

A photograph of a residential street with trees, parked cars, and a person walking on the sidewalk. The image is darkened to serve as a background for the text.

# Garden Street Safety Improvement Project Community Meeting #4

September 20, 2022 | 6:00 pm | Zoom

# Garden Street Safety Improvement Project

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## Fourth Community Meeting

September 20, 2022 | City of Cambridge

### Provide Feedback after the Presentation

- You will find information on how to give feedback at the end of the presentation

### Cameras + Microphones

- Your camera is off
- We will enable your microphone only when you are speaking

### We are Recording

- We will post the recording of tonight's meeting on the project page

**[cambridgema.gov/GardenStHuronMason](https://cambridgema.gov/GardenStHuronMason)**

# Agenda

- Project Schedule
- Planning Background: Policies + Ordinances
- Planning Background: Separated Bike Lanes and the Bike Plan
- Project Overview
- Preferred Layout (Option 3)
- Next Steps
- Questions + Feedback

# Project Schedule

## Meetings/Timeline

**May 24**

Community Meeting 1

**July 12**

Community Meeting 2

**August 9**

Community Meeting 3

 **September 20**

Community Meeting 4

**September 22**

Community Open House

**Fall 2022\***

Project Installation

## Outreach

### What we've done:

- Posters attached to signposts along street
- Individual notifications to major stakeholders including schools, houses of worship, etc.
- Update emails sent to city and project mailing lists
- Mailed postcards and delivered flyers door-to-door to addresses within impacted area

### What you can do:

- Sign up for the mailing list for the latest updates
- Sign up for the city's Daily Update emails
- Email or call the project manager directly
- Visit the project webpage below for the latest information

**[cambridgema.gov/GardenStHuronMason](https://cambridgema.gov/GardenStHuronMason)**

\* Some parts of Section D, Concord Avenue to Mason Street will be installed in 2023



# **Planning Background: Policies + Ordinances**

# What drives our street design?

**We design for people of all ages and abilities.**

**This includes:**

- People who may not have access to a car
- Safe and accessible facilities, including bike lanes, that can be used by a wide range of people

**How we think about vehicle congestion and delay**

- Moving people slowly is moving people safely
- We do not prioritize eliminating delay for people driving alone

**Focus is on moving people and goods, not their vehicles**

- Buses run less frequently than cars, but carry more people
- Cannot ignore access for trucks and local deliveries



# Street Design - Enforcement - Education

## Street Design

- A Safe System is a human-centered approach to street design, engineered to prevent errors as much as possible and lessen the impacts of errors when they do occur.
- Shifts away from individual blame
- Keep road users safe by designing for the most vulnerable (i.e. people not in cars)
- Crash prevention is more effective than crash mitigation

## Enforcement and Education

- Enforcement and Education are supplemental to proper street design, not a replacement

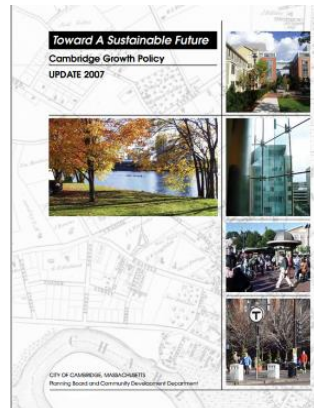
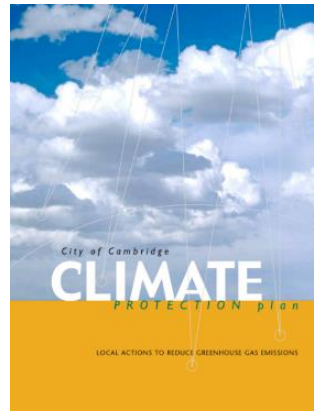
### Example:

A momentary distraction can mean a driver doesn't see a cyclist or vice versa.

Providing separation between people in cars and people on bikes decreases the chance that a momentary distraction leads to a deadly crash.

# City Policies that Support Sustainable Transportation

- Vehicle Trip Reduction Ordinance
- Parking & Transportation Demand Ordinance
- Climate Protection Plan
- School Wellness Policy
- Envision Cambridge



## ► Complete Streets



## ► Vision Zero



## ► Cycling Safety Ordinance





# Cycling Safety Ordinance Overview

## 2019: City Council Passed the Cycling Safety Ordinance

- Requires construction of separated bike lanes when streets are being reconstructed as a part of the City's "Five-Year Plan for Streets and Sidewalks" and when they have been designated for "Greater Separation" in the Bicycle Network Vision

## 2020: City Council Passed Amendments to the Ordinance

- The amendments set ambitious requirements for the installation of approximately 25 miles of separated bike lanes within the next five to seven years.
- The location of these facilities is informed by both the Cambridge Bicycle Network Vision and specific requirements in the Ordinance.

Image: A separated bike lane on Brattle St;

Credit: Kyle Klein



# Cycling Safety Ordinance Overview- Continued

In general, the amendments to the Ordinance require the installation of separated bike lanes on:

- All of Massachusetts Ave;
- **Garden St, eastbound from Huron Ave to Berkeley St, and westbound from Mason St to Huron Ave;**
- Broadway from Quincy St to Hampshire St;
- Cambridge St from Oak St to Second St;
- Hampshire St from Amory St to Broadway; and
- 11.6 miles of separated bike lanes in other locations within the Bicycle Network Vision

Learn more at  
[cambridgema.gov/cycling-safety-ordinance](https://cambridgema.gov/cycling-safety-ordinance)

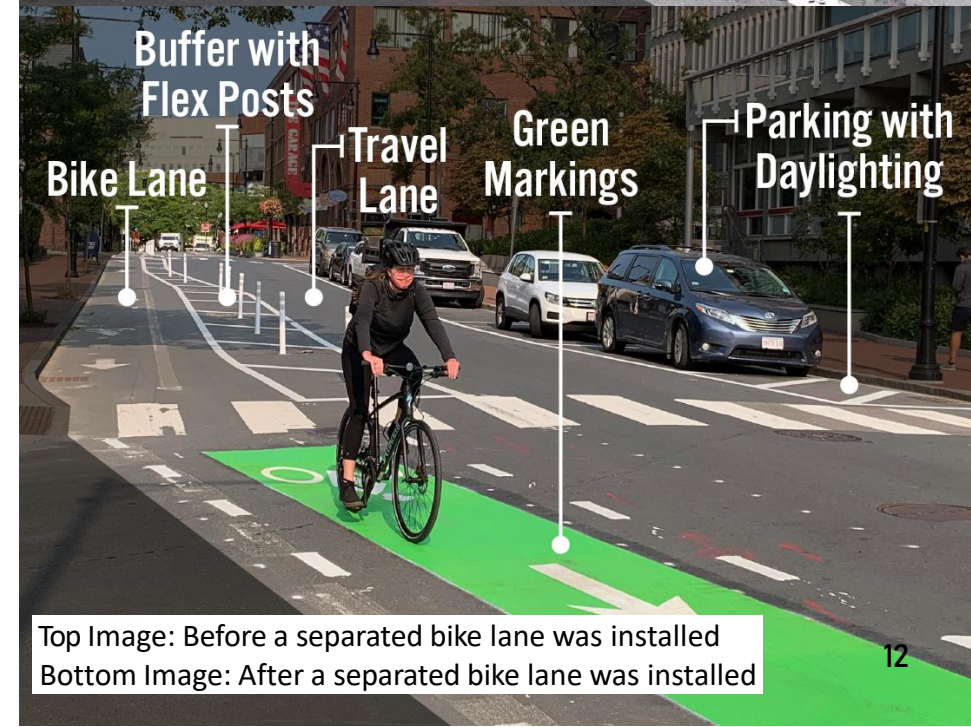


# **Planning Background: Separated Bike Lanes and the Bike Plan**



# Separated Bike Lane Benefits

- Increases comfort and access for people of all ages and abilities
- Reduces crash and injury risk
- Eliminates threat of "dooring" from parked vehicles
- Reduces potential conflicts between vehicles and people biking
- Encourages slower traffic speeds by visually narrowing the roadway width

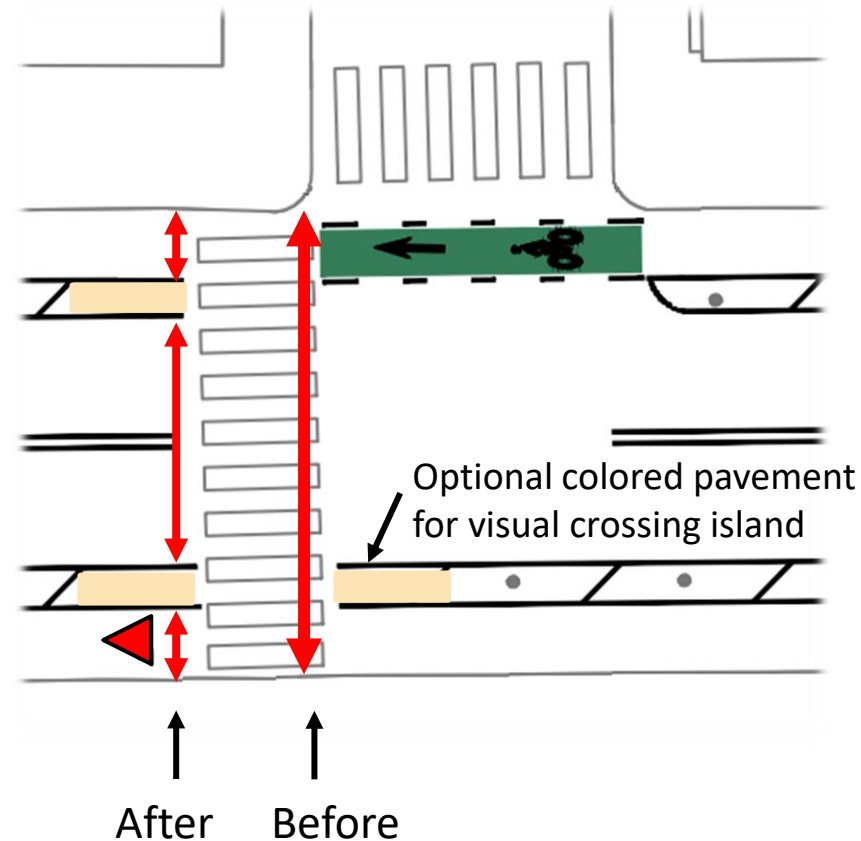




# Separated Bike Lane Benefits - Pedestrian Safety

Separated bicycle lanes improve safety for people walking

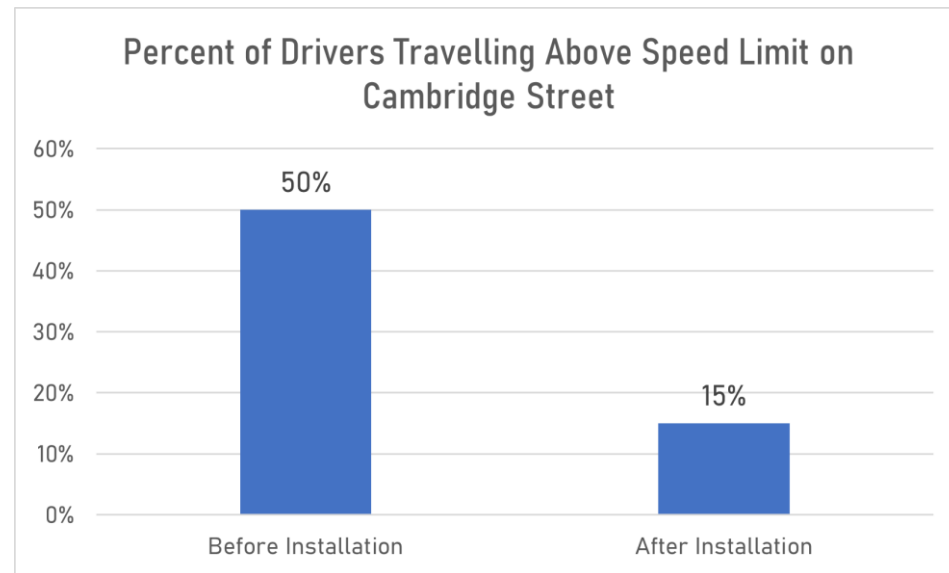
- Shorter crossing distances
- Better sightlines
- Each potential conflict can be handled separately (i.e., cross bike lane, then vehicle lanes)
- Visually narrows the roadway for drivers, encouraging lower speeds and higher yielding rates.



# Separated Bike Lane Benefits – Continued

## Speed Reduction

- Separated bike lane projects narrow the roadway for drivers, both physically and visually
- This lowers driver speeds, which increases overall safety
- Lower speeds are safer for all users, including people walking, driving, and biking
- Example: The Cambridge Street project (2017/2018) saw a reduction in overall speeds of about 25%



Cambridge Street Bicycle Safety Demonstration Project - CDD - City of Cambridge, Massachusetts ([cambridgema.gov](http://cambridgema.gov))



Image: Cambridge Street separated bike lane (2017)

# Separated Bike Lane Benefits – Continued

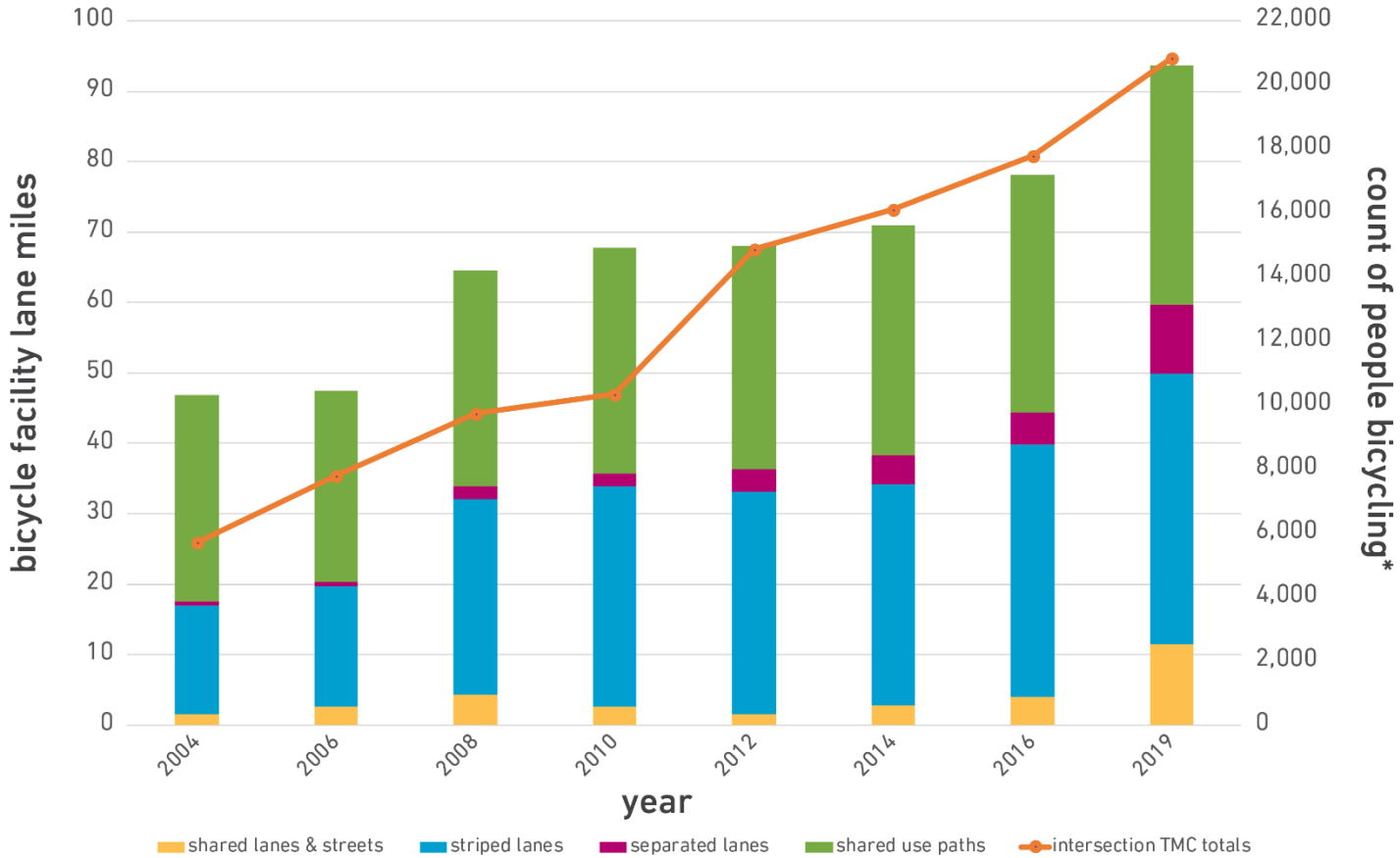
More people ride bicycles when we build more bicycle infrastructure.

A lack of safe and accessible routes and facilities for people of all ages and abilities prevents many people from biking.

As we've built more, we've enabled a wider variety of people to bike



**BICYCLE FACILITY LANE MILES AND  
NUMBER OF PEOPLE BICYCLING (2004-2019)**





# Cambridge Bicycle Plan

*Vision from the Cambridge Bicycle Plan:*

Cambridge will be a place where bicycling is equally available to everyone, all destinations can be reached by bike, and streets are designed to accommodate bicycling **for people of all ages, abilities and identities.**

A variety of barriers make it harder for people to choose to bicycle, even though they would like to. Creating safe and comfortable streets is a necessary condition to enable everyone to have this choice. This reflects the philosophy that people are at the center of transportation planning and design.





# Garden Street in the Bicycle Plan

Garden Street from Huron Avenue to Mason Street is designated for “greater separation” to support people biking safely and comfortably.

Garden Street is a priority:

- Key East-West corridor that avoids busier streets like Concord Avenue
- Helps connect CRLS (high school) with sports facilities at Danehy Park and Russell Field
- Key route to/from Radcliffe Quad
- Connects residents and visitors to retail, jobs, parks, and squares

Learn more: [cambridgema.gov/2020bikeplanupdate](https://cambridgema.gov/2020bikeplanupdate)

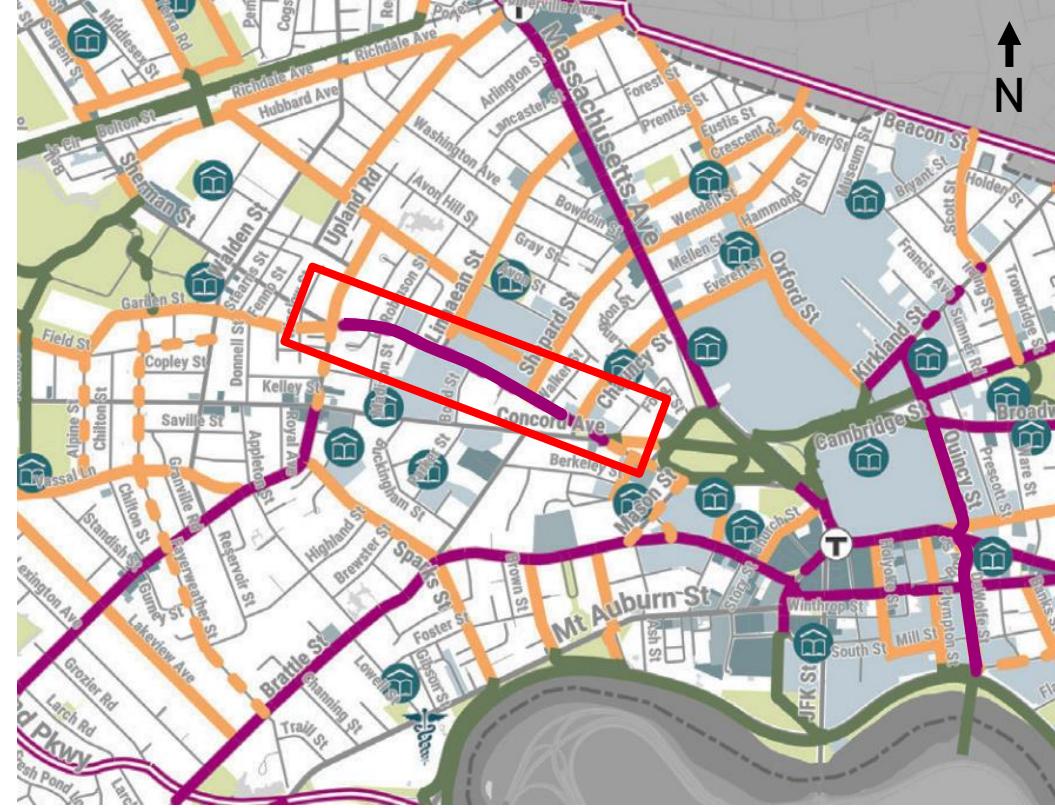


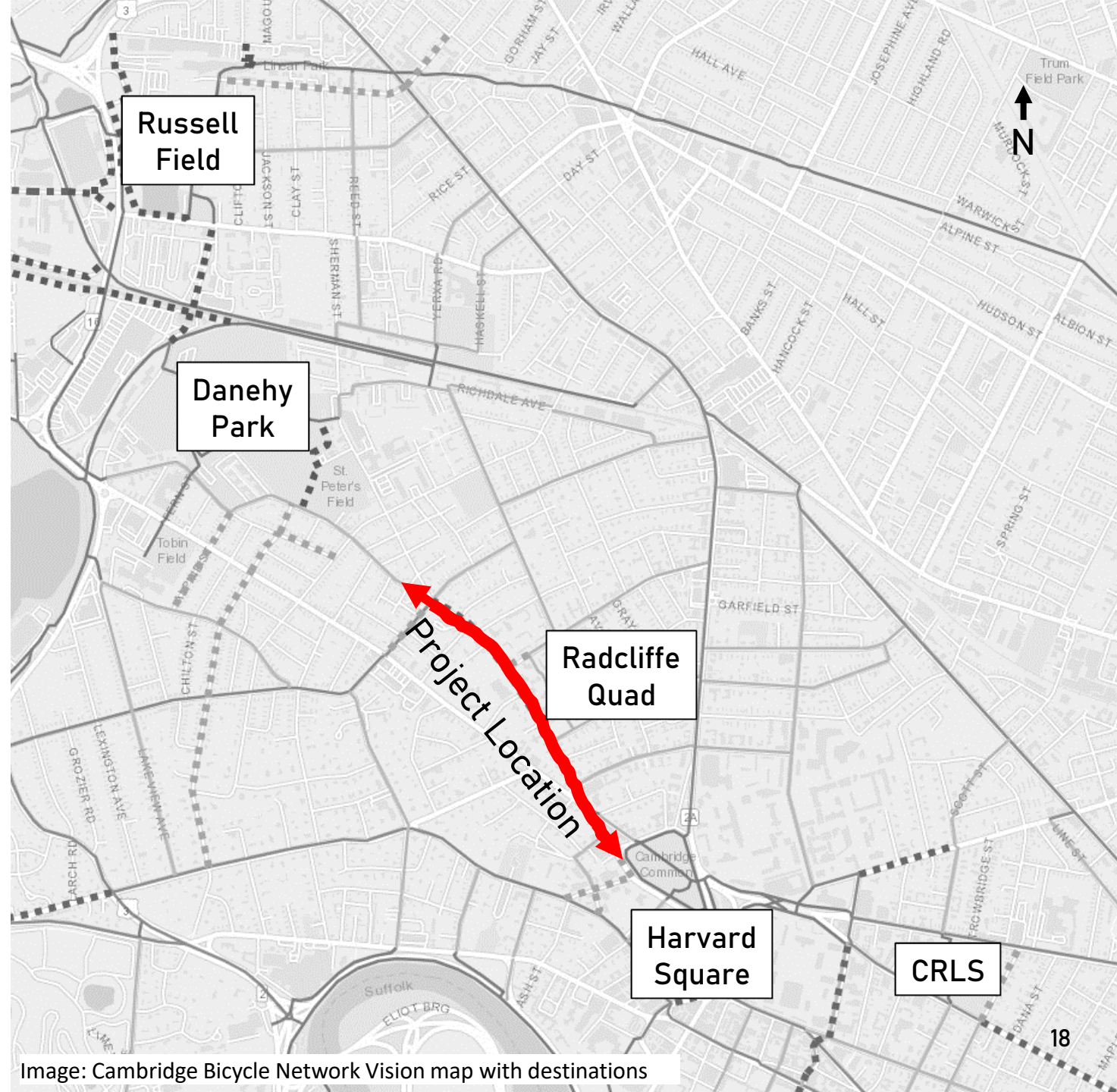
Image: Shuttle bus passing a person biking on Garden Street



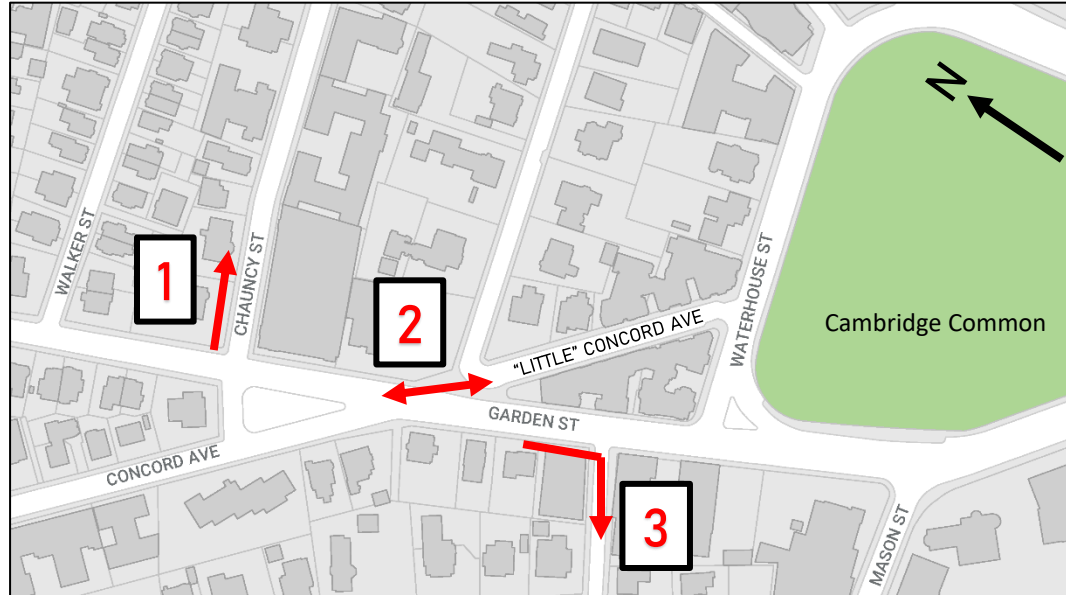


# Key Connections

- East-West corridor that avoids busier streets like Concord Avenue
- Helps connect CRLS (high school) with sports facilities at Danehy Park and Russell Field
- Key route to/from Radcliffe Quad
- Connects residents and visitors to retail, jobs, parks, and squares



# Key Connections - Bicycle Routes



Chauncy St/Arsenal Sq  
(towards Mass Ave)

"Little" Concord Avenue  
(East-West travel)

Berkeley St, Phillips Pl,  
and James St  
(to Harvard Sq)



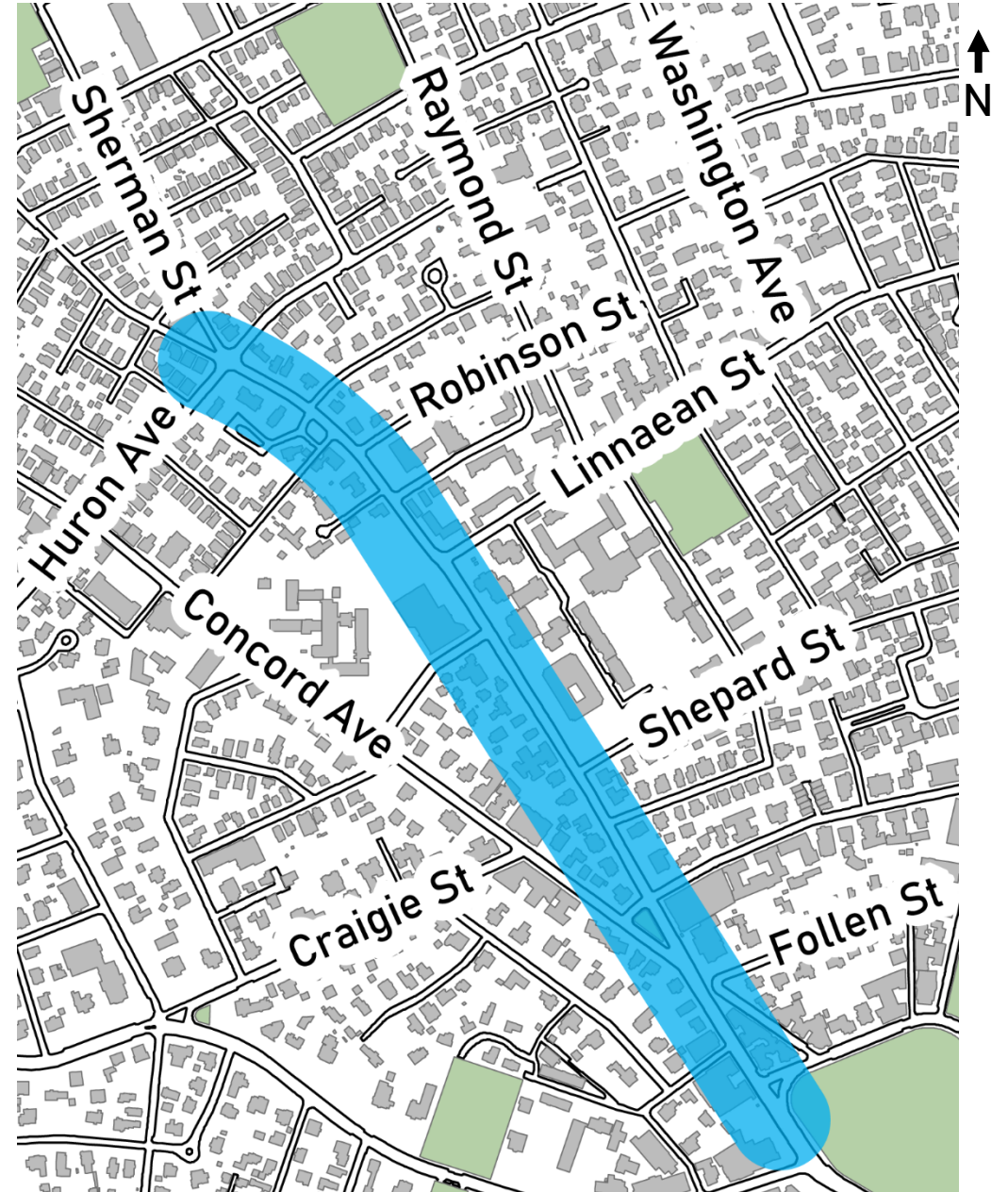
# Project Overview



# Project Area

Garden St 

Huron Avenue to Mason Street



# Project Scope



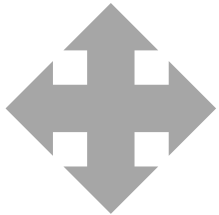
Install separated bike lanes



Improve crossing locations for people walking



Identify locations for curbside access (parking, loading)



Address safety at key intersections

# What is a quick-build project?

Quick-build projects allow us to make safety improvements more rapidly

Our quick-build toolbox includes:

- Pavement marking changes
- Installation of flex posts
- Changes to signage
- Some modifications to signal timing



Image: Cambridge Street Separated Bike Lane (2017)



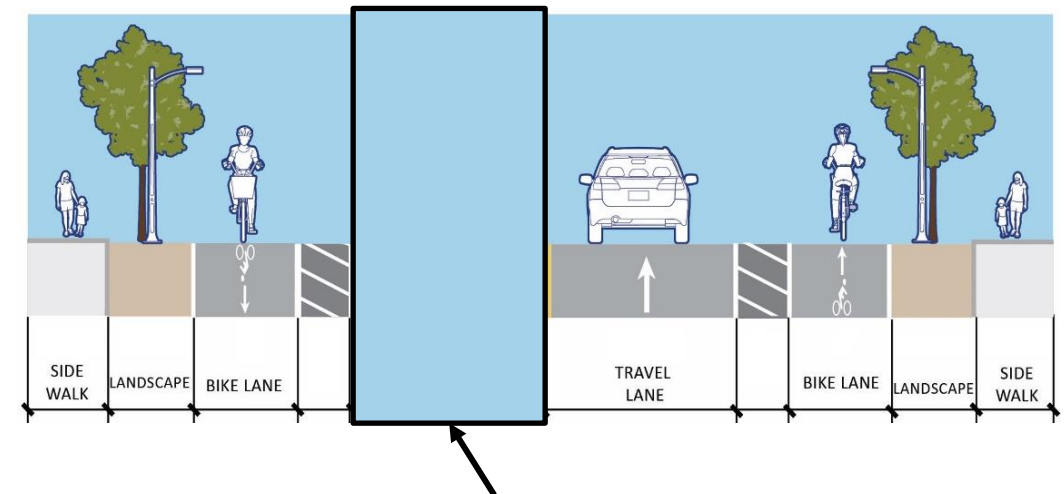
# Design Considerations - Trade-offs

## Parking and Loading

- Most buildings have driveways in the western end of the project near Huron Avenue
- There are many residents without driveways in the eastern end of project near Waterhouse Street
- The eastern end also has businesses, houses of worship, and schools that use short term parking

## Street Network (one-ways for vehicles)

- Making Garden Street a one-way can reduce total traffic volumes
- Extra space could become parking
- Need to consider neighborhood circulation, including shuttles
- Impacts could extend beyond project area



Trade-off: Travel lane or parking lane?

# Design Considerations – Bike Lane Directionality

## Bike lane directionality (one-way vs two-way)

- Two-way bike lanes take up less roadway space, but aren't as intuitive as one-ways
- People driving expect people biking to be going in the same direction as them
- Drivers need to look in both directions before crossing two-way bike lanes
- Switching between a two-way bike lane on one side and one-way bike lanes on both sides is easier at a traffic signal



Image: A two-way separated bike lane on Brattle Street (2017)



Image: A one-way separated bike lane on Mt Auburn Street (2020)



# Previous Community Meetings

We held three community meetings on Zoom for the community to provide feedback on the project.

## First Community Meeting (May 24)

- No set plan for the street
- Focused on city policies, legal requirements, the origins of the project, and its scope
- Asked what works and doesn't work today and discussed potential trade-offs

## Second Community Meeting (July 12)

- Presented two layout options based on community feedback
- Heard strong support for a longer one-way option
  - ✓ Keeps more parking
  - ✓ Provide continuous one-way bike lanes



Image: Postcard mailed to 3,500 addresses in project area in May

## Prior to Third Community Meeting (August 9):

Expanded outreach to include areas and community members affected by new one-way street options

- Email list, project website, city daily email updates, signs along the street, flyers distributed door-to-door
- Explicitly stated that one-way options were being considered

# Previous Community Meetings - Continued

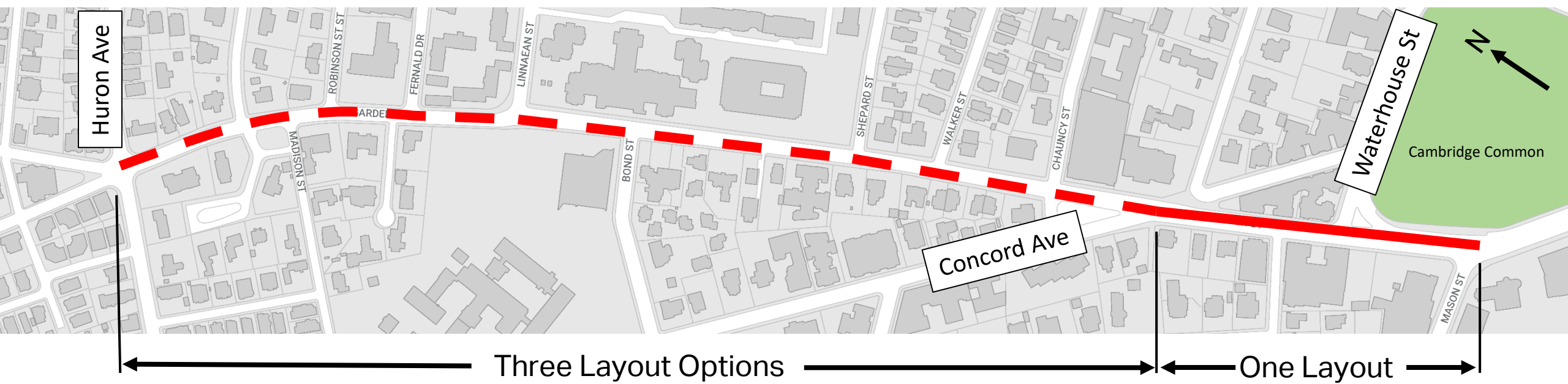
At the third community meeting on August 9, we presented three layout options for the street. Community feedback included:

- Preference for one-way bike lanes on both sides instead of a two-way bike lane on one side
- Keep as much parking as possible
- Consider the needs of seniors
- Improve the crosswalks at Waterhouse Street (Sheraton) and at Shepard Street
- Make Garden Street a one-way to make space for parking
- Reduce cut through traffic
- Keep people on bikes off the sidewalks

**Based on this feedback and more, we are moving forward with Option 3, which converts a portion of Garden Street to one-way.**



# Summary of Considered Options

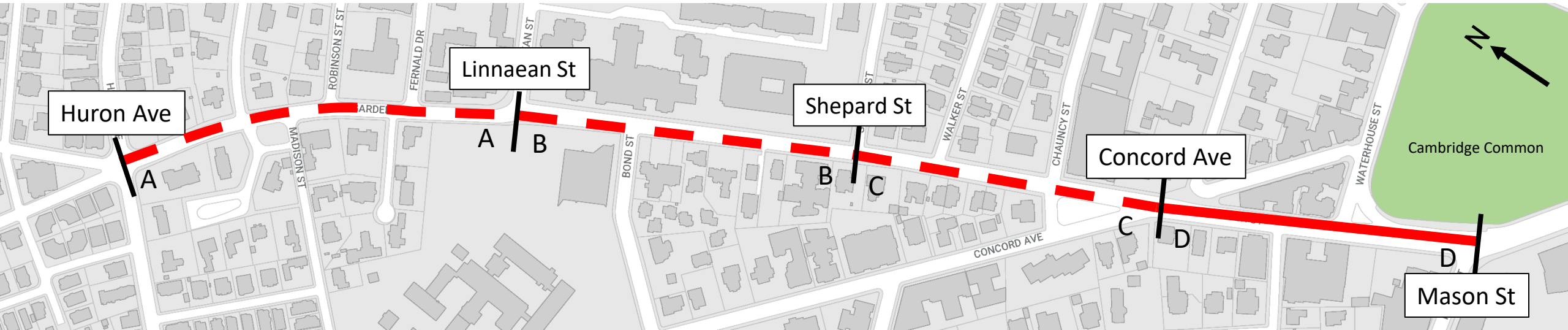


There were three layout options for the area between Huron Avenue and Concord Avenue.

There was one preferred layout for the area between Concord Avenue and Mason Street.



# Summary of Considered Options – Project Sections



To compare options, the project was separated into four sections.

Sections A, B, and C had three layout options while Section D only had one preferred layout.

## Section Key

- A. Huron Avenue to Linnaean Street
- B. Linnaean Street to Shepard Street
- C. Shepard Street to Concord Avenue
- D. Concord Avenue to Mason Street

# Summary of Considered Options

Sections A, B, and C (Huron Avenue to Concord Avenue)

## Option 1

- Two-way vehicle traffic
- Two-way separated bike lane on the south side

## Option 2

- Two-way vehicle traffic (Huron Avenue – Shepard Street)
- One-way vehicle traffic eastbound (Shepard Street – Concord Avenue)
- Two-way separated bike lane on the south side (Huron Avenue – Linnaean Street)
- One-way separated bike lanes on both sides (Linnaean Street – Concord Avenue)

## Option 3

- One-way vehicle traffic eastbound
- One-way separated bike lanes on both sides

Section D (Concord Avenue to Mason Street)

- Two-way vehicle traffic
- One-way separated bike lanes on both sides\*

\*Eastbound separated bike lane to Berkeley Street only

# Summary of Considered Options - Continued

<b>Option 1</b>	Section A Huron to Linnaean	Section B Linnaean to Shepard	Section C Shepard to Concord	Section D Concord to Mason
Biking	Two-way (south side)			One-way (both sides)
Driving	Two-way travel			

<b>Option 2</b>				
Biking	Two-way (south side)	One-way (both sides)		
Driving	Two-way travel		One-way travel (EB)	Two-way travel

<b>Option 3</b>				
Biking	One-way (both sides)			
Driving	One-way travel (EB)			Two-way travel



# Summary of Considered Options - Parking Impacts

## Permit Parking

	Section A Huron to Linnaean		Section B Linnaean to Shepard		Section C Shepard to Concord		Section D Concord to Mason		Overall		
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Change
Option 1	26	0	49	3	18	5	19	13	112	21	-91
Option 2	26	0	49	0	18	23	19	13	112	36	-76
Option 3	26	0	49	31	18	21	19	13	112	65	-47

The preferred layout (Option 3) retains a significant amount of permit parking closer to Harvard Sq.

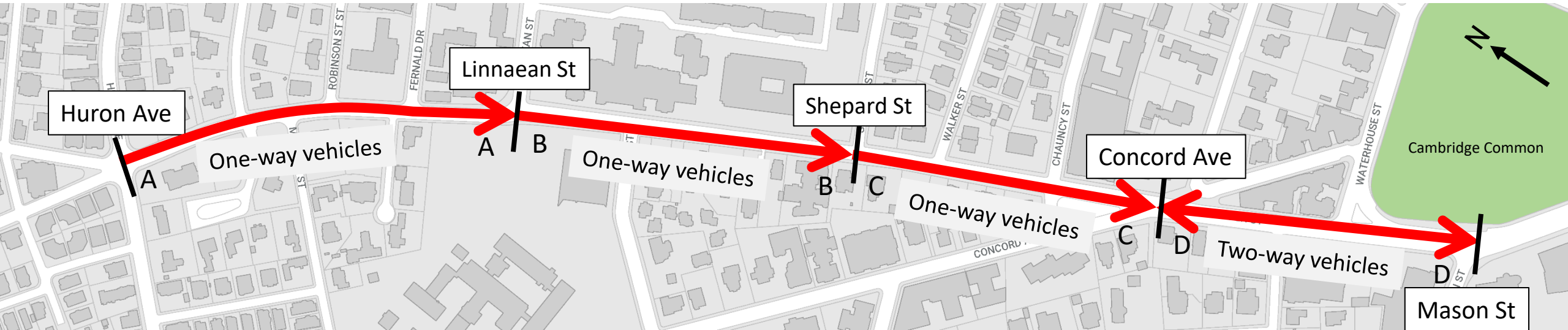
	Shepard St to Waterhouse St (C&D)		
	Existing	Proposed	Change
Option 1	37	18	-19
Option 2	37	36	-1
Option 3	37	34	-3



# **Preferred Layout (Option 3)**

# Preferred Layout

	Section A	Section B	Section C	Section D
Biking	One-way (both sides)			
Driving	One-way travel (EB)			Two-way travel



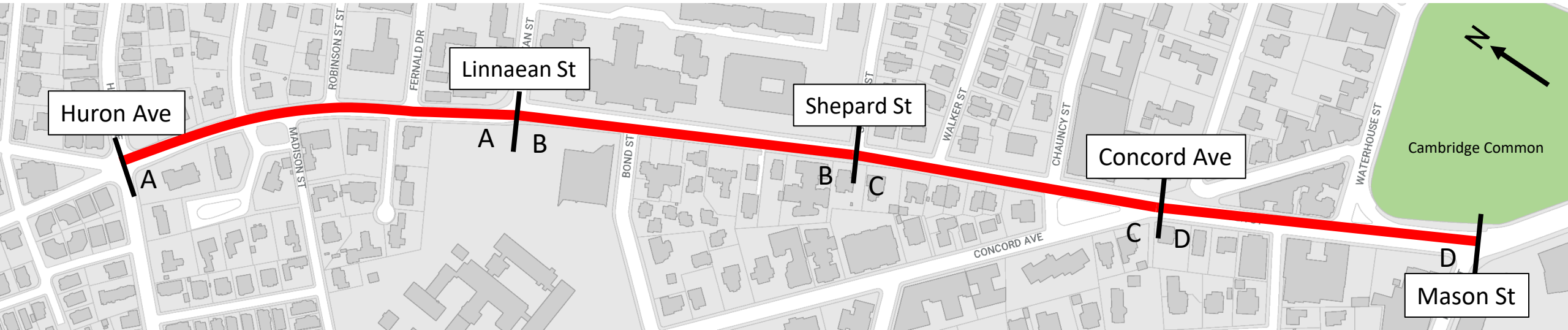
## Preferred Layout (Option 3)

- One-way separated bike lanes on both sides\*
- One-way vehicle traffic eastbound between Huron Avenue and Concord Avenue
- Two-way vehicle traffic between Concord Avenue and Mason Street

\*Eastbound separated bike lane to Berkeley Street only



# Preferred Layout



## Section Key

- A. Huron Avenue to Linnaean Street
- B. Linnaean Street to Shepard Street
- C. Shepard Street to Concord Avenue
- D. Concord Avenue to Mason Street

# Preferred Layout – Key Aspects

## One-way vehicle traffic

(Huron Avenue to Concord Avenue, eastbound)

- Reduces total traffic volumes
- Provides space for parking
- Reduces vehicle volumes on Garden Street west of Huron Avenue (aligns with goals in the Bicycle Network Vision Plan)

## One-way separated bike lanes on both sides

- Predictable interactions at side streets and driveways
- Better access when biking to destinations on both sides of the street
- Straightforward operations and expectations at traffic signals and crosswalks

## Parking and loading

- Retains more parking on Garden Street
- Parking changes sides to maximize the number of spaces
- Prioritizes parking where there is the most need
- Street cleaning parking restrictions are no longer needed

# Preferred Layout - Section A

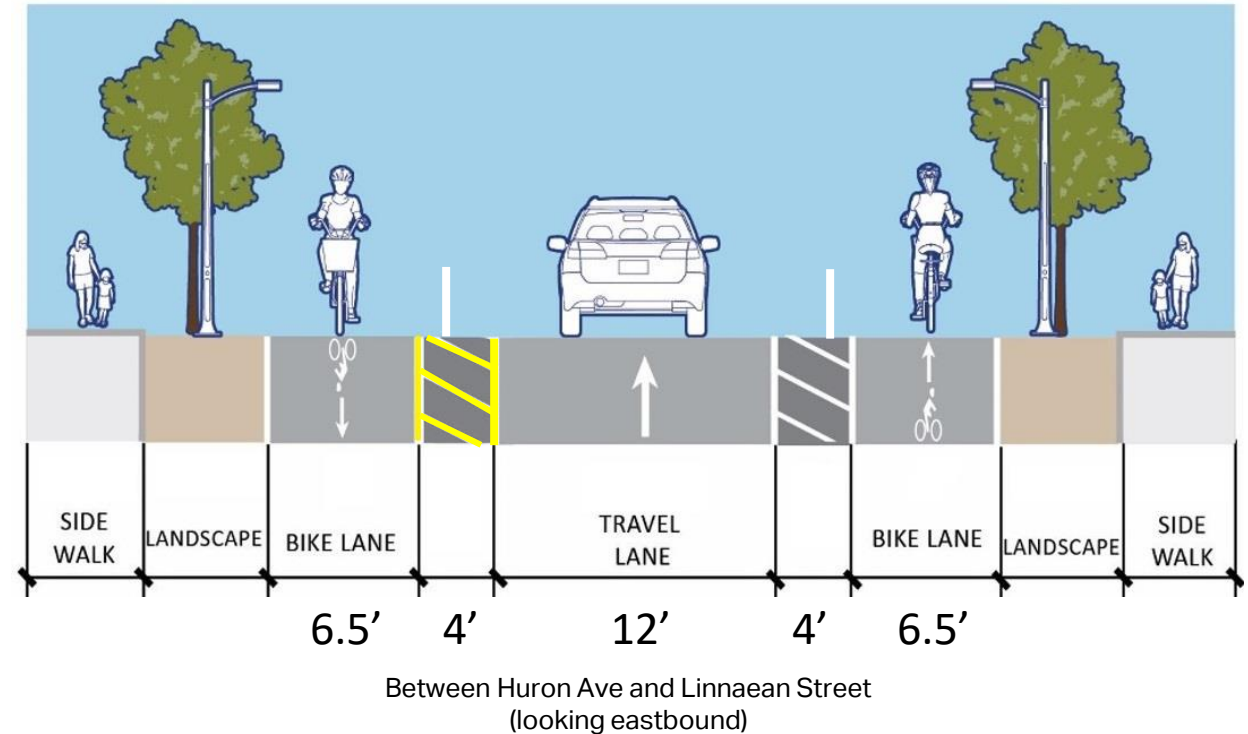
Huron Avenue to Linnaean Street

## Direction of travel

- One-way eastbound for vehicles towards Harvard Square
- One-way separated bike lanes on both sides of the street: one in each direction

## Notes

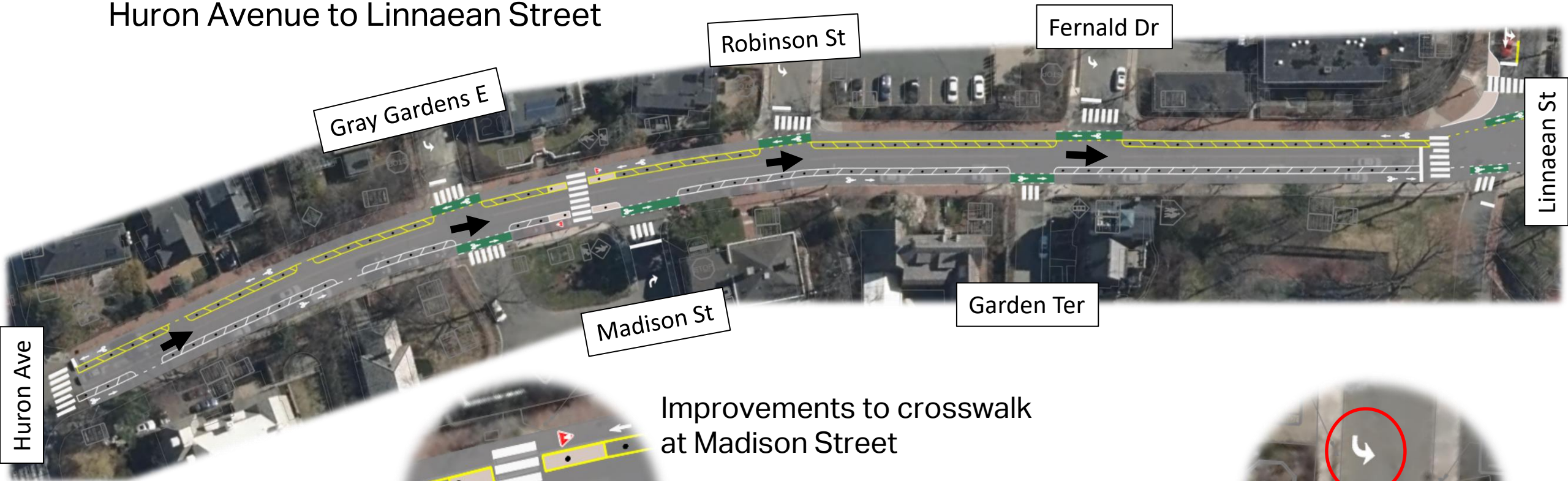
- All parking is removed in Section A (26 spaces)
- Provides space to let a fire truck pass
- Narrows vehicle space lowers driving speeds





# Preferred Layout - Section A

Huron Avenue to Linnaean Street



Improvements to crosswalk  
at Madison Street



All intersecting streets have turn  
arrows to reinforce one-way

# Preferred Layout - Section B

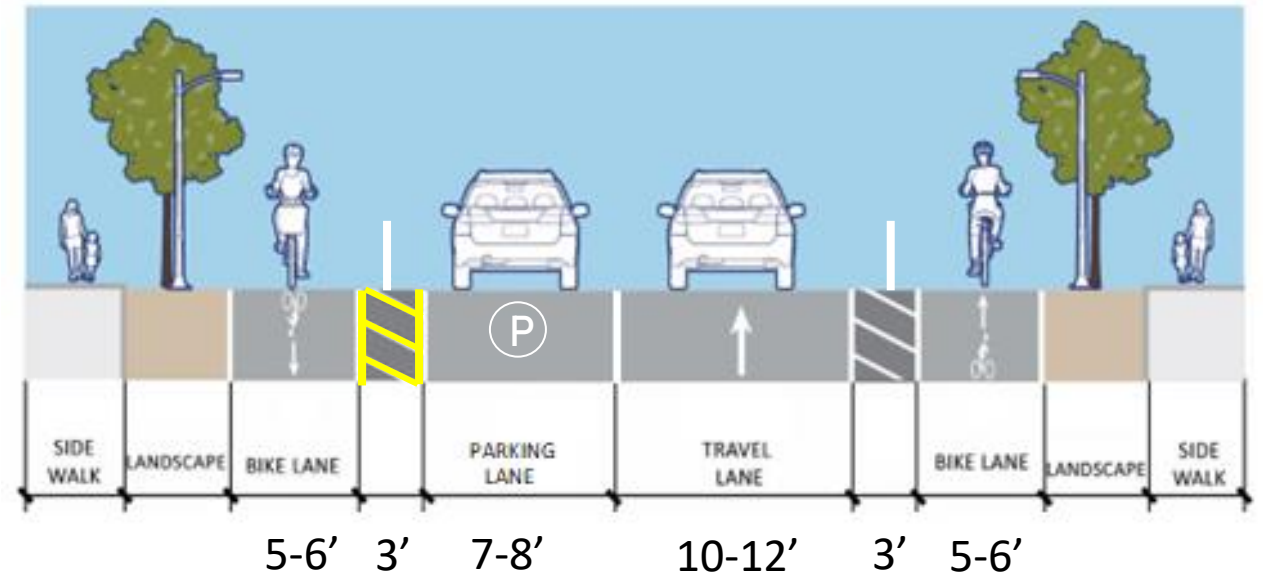
Linnaean Street to Shepard Street

## Direction of travel

- One-way eastbound for vehicles towards Harvard Square
- One-way separated bike lanes on both sides of the street: one in each direction

## Notes

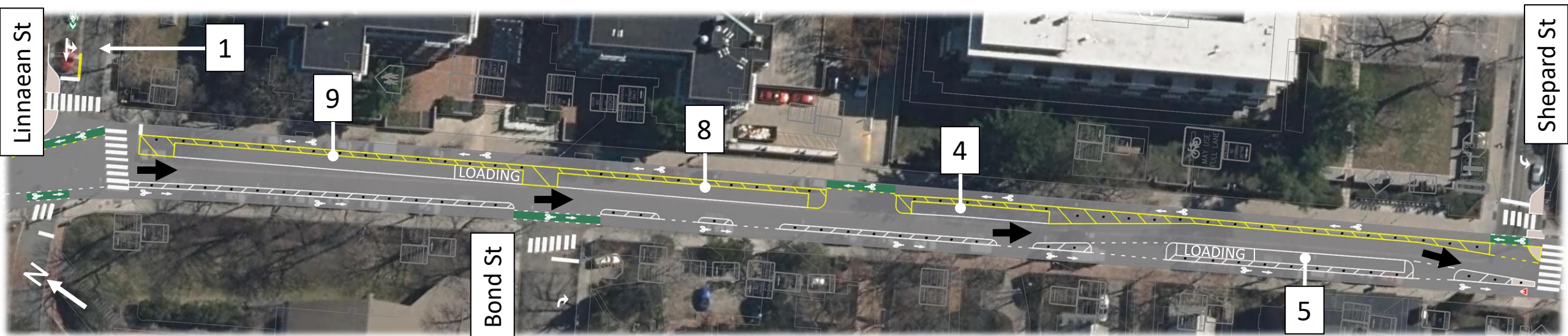
- Parking and loading can be retained on one side of the street
- Provides space to let a fire truck pass
- Narrow vehicle space lowers driving speeds
- Lane widths vary due to inconsistent width of roadway



Between Linnaean Street and Shepard Street (looking eastbound)  
(The parking will be on the right side near Shepard Street)

# Preferred Layout - Section B

Linnaean Street to Shepard Street



## Parking Impacts (Linnaean St to Shepard St)

		Existing	Proposed
#	Permit Parking	49	27
	Loading Zone	1	2
Total		50	29

Based on community feedback:

- Maximized parking by keeping it mainly on north side
- Kept parking on south side near Shepard Street
- Retained the loading zone opposite Bond Street
- One new permit parking spot on Linnaean Street
- All intersecting streets have turn arrows



# Preferred Layout - Section C

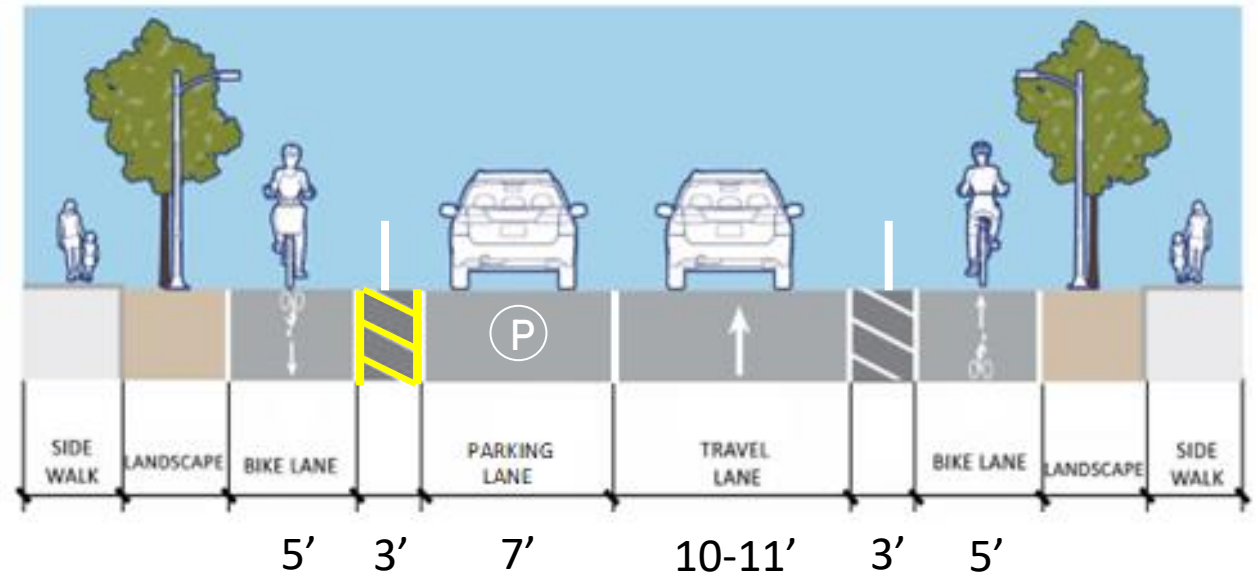
Shepard Street to Concord Avenue

## Direction of travel

- One-way eastbound for vehicles towards Harvard Square
- One-way separated bike lanes on both sides of the street: one in each direction

## Notes

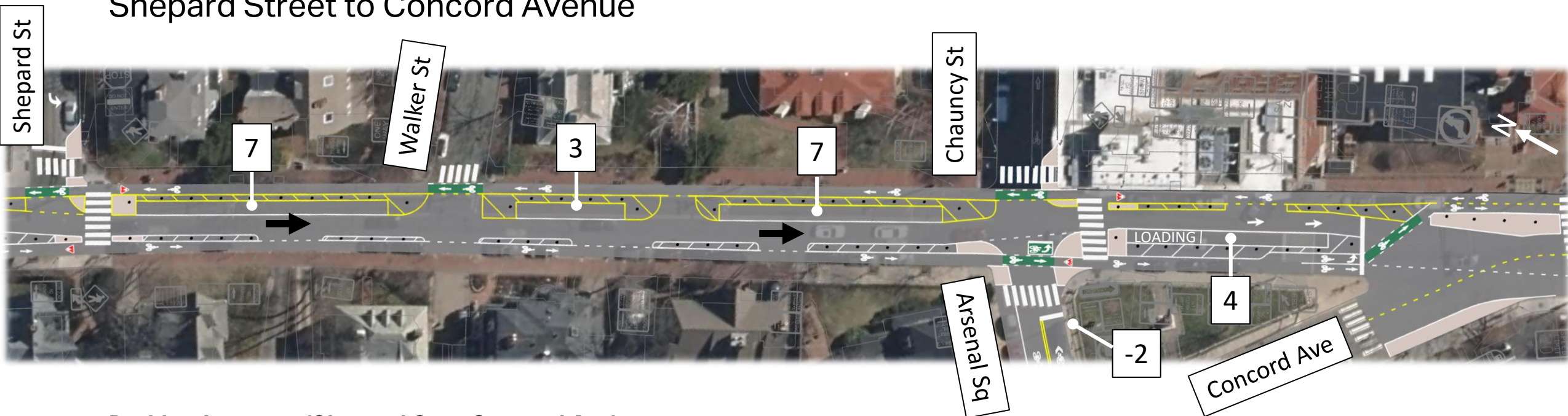
- Parking and loading can be retained on one side of the street
- Narrowed vehicular space lowers driving speeds
- Lane widths vary due to inconsistent width of roadway
- Snow emergency signs added



Between Linnaean Street and Shepard Street (looking eastbound)  
(The parking will be on the right side between Chauncy Street and Concord Avenue)

# Preferred Layout - Section C

Shepard Street to Concord Avenue



## Parking Impacts (Shepard St to Concord Ave)

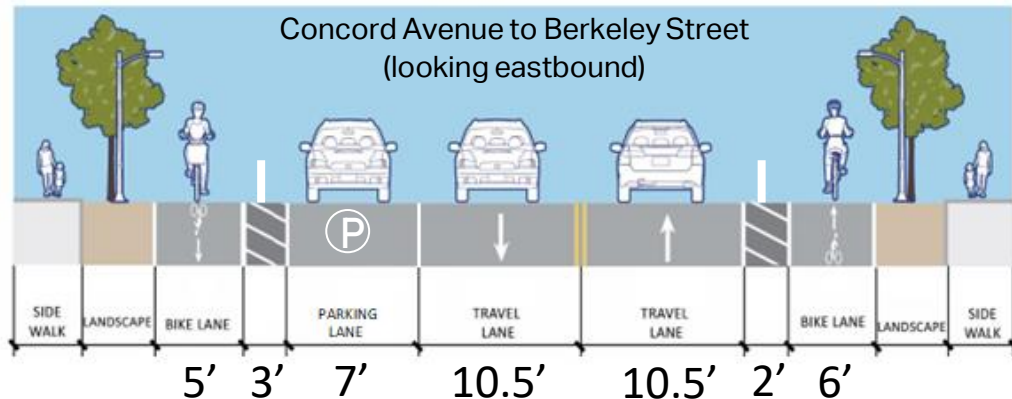
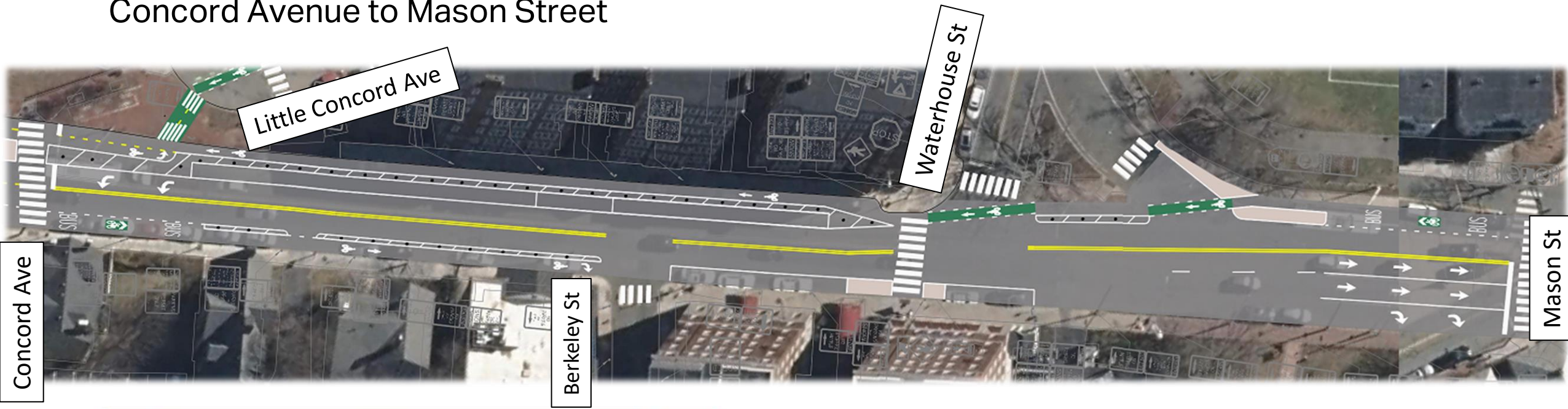
#		Existing	Proposed
	Permit Parking	18	19
	Loading Zone	1	1
	Unrestricted	5	0
	Total	24	20

Based on community feedback:

- Maximized parking by relocating it to north side of street between Shepard Street and Chauncy Street
- One additional permit parking space created
- Relocated loading zone to south side in the Chauncy Street to Concord Avenue block

# Preferred Layout - Section D

Concord Avenue to Mason Street



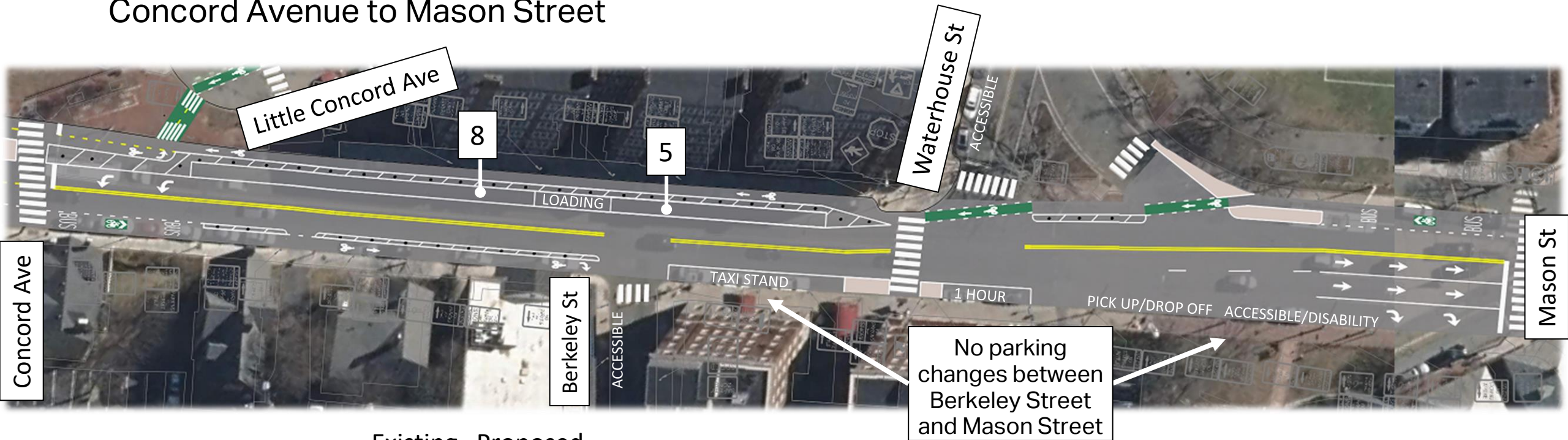
## Direction of travel

- Two-way vehicle traffic
- One-way separated bike lanes on both sides of the street
  - Westbound: Mason Street to Concord Avenue
  - Eastbound: Concord Avenue to Berkeley Street



# Preferred Layout - Section D

Concord Avenue to Mason Street



#		Existing	Proposed
	Permit Parking	19	13
	Loading	1	1
	Pick up/drop off	3	3
	Accessible/Disability	3	5
	1 Hour	2	2
	Taxi	6	3

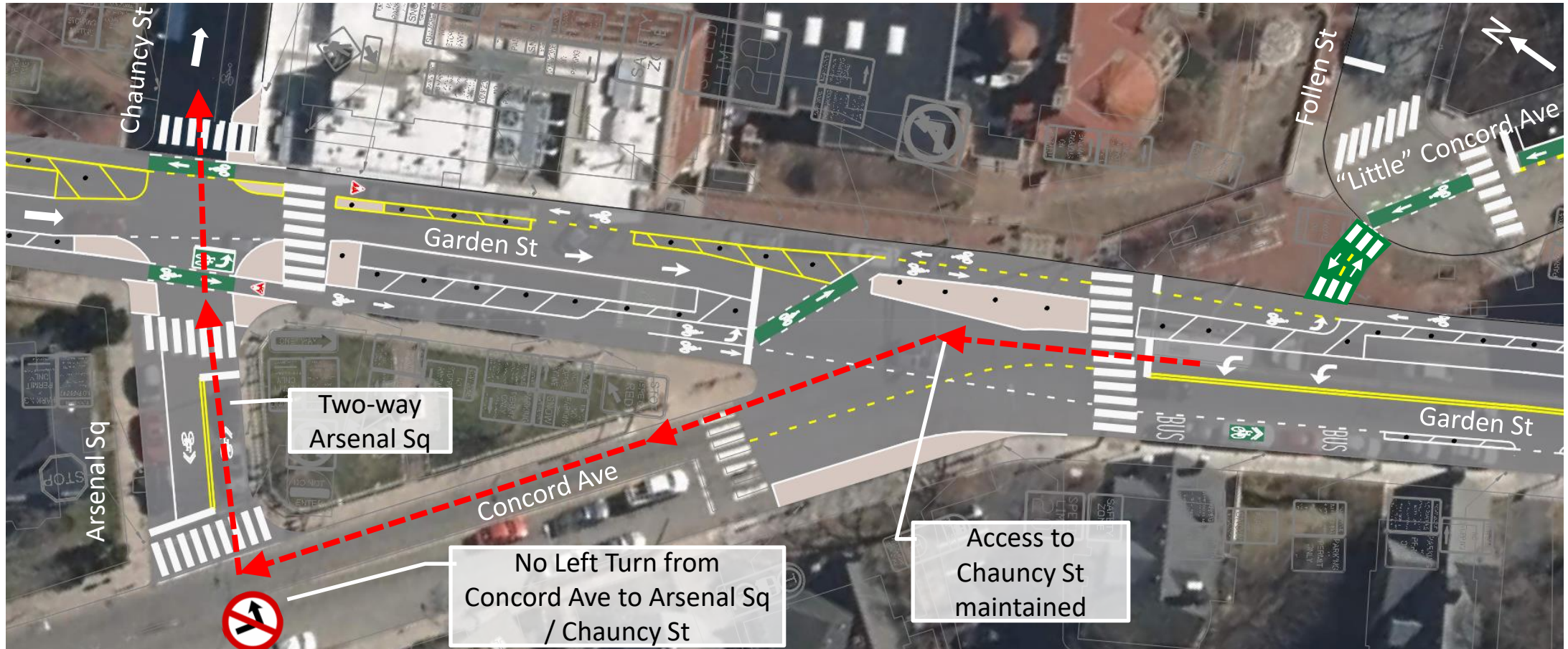
Based on community feedback:

- Kept parking on the north side of the street, removing only one space on that side
- Two new (Waterhouse Street) and one relocated (Berkeley Street) accessible/disability spaces

# One-way Impacts

# One-way Impacts

## Intersection of Garden Street at Concord Avenue





# One-way Impacts

To understand the impacts of making Garden Street one-way, we analyzed how people currently use the corridor.

- Gathered anonymized data from smartphones and navigation devices to provide insight on travel patterns and trends
- Data represents a portion of trips and is scaled with real traffic counts to quantify impacts
- Tells us the most common areas people go after traveling along Garden Street heading westbound
- Can help us anticipate where rerouted trips could go if Garden Street were one-way

The detailed analysis slides and the technical memorandum are posted on the project website\*



Image: Map showing a selection of affected routes

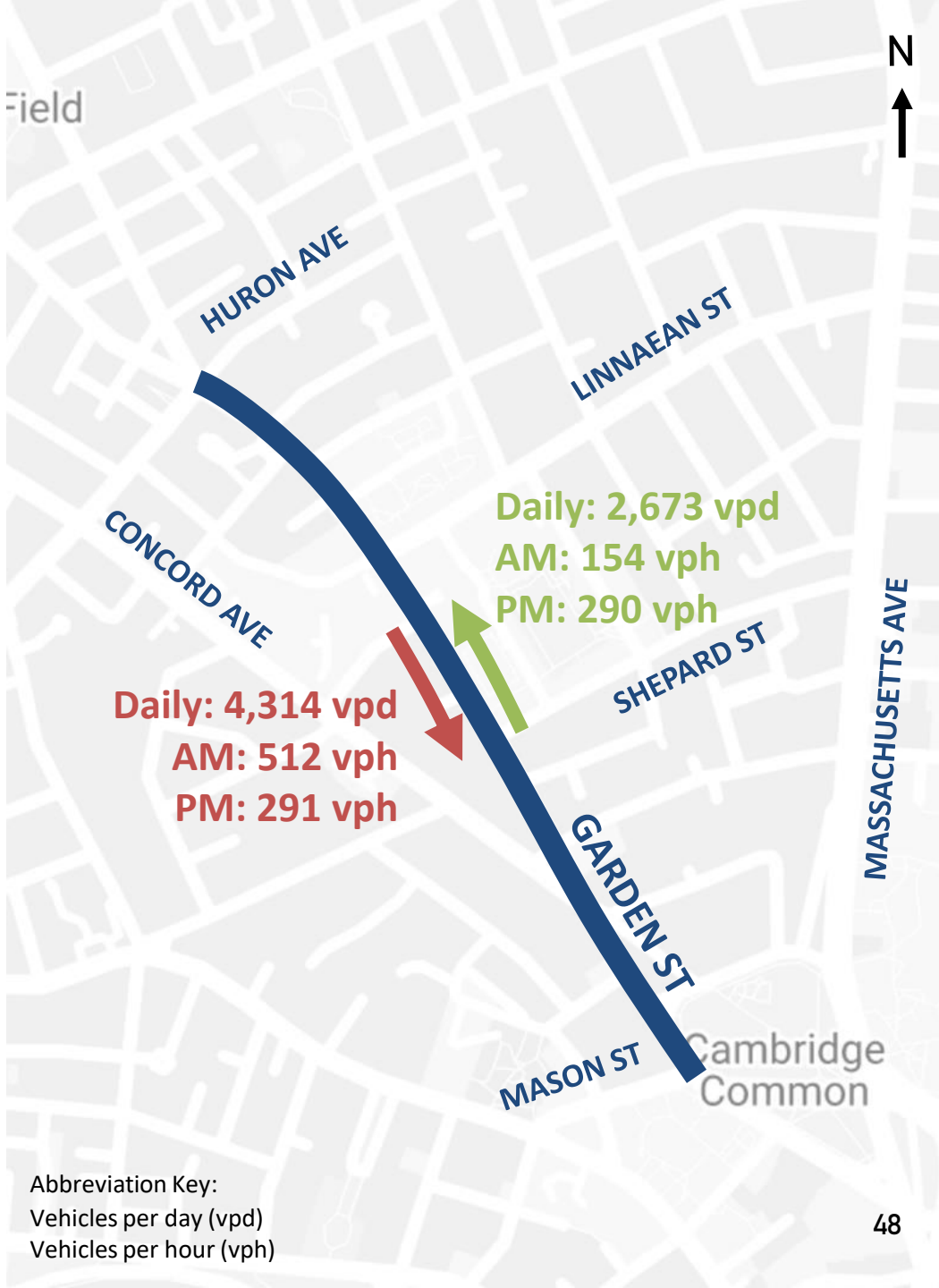
\*Slight modifications have been made to the analysis since the last meeting; fewer trips are anticipated to use Concord Avenue than previously presented.

# One-way Impacts

Traffic counts performed on Tuesday, June 14, 2022  
Approximately 7,000 vehicles per day use Garden Street in the project area.

- A significant percentage of vehicle traffic is headed eastbound, making westbound the preferred direction to reroute
- Peak hour trips represent the maximum number of vehicles per hour that would need to be rerouted

Garden Street Peak Hour Vehicle Traffic (vehicles per hour)		
	Westbound	Eastbound
Morning (8-9 A.M.)	154	512
Evening (4:30-5:30 P.M.)	290	291

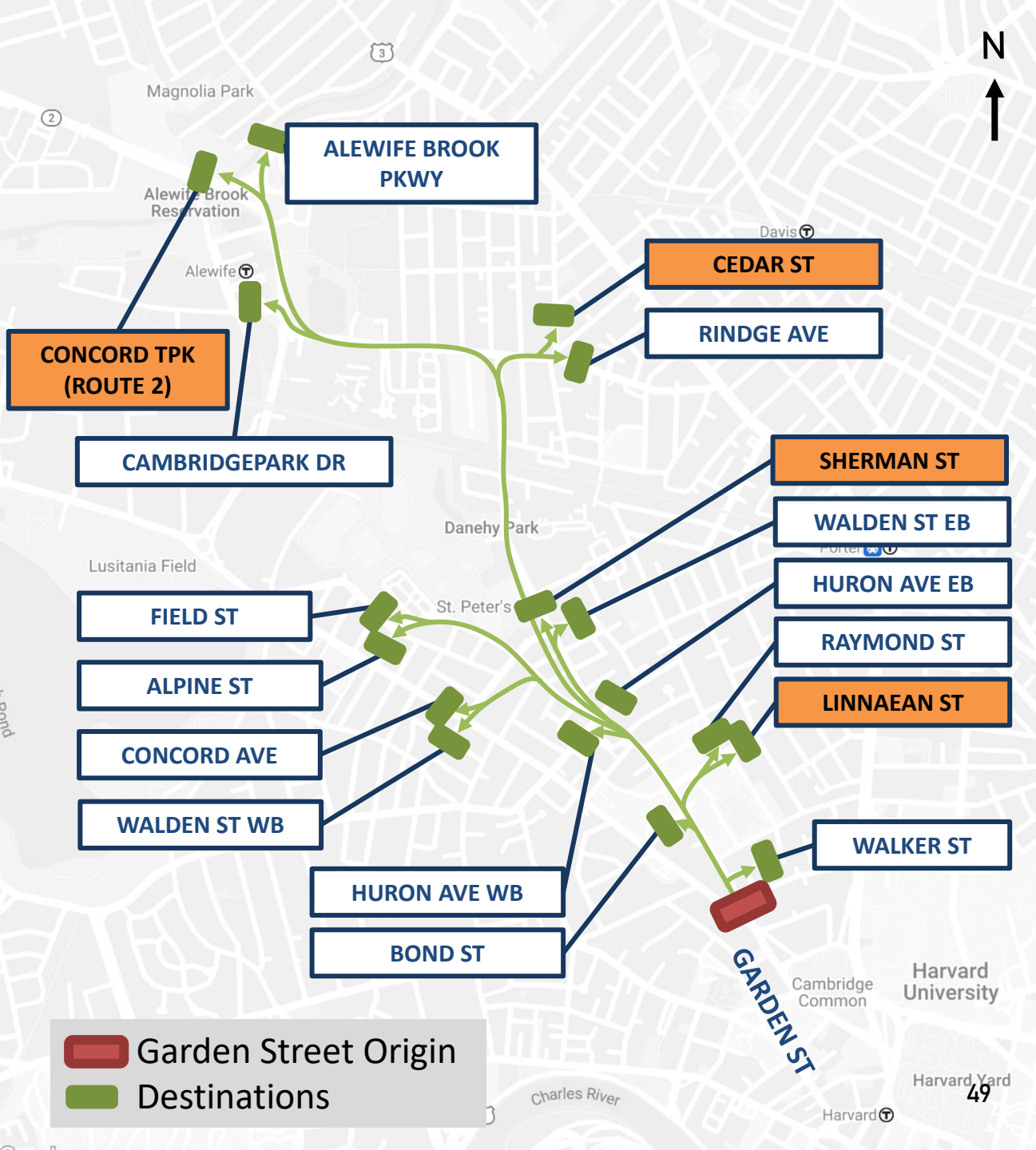


# One-way Impacts

Data shows most trips from Garden Street near Concord Avenue (red box) pass through and go beyond these locations (green boxes)

	Morning Peak (7-9 A.M.)		Evening Peak (4-6 P.M.)	
Destination	% of WB Traffic	Vehicles per hour	% of WB Traffic	Vehicles per hour
Alpine Street	1%	1	3%	7
Cedar Street	9%	14	3%	9
Concord Street	1%	2	3%	9
Field Street	3%	5	4%	12
Linnaean Street	23%	35	5%	14
Raymond Street	5%	7	3%	10
Rindge Avenue	4%	6	1%	3
Route 2	0%	0	22%	64
Sherman Street	35%	54	13%	36
Walker Street	3%	5	3%	8

Note: The table above shows destinations with the highest percentages only. See full data set on project website for locations shown on the map, but not in the table.



# One-way Impacts

Peak hour trips represent the maximum number of vehicles per hour that would need to be rerouted.

## Concord Ave peak hour impacts\*

- Morning: 10 vehicles per hour (<1 extra per min.)
- Evening: 95 vehicles per hour (1-2 extra per min.)

## Massachusetts Ave peak hour impacts\*

- Morning: 121 vehicles per hour (2 extra per min.)
- Evening: 91 vehicles per hour (1-2 extra per min.)

Longer regional trips may avoid the Garden Street area altogether, decreasing these impacts

Each destination was assigned a reroute zone. See full analysis for details.

\*Approximate values





# One-way Impacts

85% of morning peak trips and 64% of evening peak trips were to destinations outside the project area (passed through a green box).

Approx. 23 (A.M.) and 104 (P.M.) vehicle trips per hour did not match to outside destinations (green boxes) and are likely local trips on or along Garden Street. They could use the local street network to get to their destination.

## Summary:

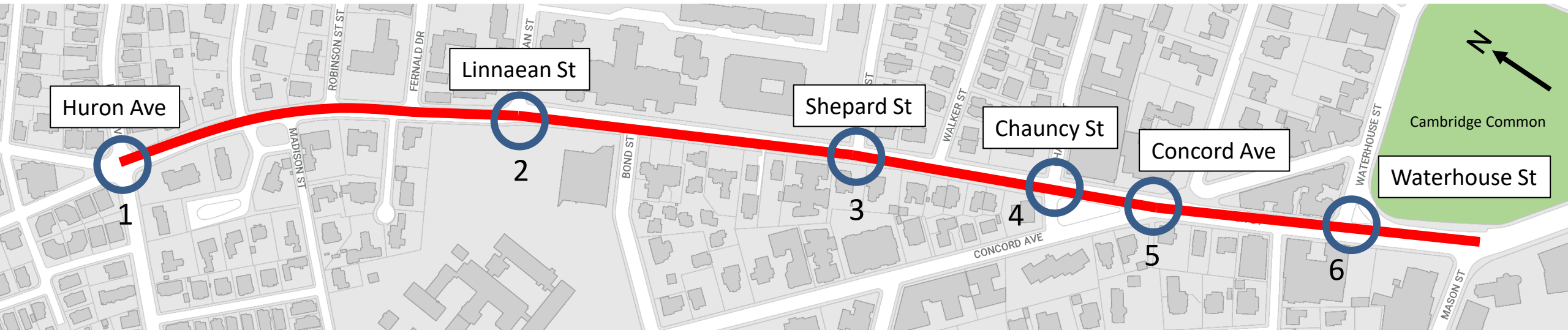
WB Garden Street Volume	A.M. Peak (vph)	P.M. Peak (vph)
Existing (from traffic count)	154	290
Rerouted along Concord Avenue	10	95
Rerouted along Massachusetts Avenue	121	91
Remaining local street network	23	104

vph = vehicles per hour

Longer regional trips may avoid the Garden Street area altogether, decreasing these impacts

# Key Intersections

# Key Intersections



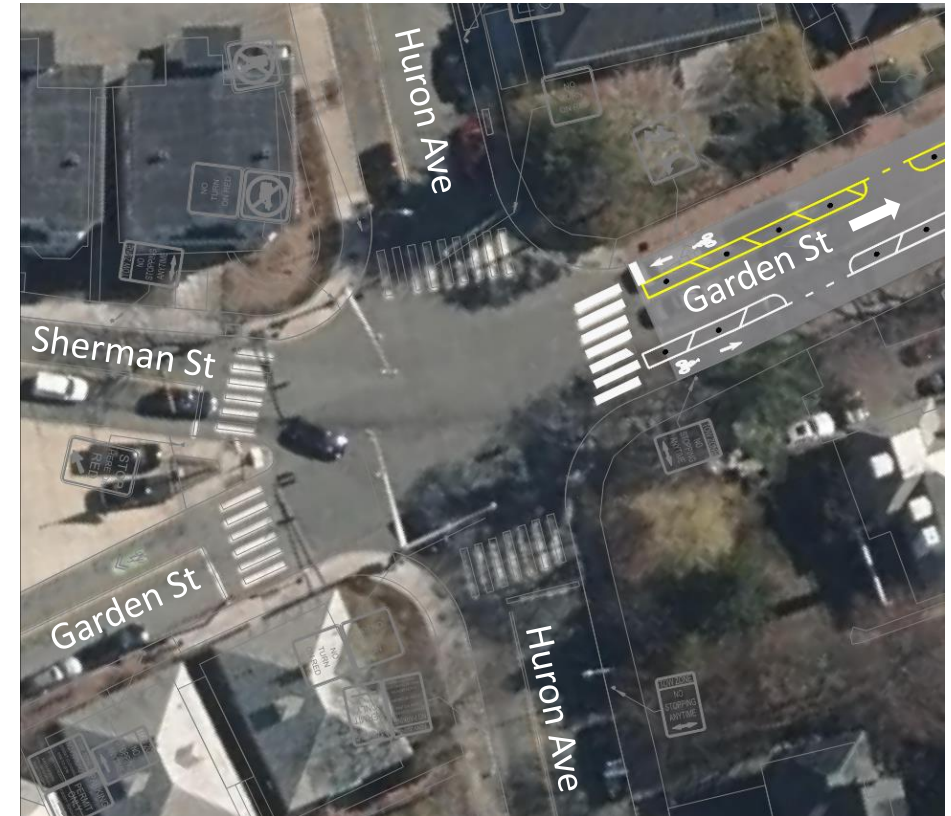
## Key intersections

1. Huron Avenue/Sherman Street
2. Linnaean Street
3. Shepard Street
4. Chauncy Street/Arsenal Square
5. Concord Avenue/Follen Street
6. Waterhouse Street



# Key Intersections - 1. Huron Ave/Sherman St Intersection

- Intersection will continue to have “exclusive pedestrian” phase – all crosswalks on at same time
- Removing westbound Garden Street vehicle approach reduces the number of conflict points
- Bicycle movements from Garden Street will have bike traffic signals
- Both Garden Street approaches will go at the same time (same as today)
- Cycle length for intersection can be shortened, reducing wait times for all users



# Key Intersections - 2. Linnaean St Intersection

Relocated stop line allows for one additional parking space

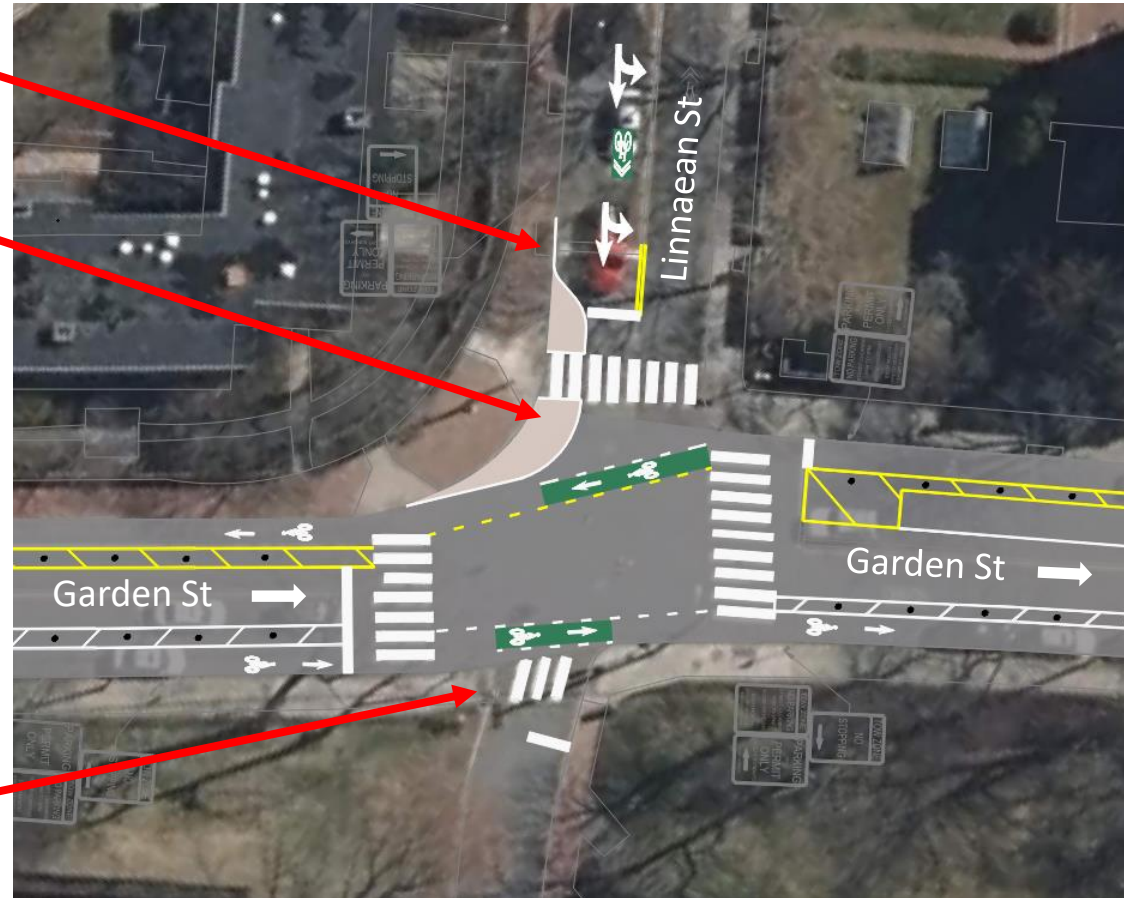
Painted curb extension

No change in signal phasing and operations

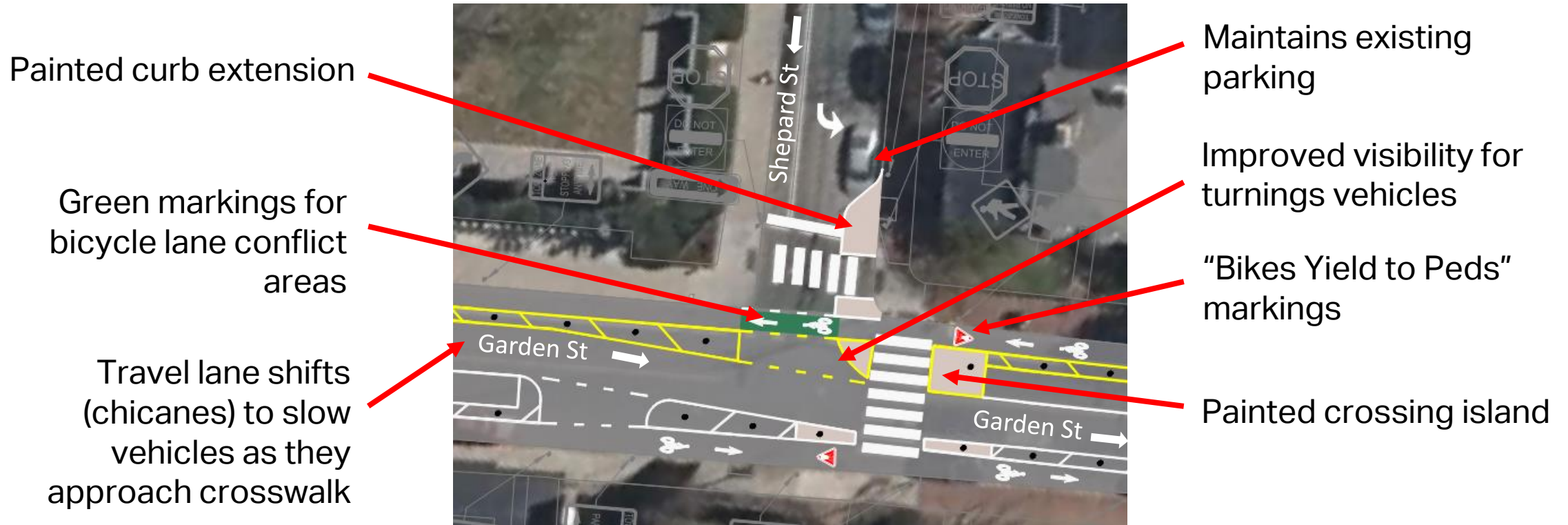
Retains "exclusive ped" phase – all crosswalks on at same time

Bike traffic signals will be installed

Pedestrian signals added across Observatory driveway



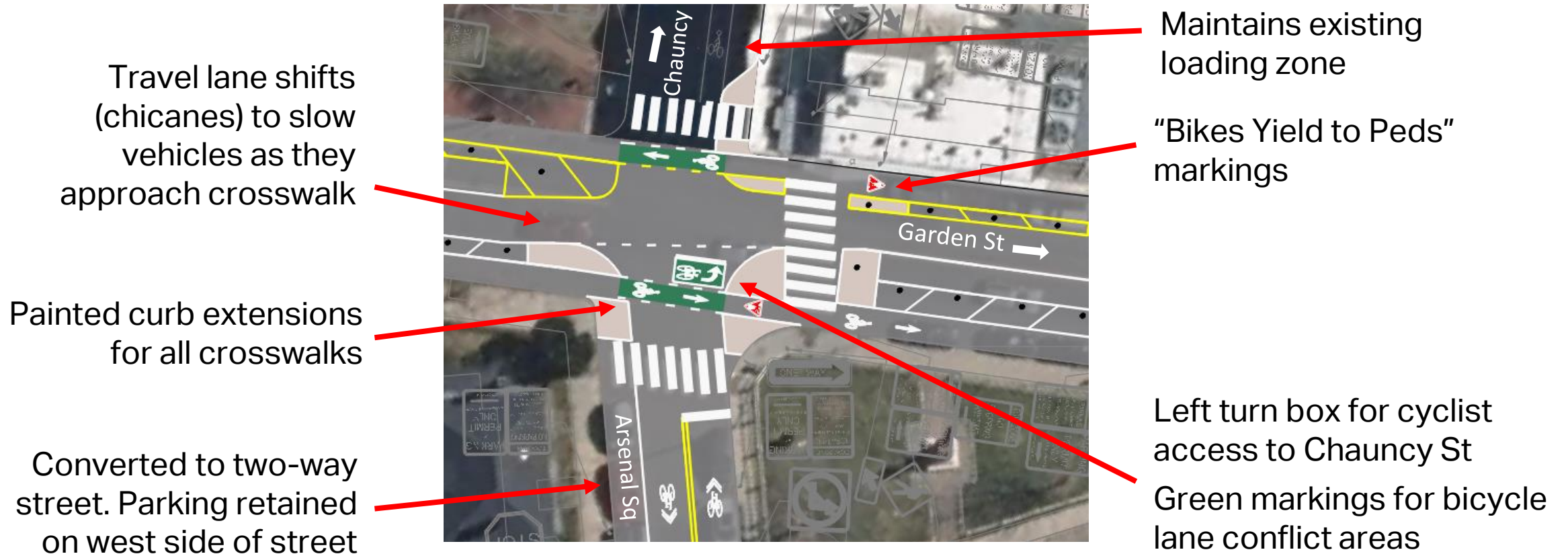
# Key Intersections - 3. Shepard St Intersection



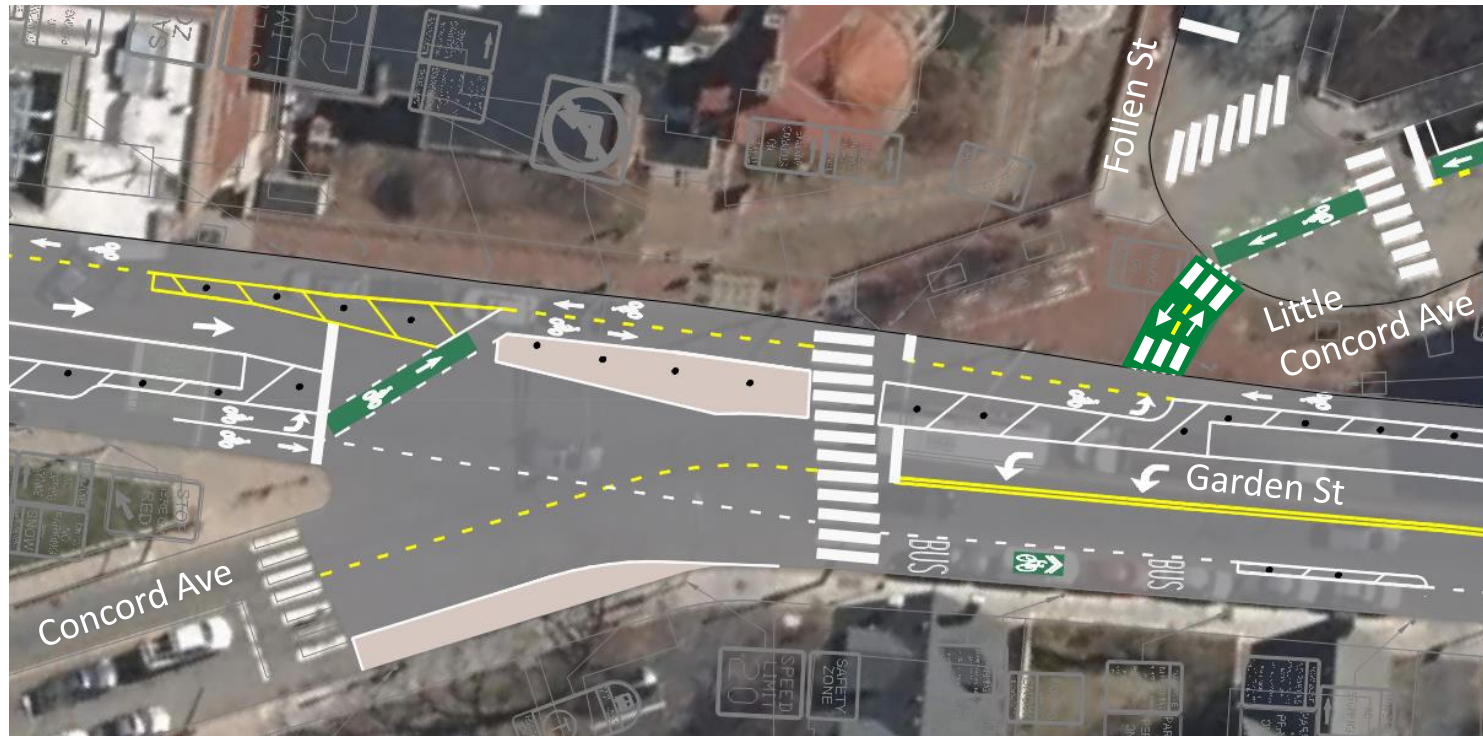
We plan to add the second crosswalk across Garden Street or move the crosswalk to the other corner to improve visibility as part of an upcoming DPW reconstruction project on Shepard Street (FY23).



# Key Intersections - 4. Chauncy St/Arsenal Sq Intersection

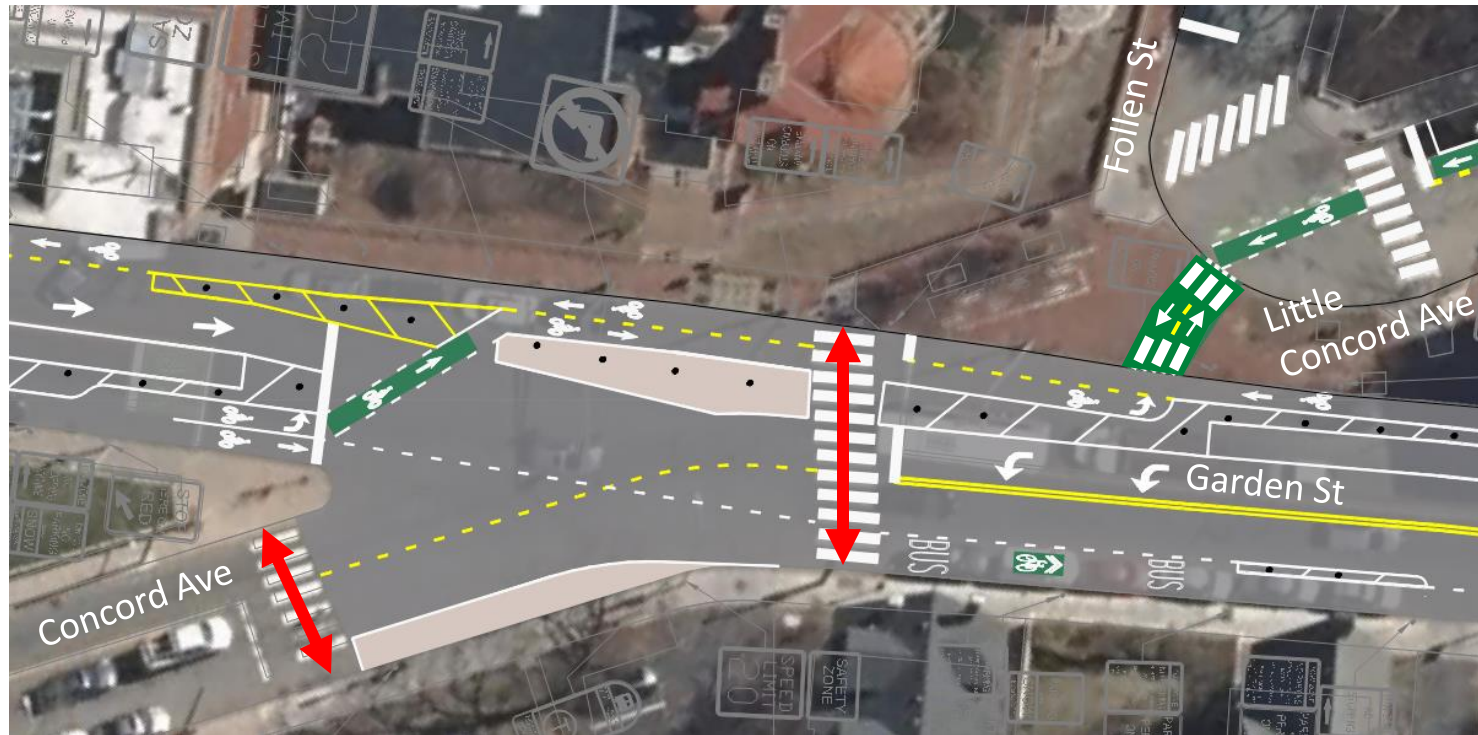


# Key Intersections - 5. Concord Ave/Follen St Intersection



- New all-way stop at Follen Street
- Connection to Little Concord Ave relocated to reduce conflicts with people walking
- Tan paint used to visually narrow the intersection
- Bike traffic signals will be installed
- Bicycle movements combined with parallel vehicle movements to minimize delay for all users

# Key Intersections - 5. Concord Ave/Follen St Intersection

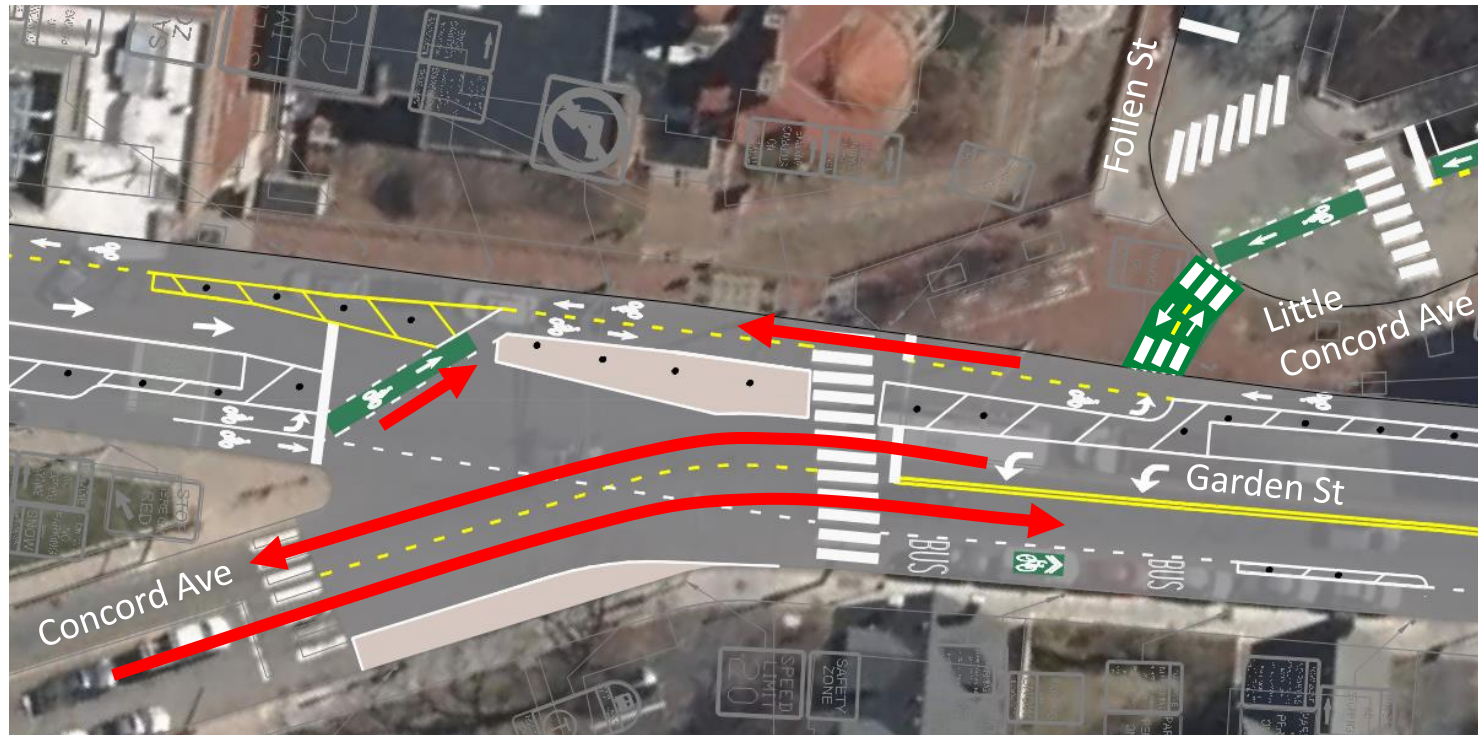


- New all-way stop at Follen Street
- Connection to Little Concord Ave relocated to reduce conflicts with people walking
- Tan paint used to visually narrow the intersection
- Bike traffic signals will be installed
- Bicycle movements combined with parallel vehicle movements to minimize delay for all users

Phase 1



# Key Intersections - 5. Concord Ave/Follen St Intersection

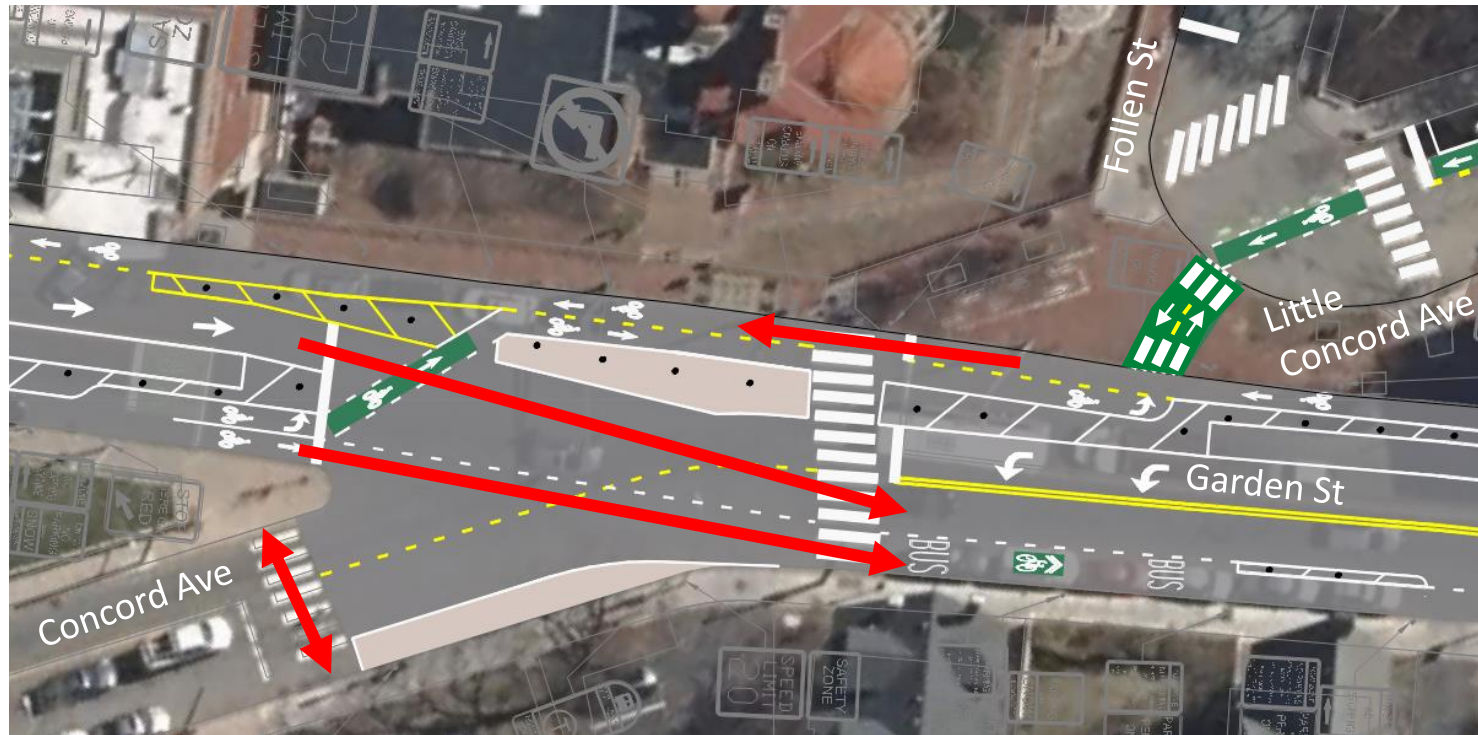


- New all-way stop at Follen Street
- Connection to Little Concord Ave relocated to reduce conflicts with people walking
- Tan paint used to visually narrow the intersection
- Bike traffic signals will be installed
- Bicycle movements combined with parallel vehicle movements to minimize delay for all users

Phase 2



# Key Intersections - 5. Concord Ave/Follen St Intersection

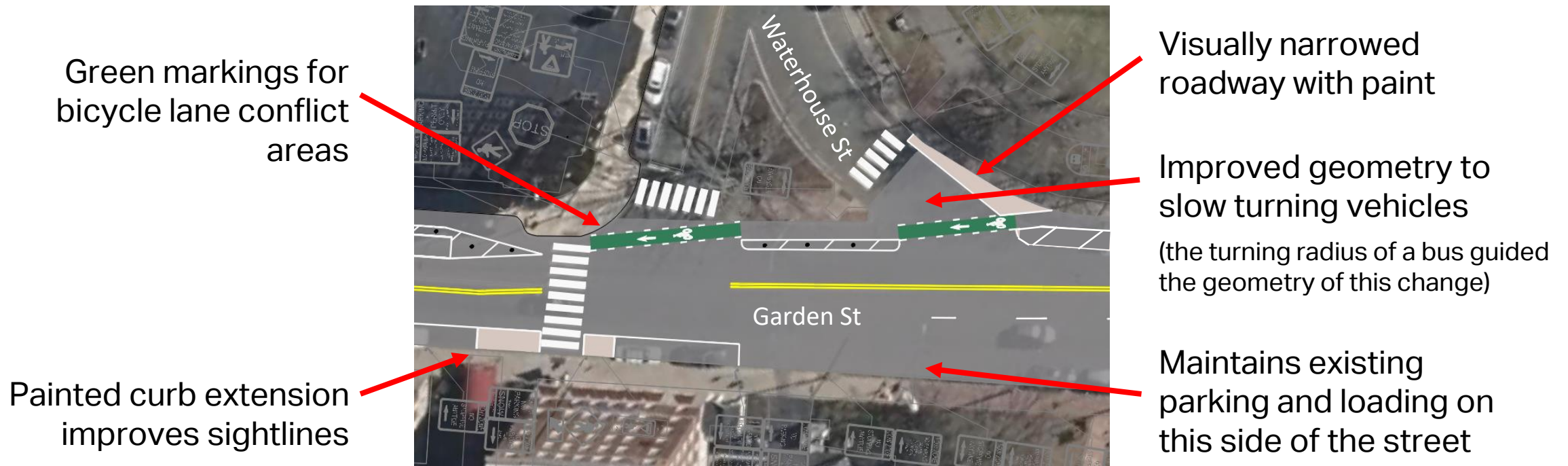


- New all-way stop at Follen Street
- Connection to Little Concord Ave relocated to reduce conflicts with people walking
- Tan paint used to visually narrow the intersection
- Bike traffic signals will be installed
- Bicycle movements combined with parallel vehicle movements to minimize delay for all users

Phase 3

# Key Intersections - 6. Waterhouse St Intersection

We plan to install a rectangular rapid flashing beacon (RRFB) crossing Garden Street at Waterhouse Street (at the Sheraton)



# Preferred Layout – Parking Impacts Summary

## Permit Parking – Updated since last meeting based on community feedback

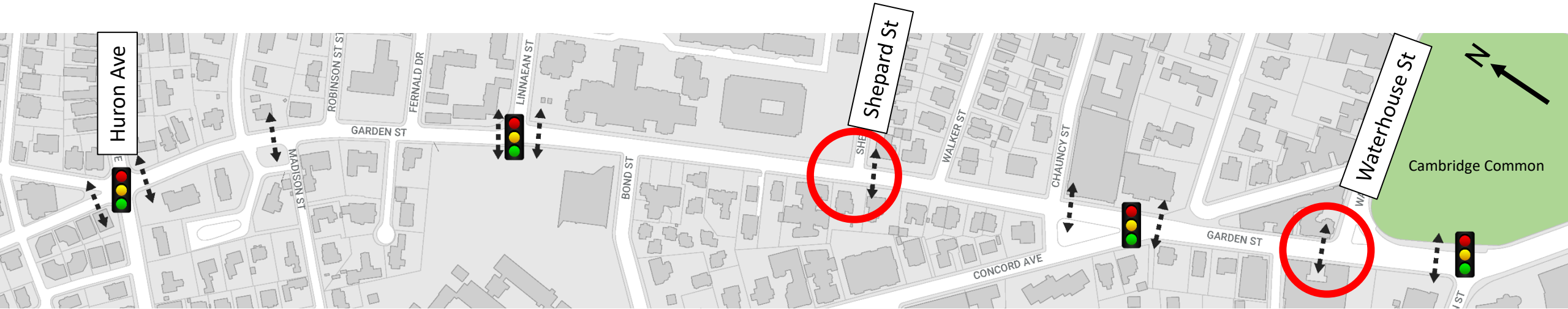
	Section A Huron to Linnaean		Section B Linnaean to Shepard		Section C Shepard to Concord		Section D Concord to Mason		Overall		
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Change
Permit parking	26	0	49	27	18	19	19	13	112	59	-53

The preferred layout retains a significant amount of permit parking closer to Harvard Sq. Between Shepard Street and Waterhouse Street, only approx. 5 permit parking spaces are removed (32 proposed, 37 existing).

## Other Parking and Loading

- The preferred layout increases the number of accessible/disability spaces in Section D from 3 to 5
  - 2 spaces kept at First Church in Cambridge
  - 1 space relocated to Berkeley Street at the accessible ramp to the building
  - 2 new spaces along the curb on the north side of Waterhouse Street at Garden Street
- No changes to parking and loading between Berkeley Street and Mason Street (Sheraton Hotel, First Church in Cambridge)
- No changes to side street parking, except the accessible/disability spaces and one new permit parking space on Linnaean Street

# Improvements for People Walking - Summary



Waterhouse and Shepard Street crosswalks were most often mentioned as needing improvement

- At Waterhouse Street, we will install a rectangular rapid flashing beacon (RRFB) as part of this project.
- At Shepard Street, we plan to add the second crosswalk across Garden Street or move the crosswalk to the other corner to improve visibility as part of an upcoming DPW reconstruction project (FY23).
- At all crosswalks, we are improving sightlines, shortening crossing distances, and making improvements to pedestrian signal phasing.



Photo: RRFB on Albany Street at Portland Street

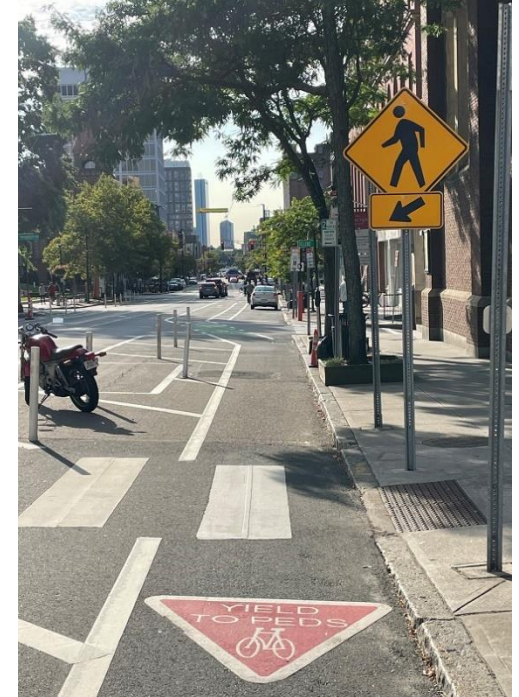
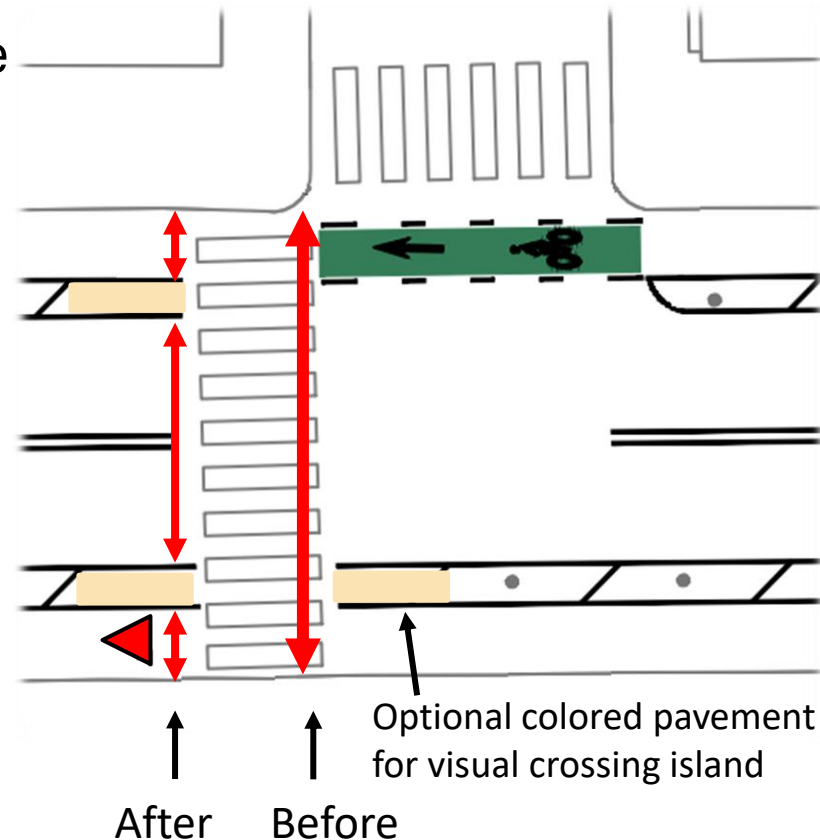


# Improvements for People Walking - Summary

Installing separated bicycle lanes on Garden Street allows us to make improvements to unsignalized crosswalks across Garden Street.

## Benefits

- Shorter crossing distances
- Better sightlines
- Each potential conflict can be handled separately (i.e., cross bike lane, then vehicle lanes)
- Visually narrows the roadway for drivers, encouraging lower speeds and higher yielding rates.



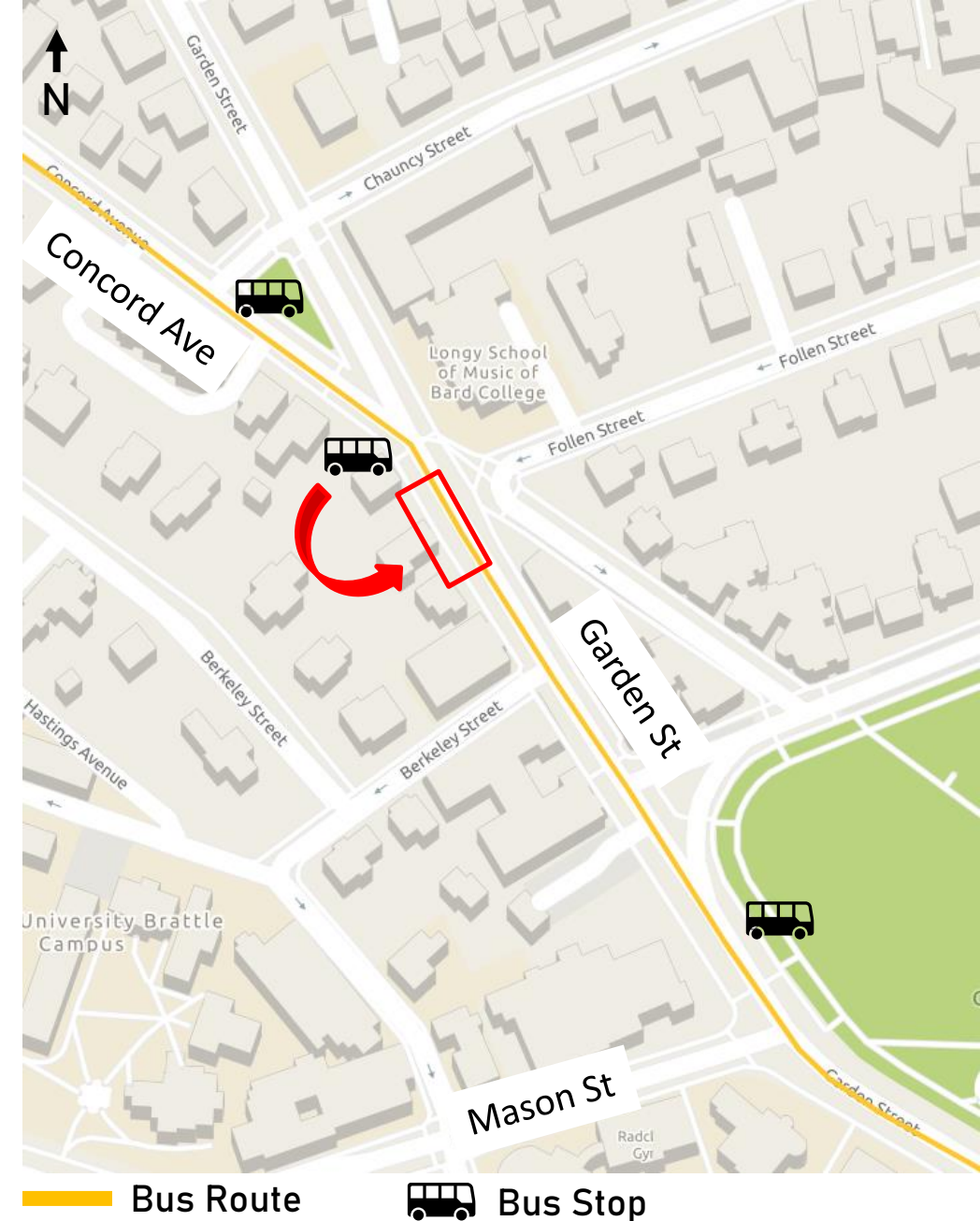
# Improvements for Transit

## MBTA routes

- Bus routes 74, 75, and 78 use Garden Street between Concord Avenue and Mason Street
- We will move the bus stop at Garden St and Concord Ave to south of the crosswalk across Garden Street
  - The MBTA requested a new location for this stop to improve visibility for bus drivers
  - No additional parking impacts

## Shuttle routes

- Lesley University shuttles will be rerouted via Waterhouse Street
- Discussions with Harvard University about their shuttle routes are ongoing. They are evaluating options that include Massachusetts Avenue and Linnaean Street or Concord Avenue and Madison Street.



# Schedule / Next Steps

# Project Schedule

## Meetings/Timeline

**May 24**

Community Meeting 1

**July 12**

Community Meeting 2

**August 9**

Community Meeting 3

 **September 20**

Community Meeting 4

**September 22**

Community Open House

**Fall 2022\***

Project Installation

## Outreach

### What we've done:

- Posters attached to signposts along street
- Individual notifications to major stakeholders including schools, houses of worship, etc.
- Update emails sent to city and project mailing lists
- Mailed postcards and delivered flyers door-to-door to addresses within impacted area

### What you can do:

- Sign up for the mailing list for the latest updates
- Sign up for the city's Daily Update emails
- Email or call the project manager directly
- Visit the project webpage below for the latest information

**[cambridgema.gov/GardenStHuronMason](https://cambridgema.gov/GardenStHuronMason)**

\* Some parts of Section D, Concord Avenue to Mason Street will be installed in 2023



# Next Steps

## Installation timeline

- We plan to install a vast majority of the project by the end of Fall 2022.
- The MBTA's unused catenary wires above the roadway affect a portion of Section D between Concord Avenue and Waterhouse Street. This area will be partially installed until wire removal work takes place (anticipated 2023).

Area affected by overhead wires



# Next Steps

## Section D interim conditions

Cannot have “floating” parking with overhead wires as it interferes with the fire truck’s ladder deployment

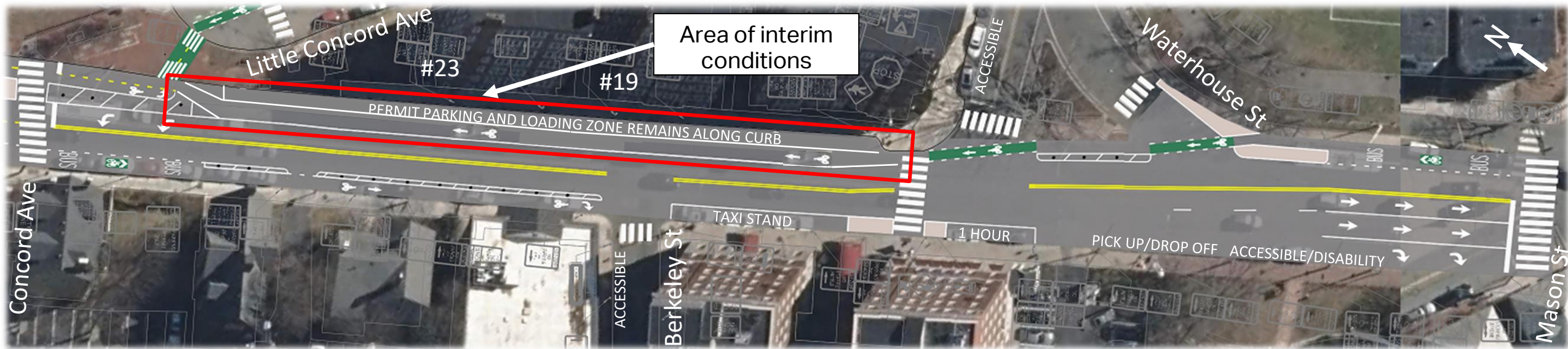
- Affects only the north side of the street where “floating” parking is planned
- Full plan installed once the MBTA’s unused catenary wires are removed from above the roadway
- We anticipate wire removal work to commence within the next year
- We will notify the community when the schedule is confirmed



Graphic: Overhead wires interfere with fire department response when parking is “floating” off the curb

# Next Steps

## Section D interim conditions



- The parking will remain along the north curb in front of 19/23 Garden Street instead of “floating”
- A marked standard bike lane will be provided
- The bike lane and parking/loading will switch places once the wires are removed
- We will notify the community when the schedule is confirmed
- Flex post locations pending Historical Commission review

# Next Steps

## Finalize the plan

- Compile feedback on the preferred layout
- Final plan completed within the next few weeks; will be posted to project website
- Community notified of the specific installation timeline, currently scheduled to begin this Fall.

## Historical Commission (November 3)

- Part of the project is within the Old Cambridge Historic District
- Project review scheduled for their November 3 meeting
- Review pertains to flex posts and curbing changes between Chauncy Street and Mason Street

## Project installation

- Approx. one week for the signals, signs, and major markings
- Temporary parking restrictions will be in place during the work
- Will be updating metal signs to indicate new parking regulations and travel direction change
- Bicycle stencils, flex posts, and colored surface treatments installed in the weeks following



# Questions + Feedback

# Questions + Feedback

- We will take comment in the order hands are raised
  - If calling in, dial \*9 to raise your hand / \*6 to unmute
- Additional questions can be asked using the Q+A function
- In order to allow everyone to speak, please try to limit your time to 1 minute
- Approximately every 15 minutes, we will provide answers to questions
- The meeting is scheduled to end at 8:00 p.m.
- You may also contact the project manager directly to provide written or verbal feedback

## Contact Information

Stephen Meuse, Street Design Project Manager  
617-349-4713  
smeuse@cambridgema.gov

**[cambridgema.gov/GardenStHuronMason](https://cambridgema.gov/GardenStHuronMason)**