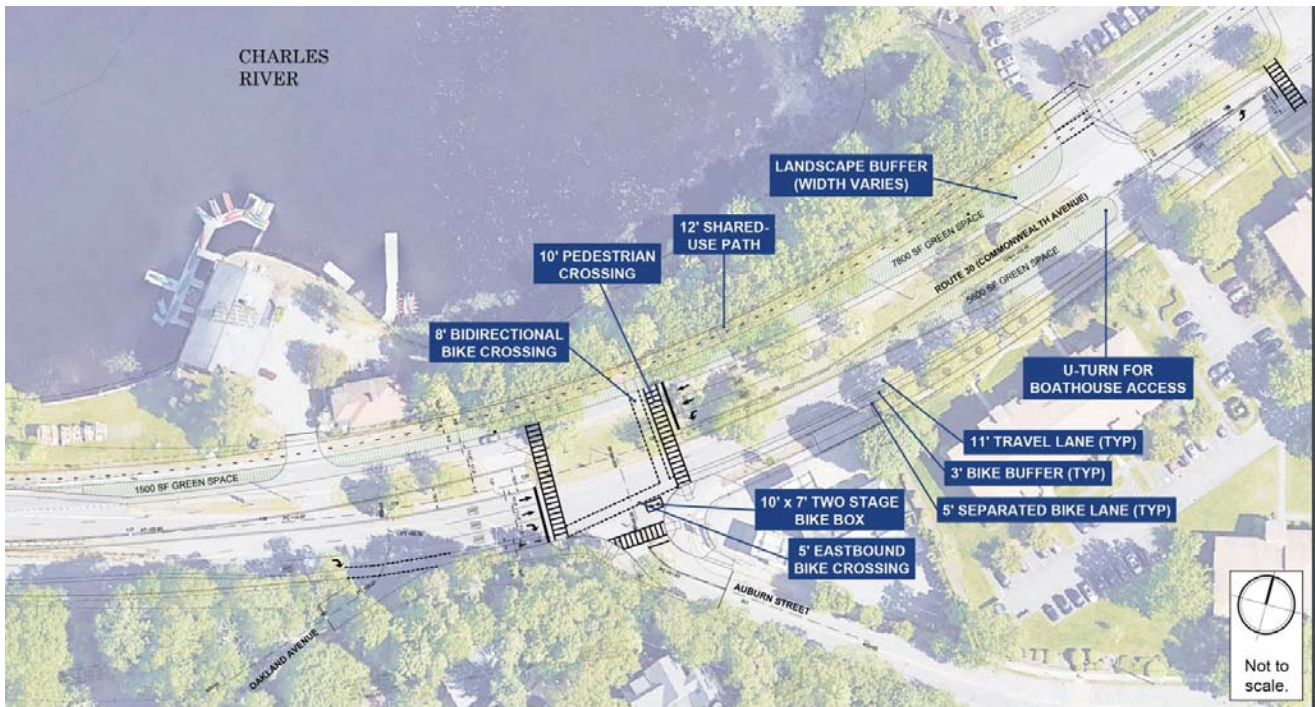
Continuous Green T- Intersection



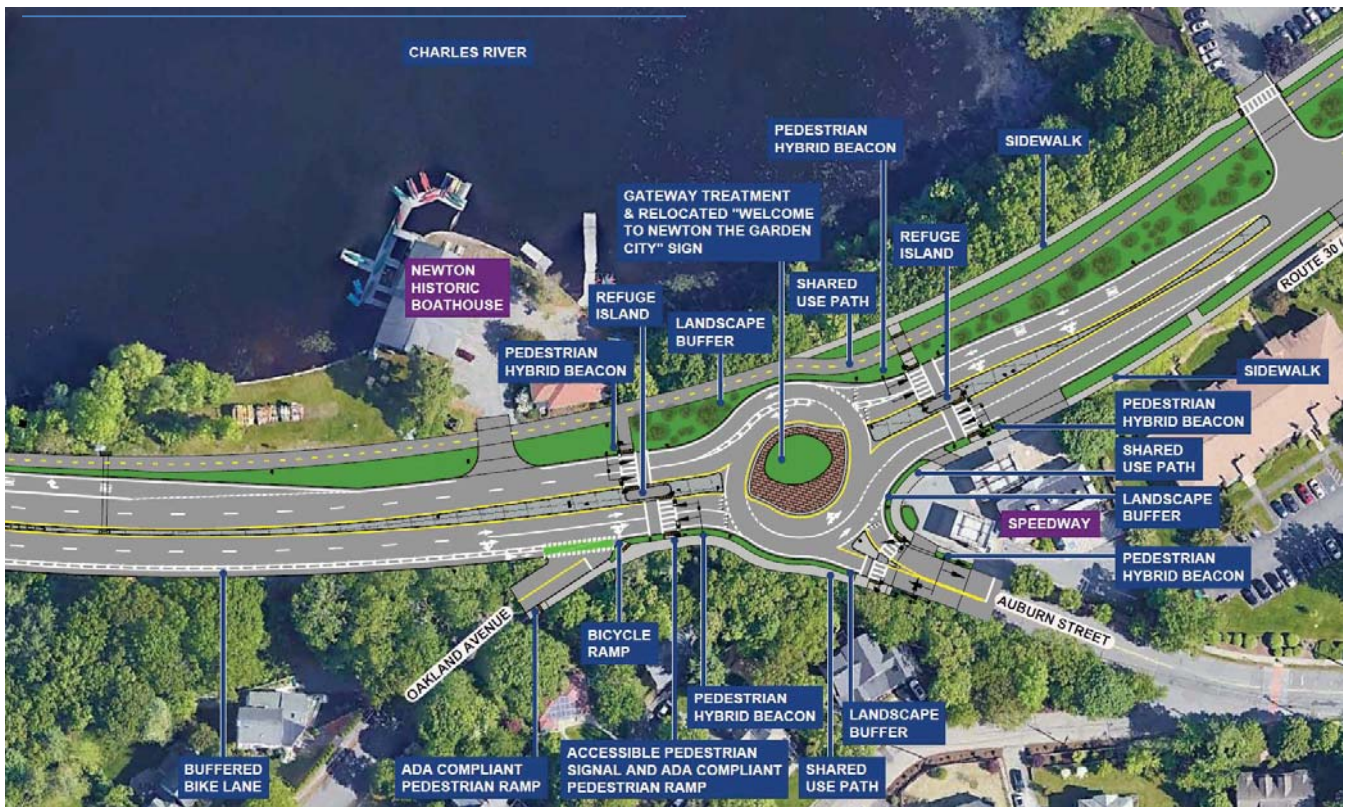
Displaced Left Turn



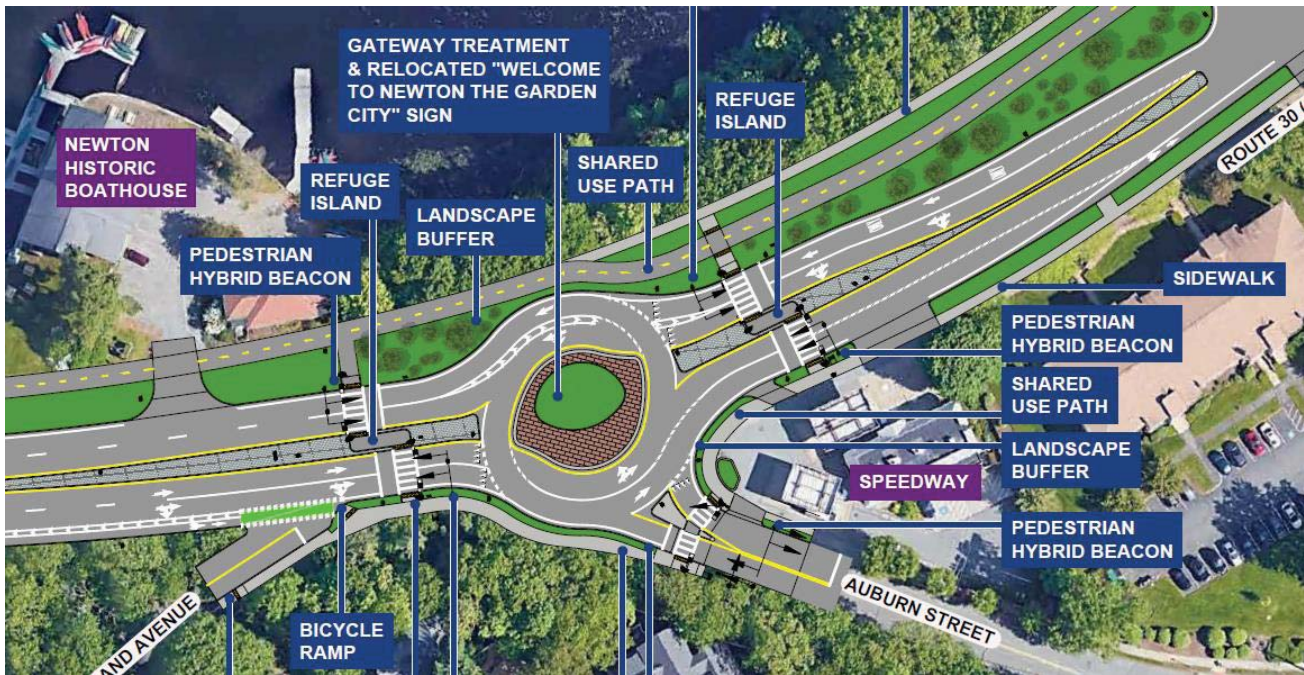
Traditional T - Intersection



Mixed Lane Modern Roundabout



Mixed Lane Modern Roundabout



Alternative Comparison Matrix

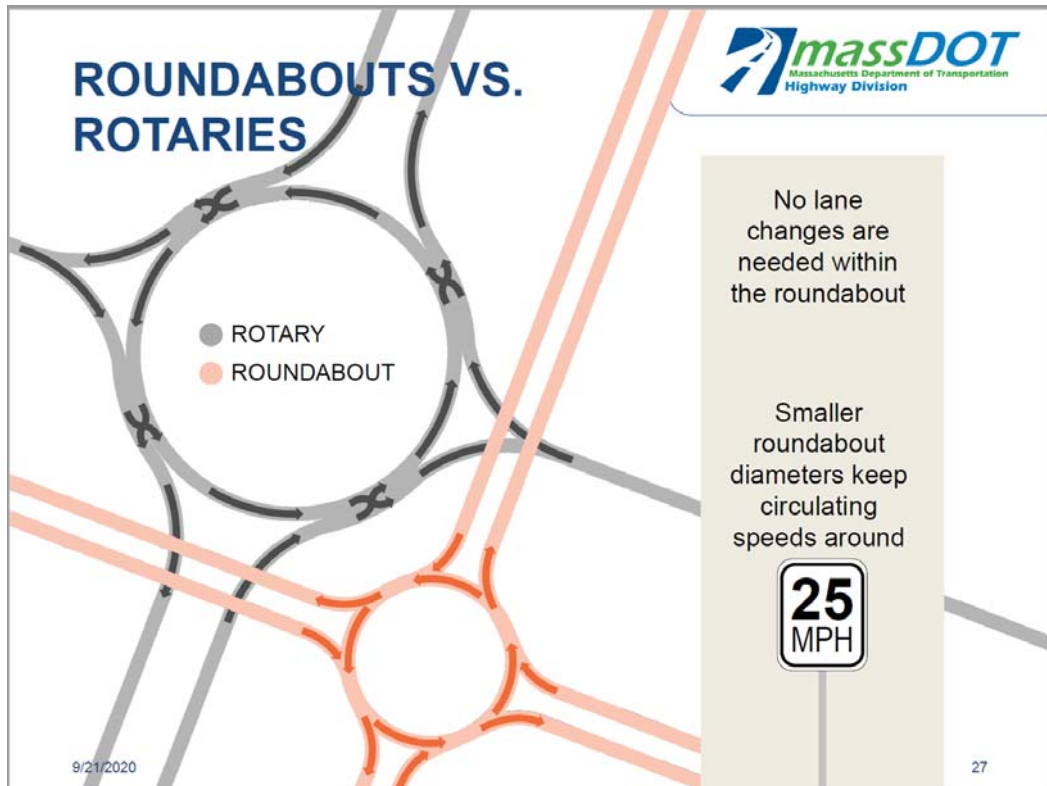
	No Build Condition	Traditional T-Intersection	Mixed Lane Modern Roundabout	Continuous Green T-Intersection	Displaced Left Turn
Multimodal Accommodations & Crossing Treatment	No APS or crossings across Comm Ave	Shared Use Path Shared or Separated Signalized crossings	Shared Use Path Shared Crossing with Pedestrian Hybrid Beacon (HAWK)	Shared Use Path Shared or Separated Signalized crossings	Shared Use Path Shared or Separated Signalized crossings
Peak hour Intersection level of service	AM 23.2s PM 22.0s	AM 20.1s PM 17.7s	AM 27.5s PM 12.8s	AM 21.2s PM 17.6s	AM 21.4s PM 13.4s
Route 30 westbound (Average) Max Queue Length(ft)	AM (12) 43 PM (26) 68	AM (245) #530 PM (162) 403	AM (0) 265 PM (0) 111	AM (0) #626 PM (0) #1132	AM (253) #560 PM (168) 461
Route 30 eastbound (Average) Max Queues(ft)	AM (190) 383 PM (267) 467	AM (61) #396 PM (144) 297	AM (0) 60 PM (0) 47	AM (69) #483 PM (165)#450	AM (143) 293 PM (102) 291
Intersection Green Space	Existing medians unusable space 18000 SF	14900 SF	20500 SF	17700 SF	17500 SF
MassDOT Preference	Eliminate	Consider	Consider	Eliminate	Eliminate
City of Newton Preference	Eliminate	Eliminate	Consider	Consider	Eliminate

3. About Roundabouts

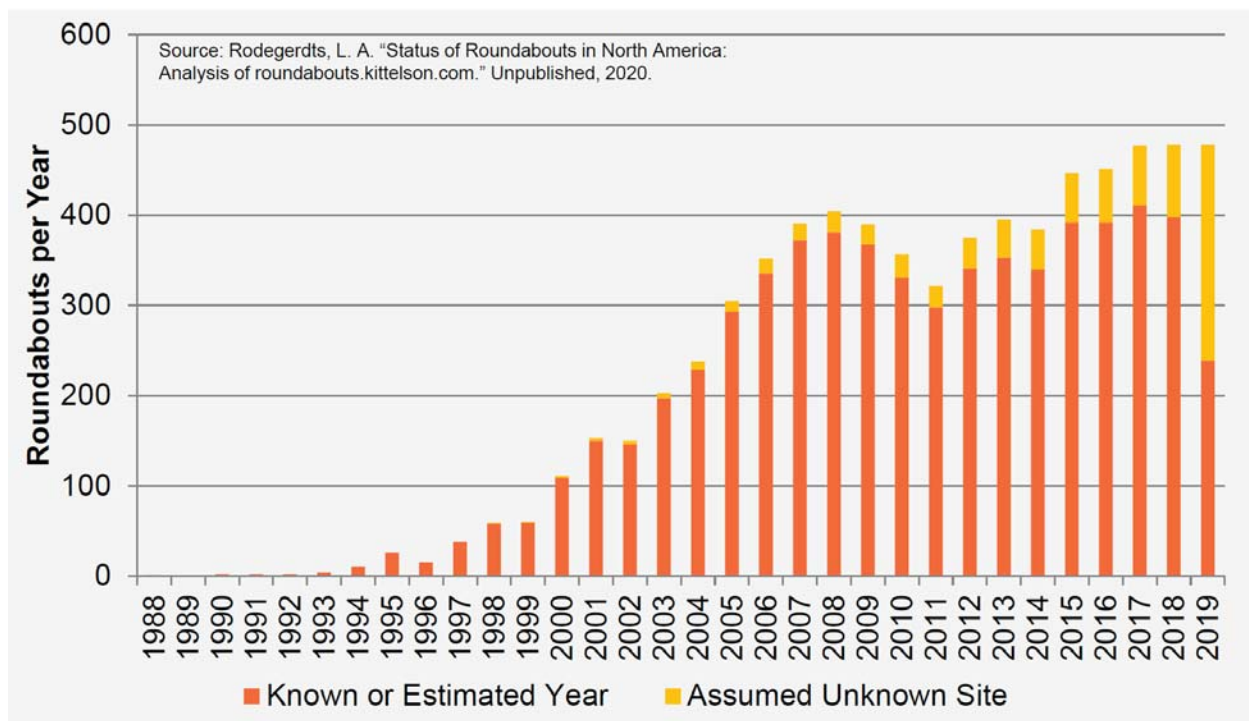
Modern roundabouts are very different than rotaries



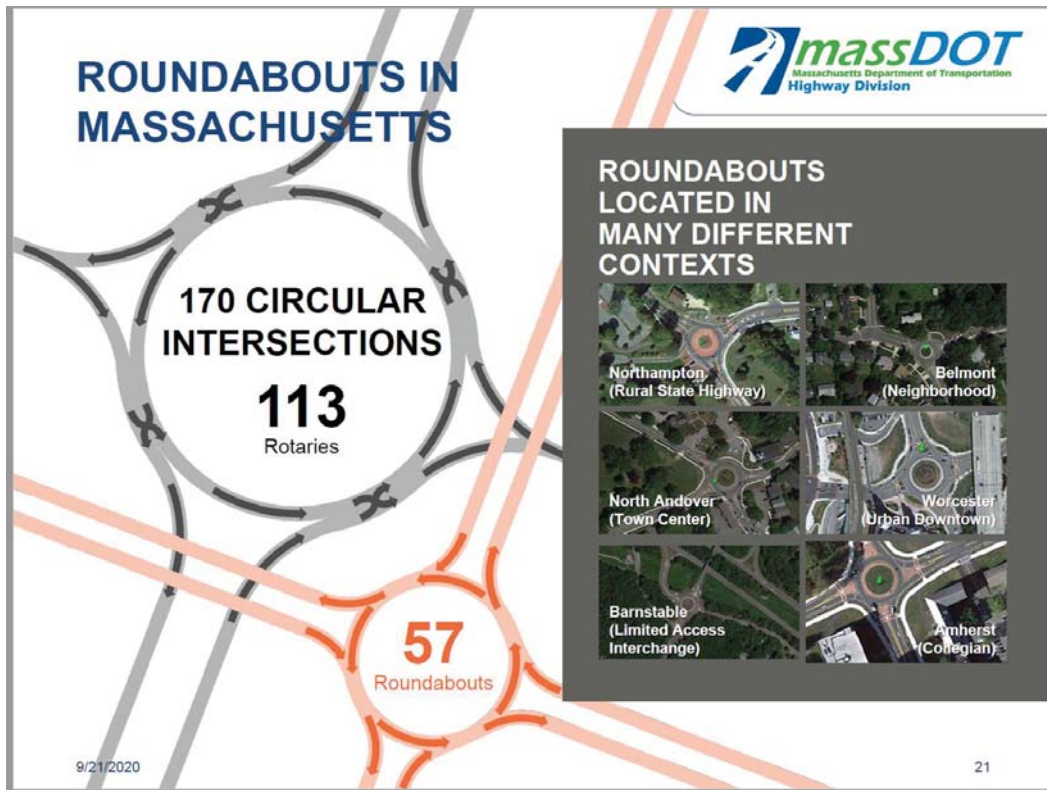
Modern roundabouts are smaller and safer than rotaries



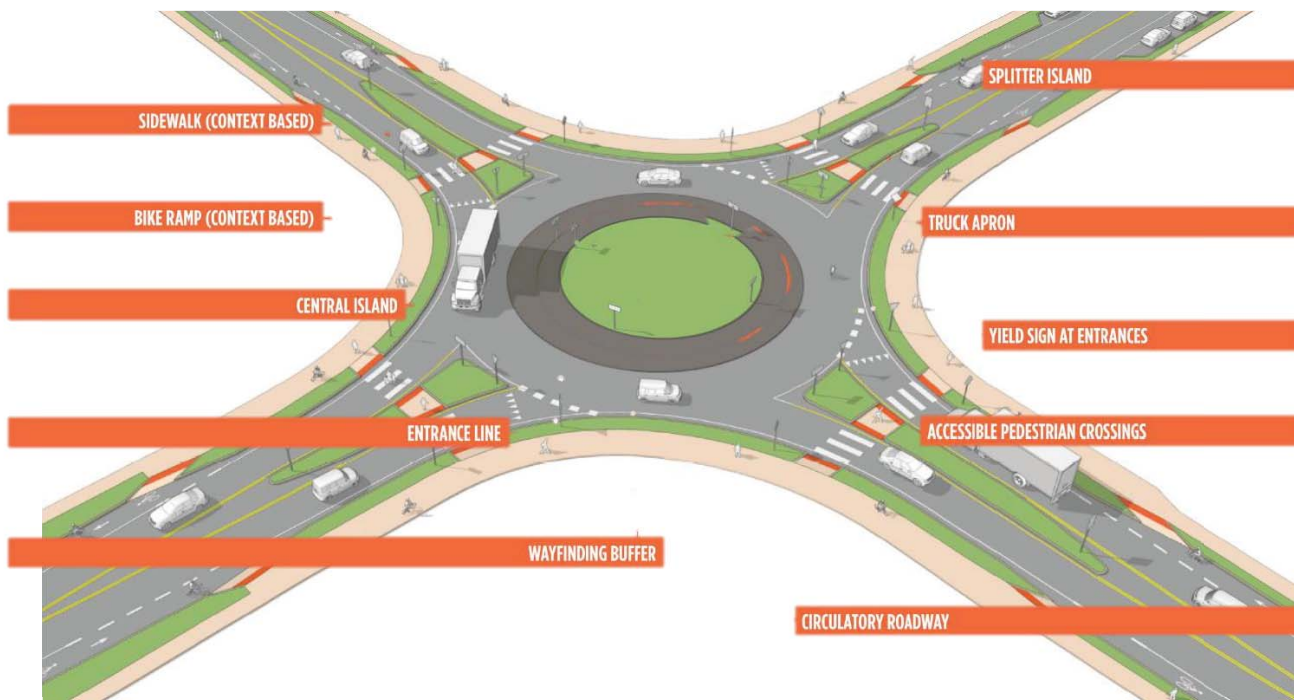
Newton will not be the first city to implement a modern roundabout



Newton will not be the first city to implement a modern roundabout



The proposed roundabout follows established best practices



4. Preliminary Questions Answered

Question: Can you provide a simulation of the roundabout at peak hour?
Answer: Yes. Please see below.



VISSIM Video Simulations Roundabout

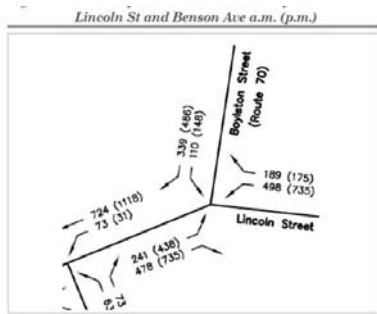
- <https://youtu.be/z1oGaJXR-V0> (AM Peak)
- <https://youtu.be/q76zlnQNNPY> (PM Peak)
- https://youtu.be/Lrqvl_ZiPHY (Ped Close-up)

Continuous Green T-Intersection (Florida T)

- https://youtu.be/r-y_-mwq14o (AM Peak)
- <https://youtu.be/JGalhAiL170> (PM Peak)

Question: Are there examples of successful modern roundabouts handling similar traffic volumes?

Answer: Yes. Boylston St @ Lincoln St, Worcester, MA



Question: Are there examples of successful modern roundabouts handling similar traffic volumes ,cont'd?

Answer: Yes. Lake Ave @ South Ave, Worcester, MA



Figure 10. 2020 a.m. Peak Hour TMC

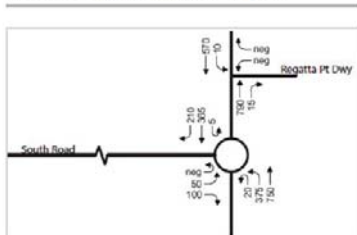
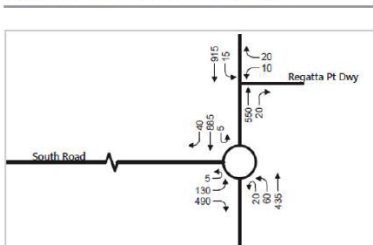
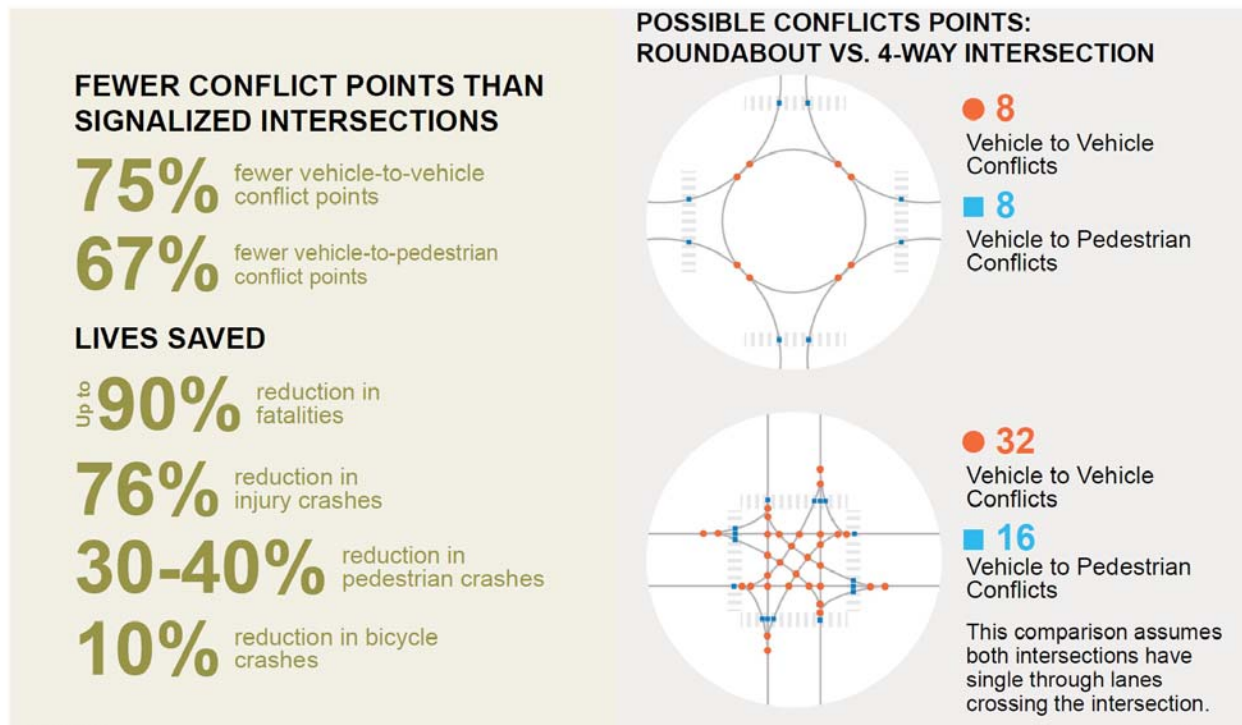


Figure 11. 2020 p.m. Peak Hour TMC



Question: Is the roundabout safe, especially for kids?

Answer: Yes.



Question: Is the roundabout safe, especially for kids, cont'd?

Answer: Yes.

Slower Vehicle Speeds (under 25 mph)

- Drivers have more time to judge and react to other cars or pedestrians
- Advantageous to older and novice drivers
- Reduces the severity of crashes
- Keeps pedestrians safer

LOWER SPEED

Lower speed is associated with better yielding rates, reduced vehicle stopping distance, and lower risk of collision injury or fatality. Also, the speed of traffic through a roundabout is more consistent with comfortable bicycle riding speed.



SHORTER, SETBACK CROSSINGS

Pedestrians cross a shorter distance of only one direction of traffic at a time since the entering and exiting flows are separated. Drivers focus on pedestrians apart from entering, circulating and exiting maneuvers.



Question: Is the roundabout safe, especially for kids, cont'd?
 Answer: Yes.

Insurance Institute for Highway Safety

Roundabouts are a safer alternative to traffic signals and stop signs. The tight circle of a roundabout forces drivers to slow down, and the most severe types of intersection crashes — right-angle, left-turn and head-on collisions — are unlikely.

AARP

AARP fact sheet supports roundabouts as safer for older drivers

- Require slower vehicle speeds
- Reduce collision severity
- Eliminate the need to make left turns in front of oncoming traffic

Question: Can you implement a trial of the roundabout?
 Answer: Not recommended, based on the following

Required for Trial Construction

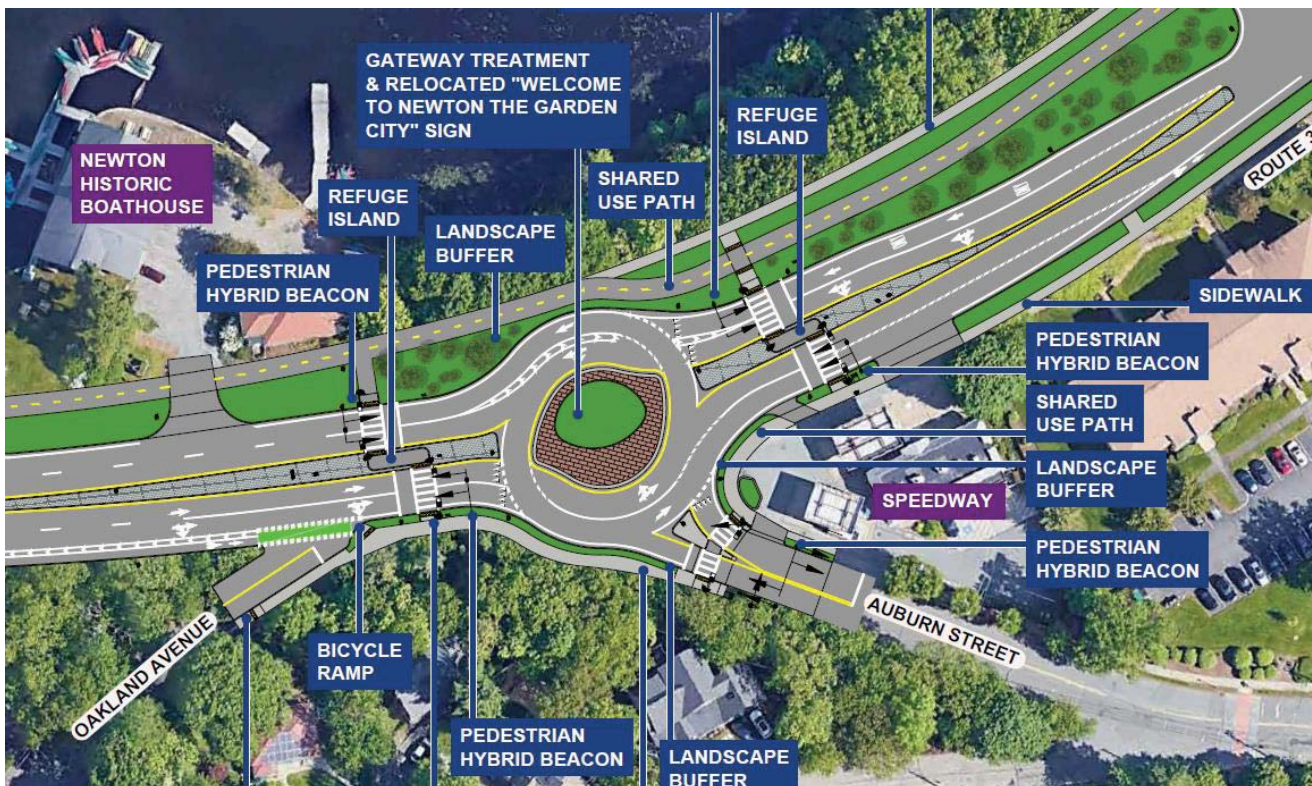
1. Excavation of landscaped medians and sidewalks
2. Relocation of 1 light pole and 3 utility poles by utility companies
3. Removal of up to 8 existing trees
4. Reconstruction of all accessible pedestrian ramps
5. Removal and replacement of existing signal equipment
6. Eradication of line striping
7. Temporary signage for wayfinding and operations
8. Variable message signs on all approaches
9. Coordination with conservation commission, local abutters, public

Temporary roundabouts provide less capacity and less safety than permanent configurations. They create more driver confusion and do not have full beneficial use of the planned pedestrian accommodations. It would not be a good demonstration of how the roundabout would work under permanent conditions

Question: Can you have a red pedestrian light at Auburn St?
Answer: A pedestrian hybrid beacon is being considered



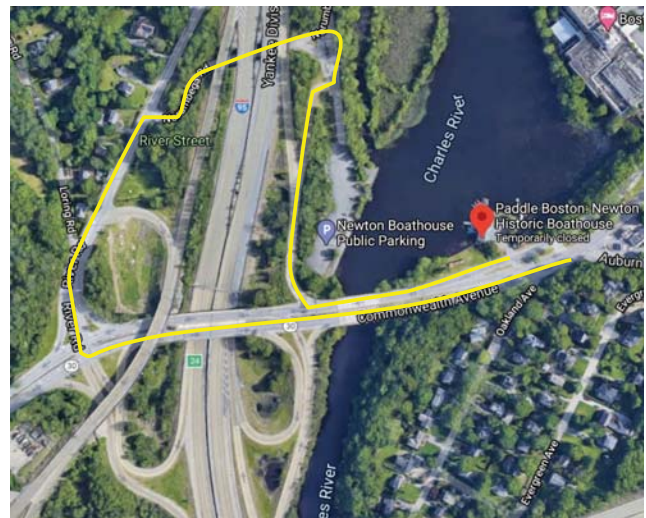
Question: How do bikes navigate the roundabout on the south side?
Answer: Bikes will use a buffered bike lane to a shared use path.



Question: At the boathouse, where can buses wait for drop off/pick up?

How do exiting vehicles travel east?

Answer: Evaluating using the grass buffer for buses. Vehicles heading east will exit west, then exit at the I95 NB on ramp to Nurembega Rd.



Question: How far west does the sidewalk or bike path extend?

Answer: A shared use path continues west of the roundabout to Nurembega Road and the Boathouse parking lot



5. Timeline and Next Steps

Timeline & Next Steps

- | | |
|---|------------------------|
| 1. City of Newton Public Information Session | 1/14/2021 |
| 2. City Council Committee Presentation and Vote | 1/20/2021 |
| 3. MassDOT 25% Design Hearing | Likely 3/2021 |
| 4. Advertising Date | Spring 2022 |
| 5. Construction | Fall 2022- Summer 2025 |

6. Questions & Comments

Nicole Freedman
Director of Transportation Planning
City of Newton
Nfreedman@newtonma.gov

City of Newton Carriageway Project

