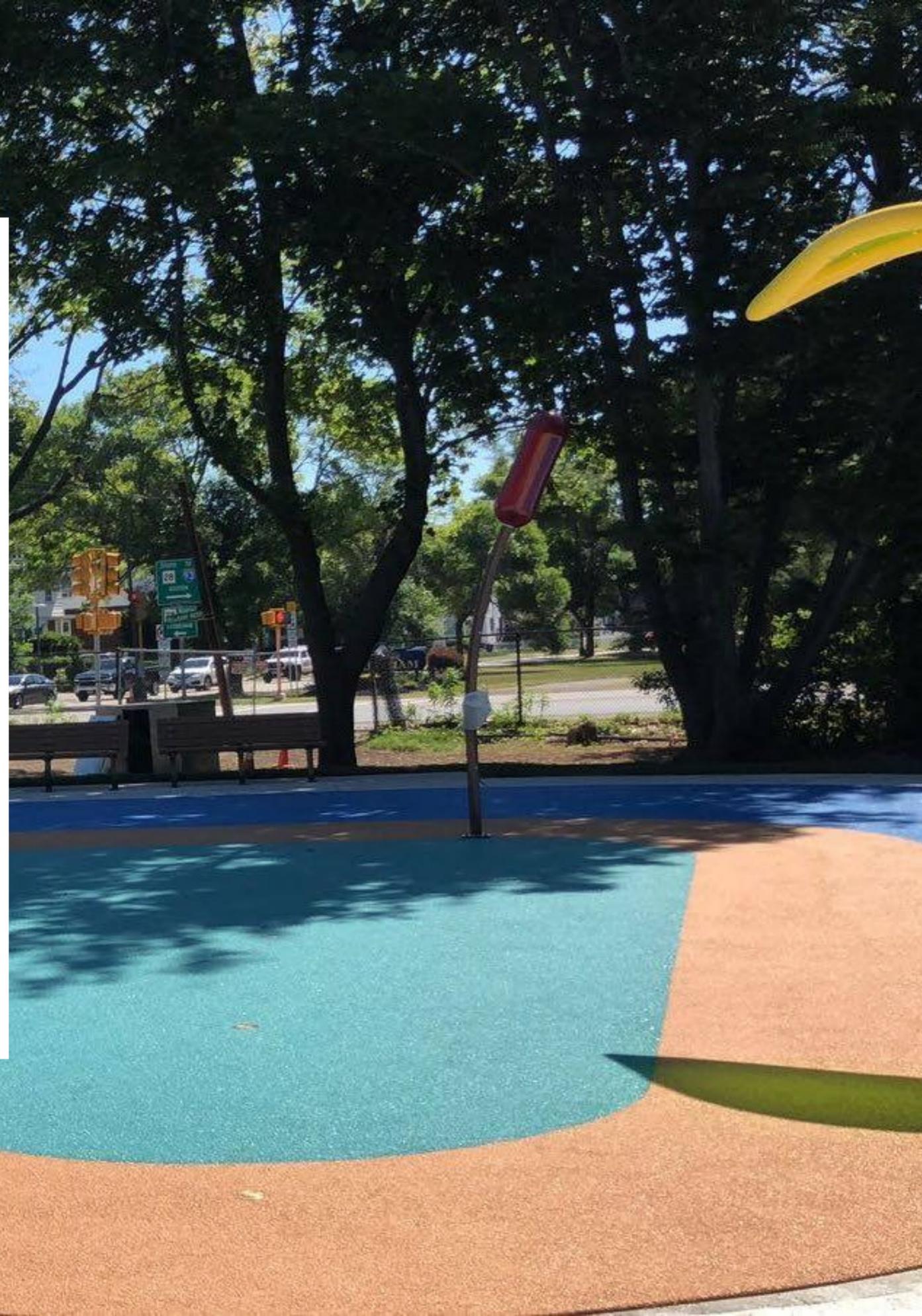


# Route 28, North Border Road, and South Street

*Public Information Meeting*

Virtual | Thursday, March 24<sup>th</sup> | 6:30 PM

Project File No. 610665



# Public meeting notes and procedures

## Notification of recording

- This virtual public meeting will be recorded. The Massachusetts Department of Transportation may choose to retain and distribute the video, still images, audio, and/or chat transcript.
- By continuing attendance with this virtual public meeting, you are consenting to participate in a recorded event.
- All recordings and chat transcript will be considered a public record.
- If you are not comfortable being recorded, please turn off your camera, keep your microphone muted, and refrain from chatting in the transcript box. Otherwise, you may choose to excuse yourself from the meeting.

## Important notes

- Your microphone and webcam are automatically disabled upon entering the meeting.
- The meeting will be open to questions and answers at the end of the presentation.
- Please take time to respond to our survey at the end of the presentation. Your feedback is important.

**All questions and comments are welcome and appreciated, however we do request that you refrain from any disrespectful comments.**

# Zoom controls



- Drop down menu to check microphone and speakers



- Ask a question and share comments



- Raise your hand



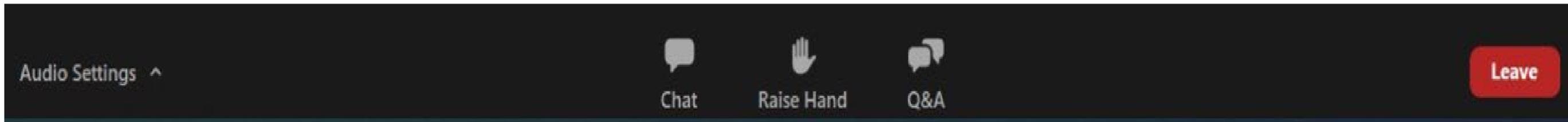
- If you are unable to access the internet or are having technical problems, please call into the meeting at 312-626-6799, Webinar ID: 895-3546-0808



If you have trouble with the meeting technology during the presentation, please call:

1-888-799-9666

**Closed captioning automatically generated by Zoom**



# Project Team

## MassDOT

- Greg Frazier, Project Manager
- Andrew Wilkins, Transit Coordinator
- Brian Fallon, District 4 Project Development Engineer

## MassDOT Right-of-Way

- Christopher Cassinello, Right-of-Way Bureau
- Gody Occeus, Right-of-Way Bureau

## MassDOT Meeting Facilitators

- Leah Grodstein, Meeting Producer
- Roy Kirwa, Meeting Producer



## Department of Conservation and Recreation

- Jeff Parenti, Deputy Chief Engineer

## Town of Stoneham

- Dennis Sheehan, Town Administrator
- Erin Wortman, Director of Planning & Community Development

## Recent Public Outreach

- The Stoneham Independent
  - March 9th, 2022
  - March 16th, 2022
- Malden Observer
  - March 11th, 2022
  - March 18th, 2022
- Coordination meetings with DCR, Town of Stoneham, Elected Officials

*The Stoneham Independent*

**Free Press Observer**

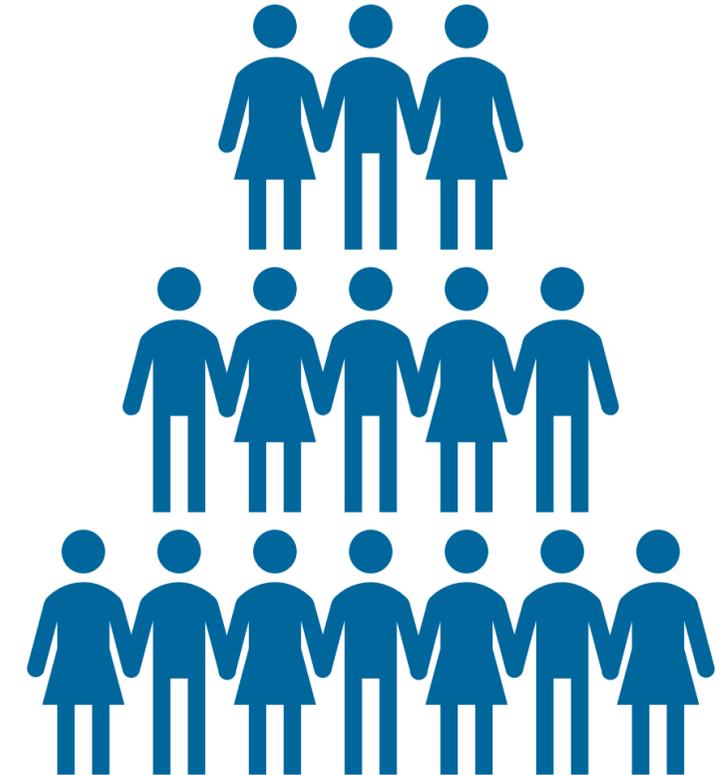
Project Website



Public Hearing Notice  
and Handout

## How We Got Here

- Land is owned by DCR
- Signal is maintained by MassDOT
  - In-house design
- MassDOT statewide safety program
  - Road Safety Audit
- Collaborating with Town of Stoneham, elected officials, DCR
- Programmed in 2025 for about \$4.2 Million



# Agenda

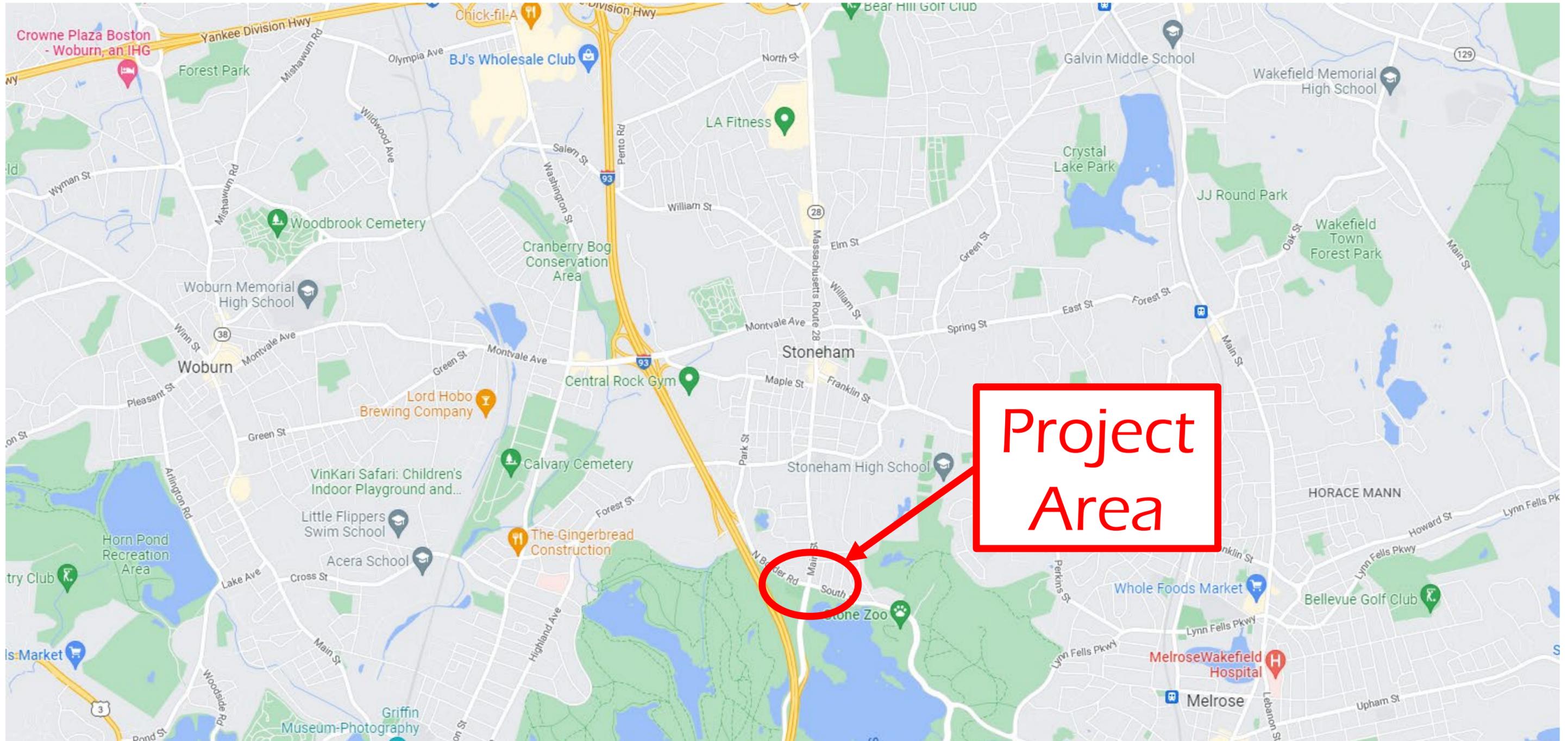
- 01 Location Overview
- 02 Safety Issues
- 03 Potential Alternatives
- 04 Next Steps
- 05 Questions and Discussion





# Location Overview

# Project Area



## Existing Conditions - Photos



Locus



View looking north from intersection

## Existing Conditions - Photos



View of intersection looking east  
(North Border Rd)



View of intersection looking west  
(South St)

## Existing Conditions - Photos



View of intersection looking north  
(Route 28)



View of intersection looking south  
(Route 28)



## Poll #1

[Select all that apply] How do you use this intersection?

Driving

Walking

Biking

Taking Transit

I don't travel through this intersection





## Poll #2

[Select all that apply] Why do you use the intersection?

I live near here

I work near here

I frequent the park or pool (recreation)

I commute through here

I don't travel through this intersection





## Poll #3

[Select all that apply] What are your biggest concerns about this intersection?

Signal Timing / Waiting Too Long

Difficulty Taking Left-Turns

High Vehicle Volume / Congestion

Speeding

Deficient Facilities for People Walking or Biking

Signal Visibility

Other

Not sure





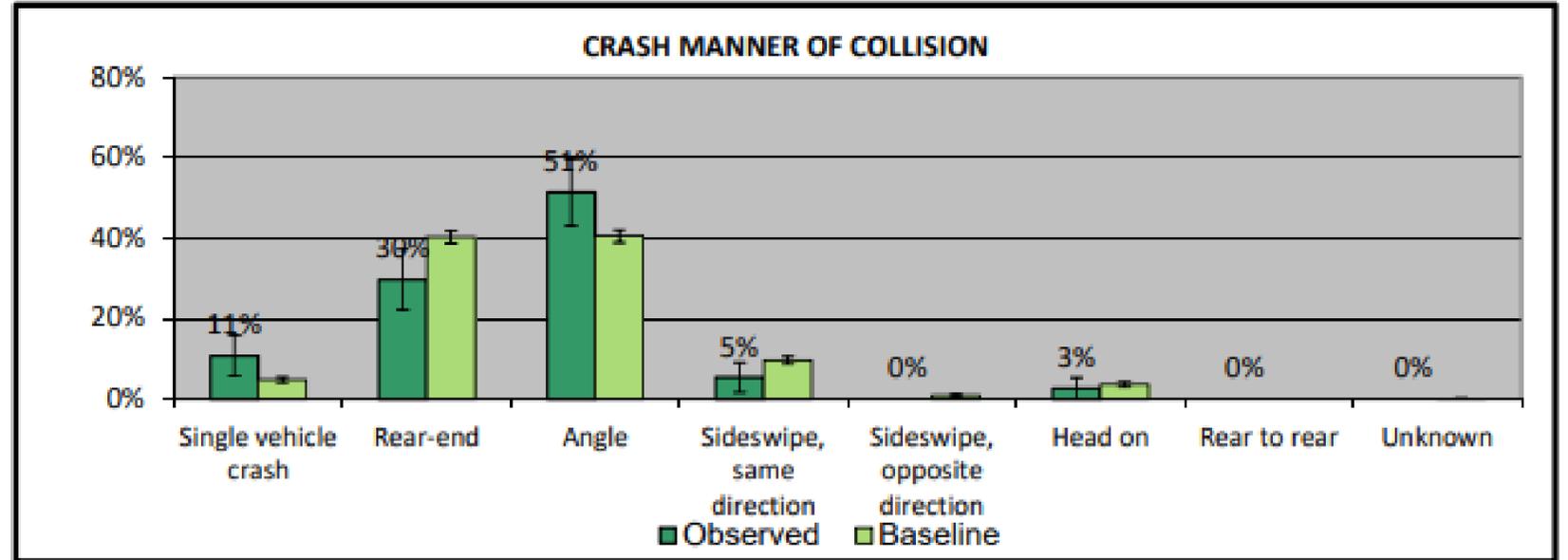
# Safety Issues

# High Crash Location



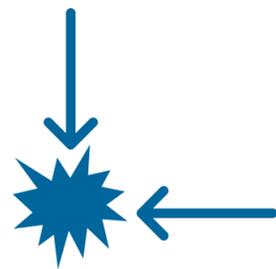
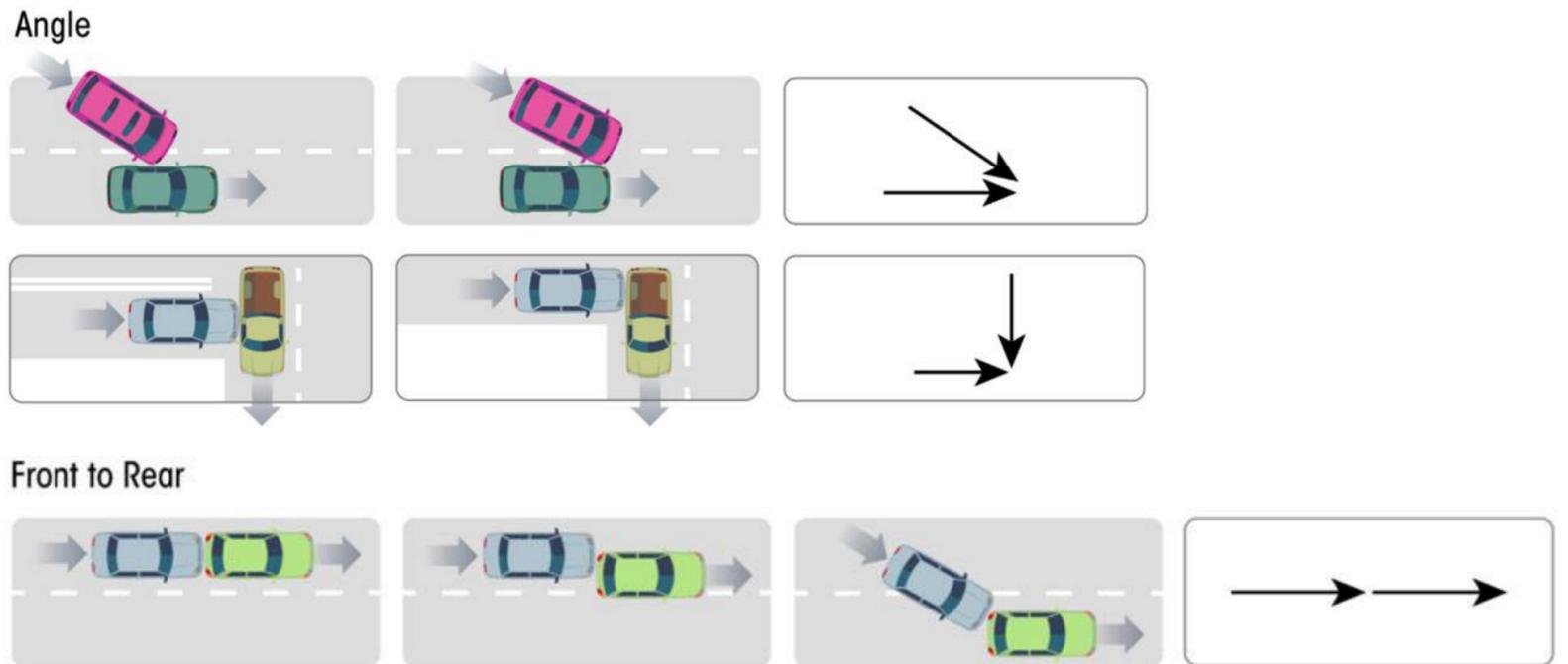
2016-2018 reporting period:

- 16 non-injury crashes
- 8 non-serious/possible injury
- 0 fatal/serious injury



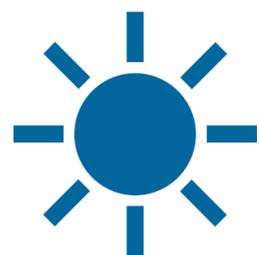
Most common crash types:

- angle crashes (51%)
- rear-end crashes (30%)
- single vehicle (11%)
- other (8%)



Conditions:

- daylight (76%)
- dry roadway (81%)



## Road Safety Audit (RSA)

- Road Safety Audits (RSAs) are conducted to evaluate potential safety issues at high-crash intersections, along with potential safety improvements.
- Project location is eligible for Highway Safety Improvement Program (HSIP) funding
- Audit team included members from MassDOT (Traffic & Safety, Highway Design, District 4), DCR, Town of Stoneham (DPW, Fire, Police, Planning, Town Administrator)

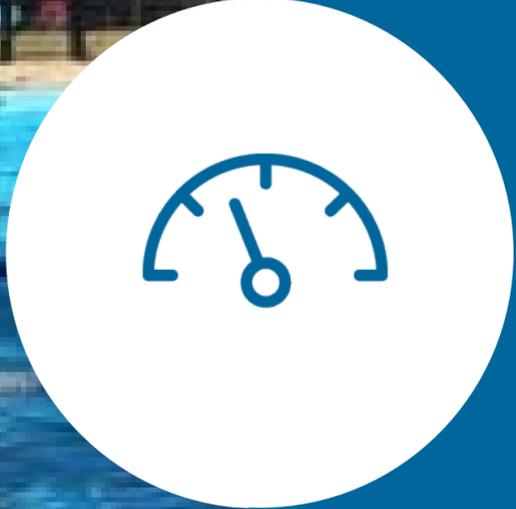


## RSA: Safety Concerns

- Signal Timing
  - Signal is “pre-timed” and does not respond to traffic conditions
- High Volume of Left-Turning Vehicles / Lane Configuration
  - The intersection sees a large volume of left-turning vehicles
  - There are no dedicated left-turn lanes
  - The majority of crashes involved angle crashes – of which, 58% of those involved turning vehicles
- Speeding
  - Highest speeds were noted on the eastbound and northbound approaches
  - Limited visual cues that drivers are approaching an intersection/urban area

## RSA: Safety Concerns

- Substandard Facilities for People Walking and Biking
  - Various ADA compliance issues at intersection; no dedicated facilities for people biking
- Signal Visibility
  - Width of intersection and volume of vehicles impacts sight distance
  - Signs, utility poles, and other roadside obstructions may contribute to visibility issues
- Other
  - Lighting appeared insufficient
  - Truck restriction signage faded or not sufficiently visible to drivers



# Potential Alternatives

## Potential Alternatives

- Based on our analysis, we have identified three potential alternatives we'd like to discuss with you:
  1. Low-impact signal
  2. High-impact signal
  3. Roundabout
- We welcome your feedback! Other alternatives can be evaluated based on your local knowledge

## Potential Alternatives

Work in progress

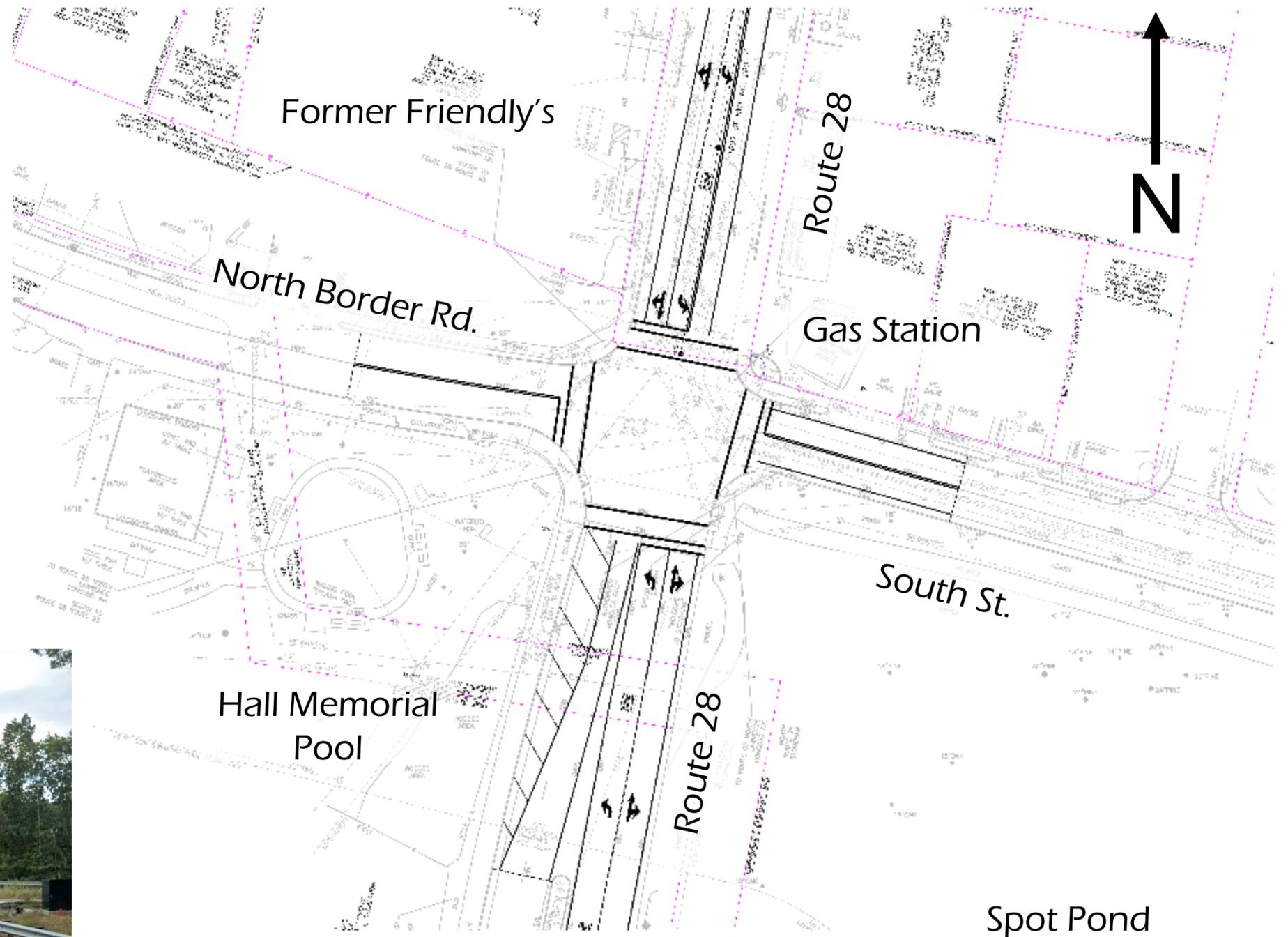
- These are still **draft** concepts – once we get your feedback we will further develop and refine these as we prepare to select a preferred alternative.
- In addition to data on safety we have survey and traffic volumes (collected in May of 2021).
- Coordinating closely with DCR, and the Town of Stoneham DPW, Planning, Town Administrator, and elected officials.

# 1. Low-Impact Signal

This alternative was investigated to see if a low-impact option with minimal geometric changes could address the safety needs at the intersection.

The left lanes on Route 28 northbound and southbound would be reassigned as a left-turn lane.

Existing pedestal mounted signals would be replaced with overhead signals.



*Pedestal mounted signal*



*Overhead (mast arm) mounted signal*

# Low-Impact Signal – Summary

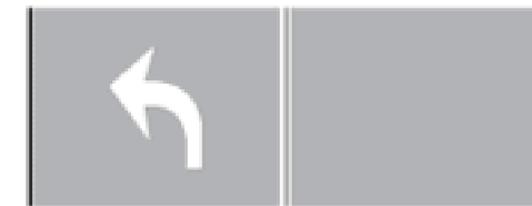
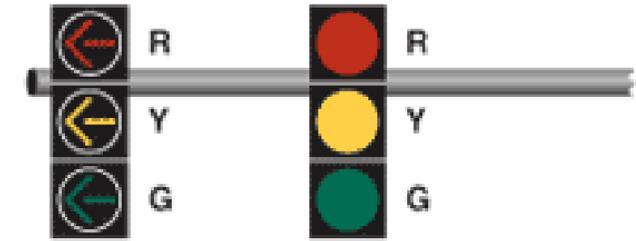
- PROS

- Low impact (minimize impacts to parklands, trees)

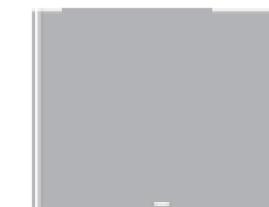
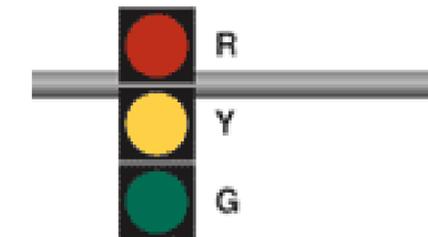
- CONS

- Does not meaningfully address safety concerns for left-turning vehicles on South Street or North Border Road
- Would not provide a significant benefit for people walking or biking
- Would not address speeding issues

Safety Issue	
• Signal Timing	✓
• High Volume of Left Turning Vehicles/Lane Configuration	X
• Speeding	!
• Non-compliant pedestrian and bicycle accommodations	X
• Signal Visibility	✓
• Other Safety Concerns	--



Route 28



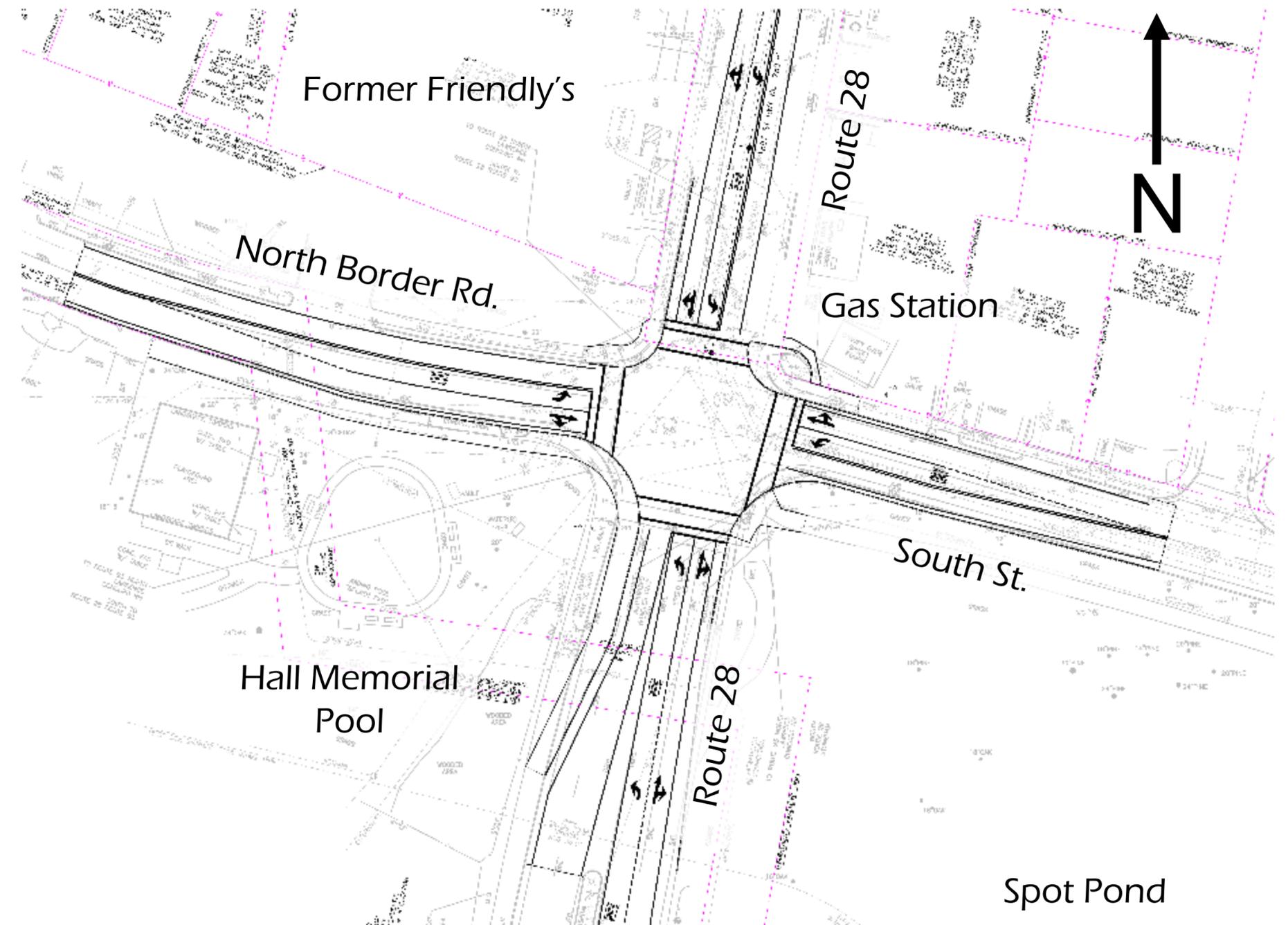
North Border Rd., South St.

## 2. High-Impact Signal

This alternative looks at what geometric changes would need to be made at the intersection to properly address the left-turn safety issues on North Border Road and South Street, and to provide facilities for people walking and biking.

The left lanes on Route 28 northbound and southbound would be reassigned as a left-turn lane.

South Street and North Border Road would be widened to add a left-turn lane on each approach.



# High-Impact Signal – Summary

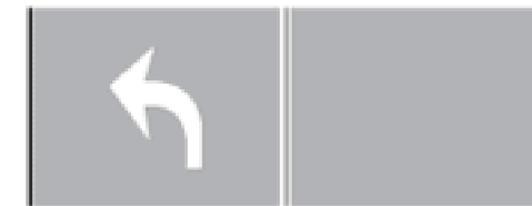
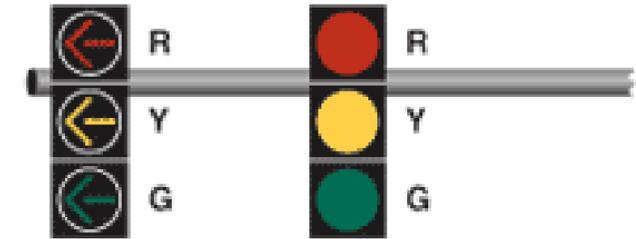
- PROS

- Provides a safety benefit for left-turning vehicles
- Smaller footprint on south leg – can return pavement to parkland

- CONS

- Would not address speeding issues
- Requires tree removal (multiple)

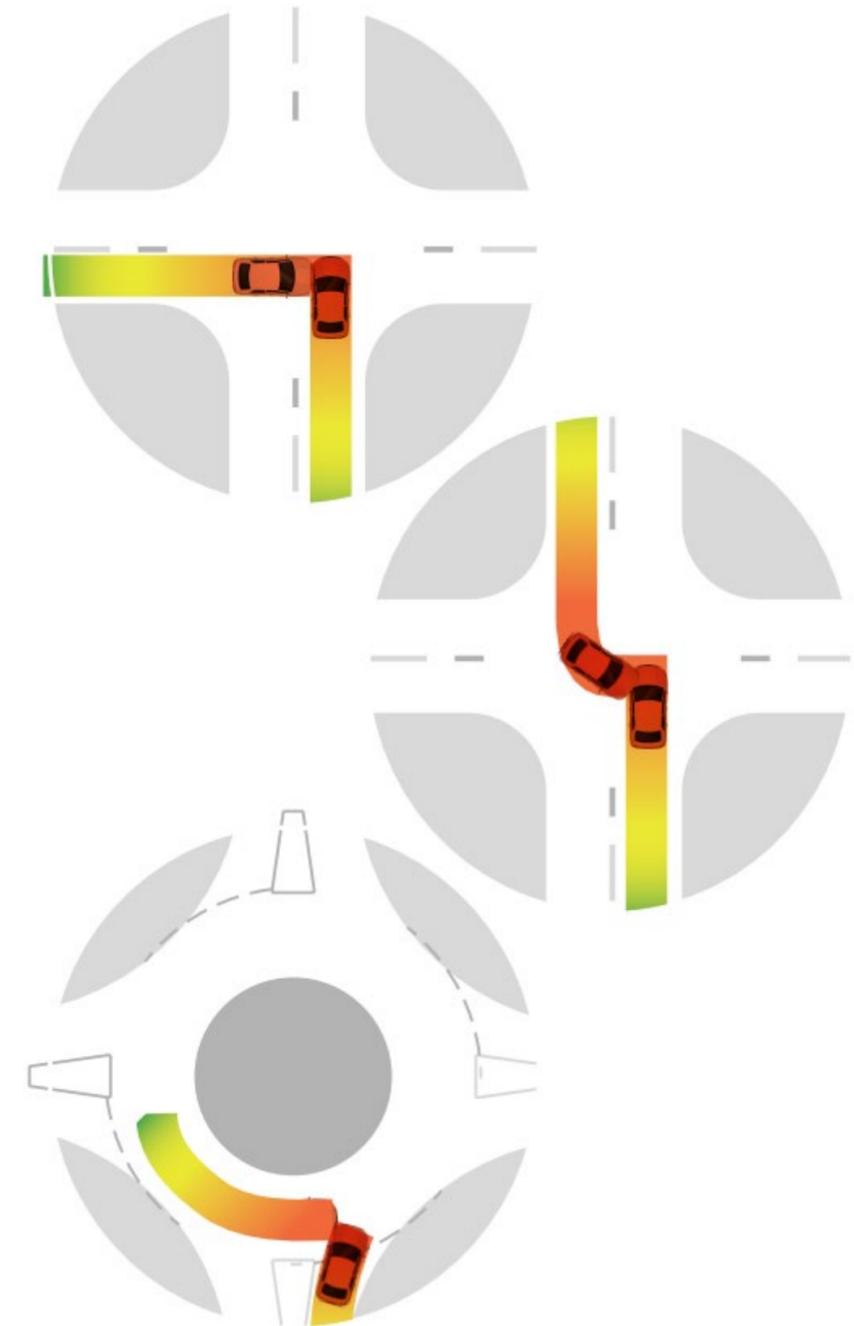
Safety Issue	
• Signal Timing	✓
• High Volume of Left Turning Vehicles/Lane Configuration	✓
• Speeding	!
• Non-compliant pedestrian and bicycle accommodations	✓
• Signal Visibility	✓
• Other Safety Concerns	--



All approaches

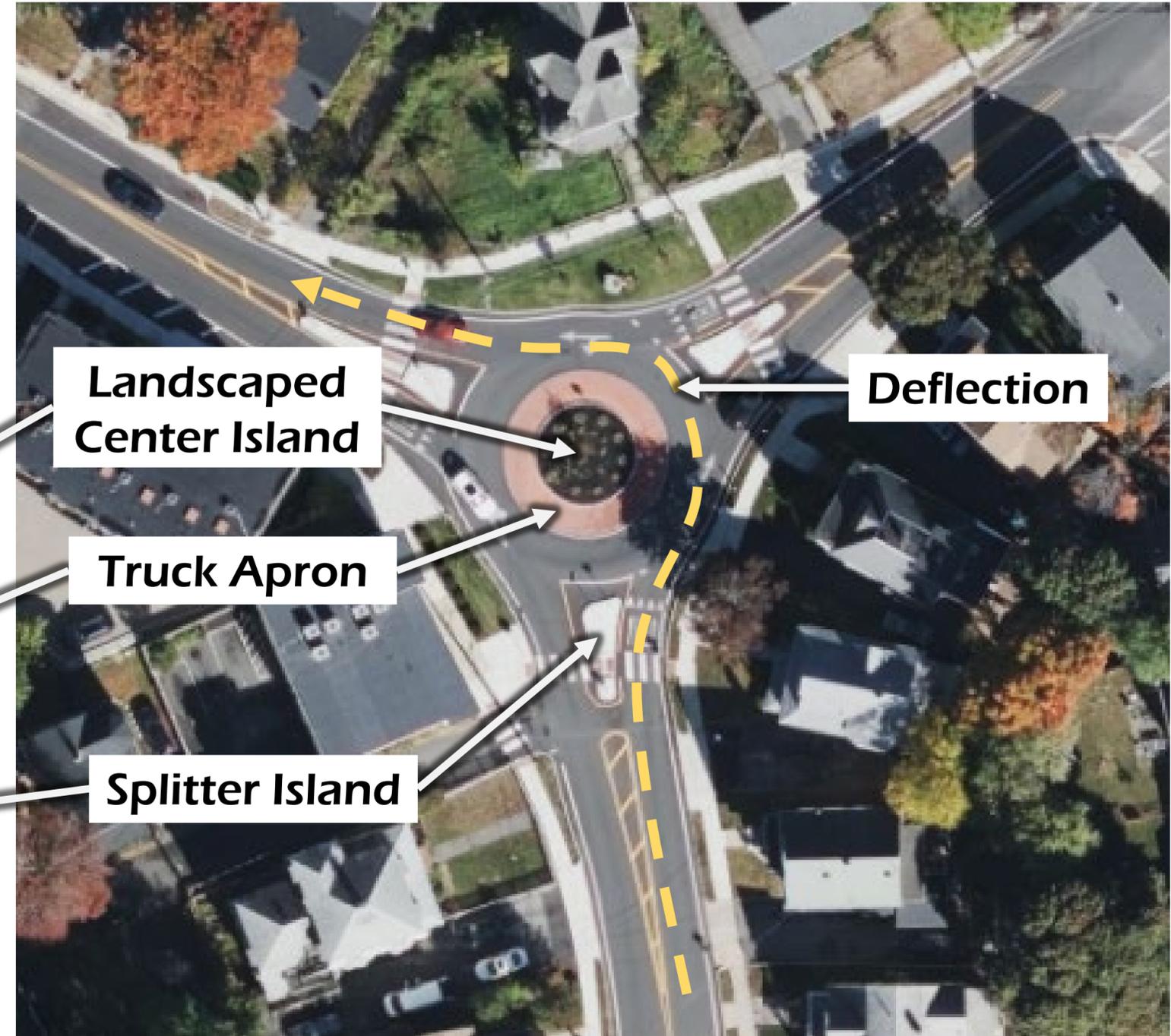
## Why a roundabout?

- Improve safety (78% reduction in fatal and injury crashes vs. a signal)
- Reduce conflict points
- Lead to improved operational performance
- Be used in a wide range of conditions (versatile)
- Shorter pedestrian crossings
- Refuge islands
- Lower speeds – target circulating speeds between 18-22 MPH



# Example Roundabout

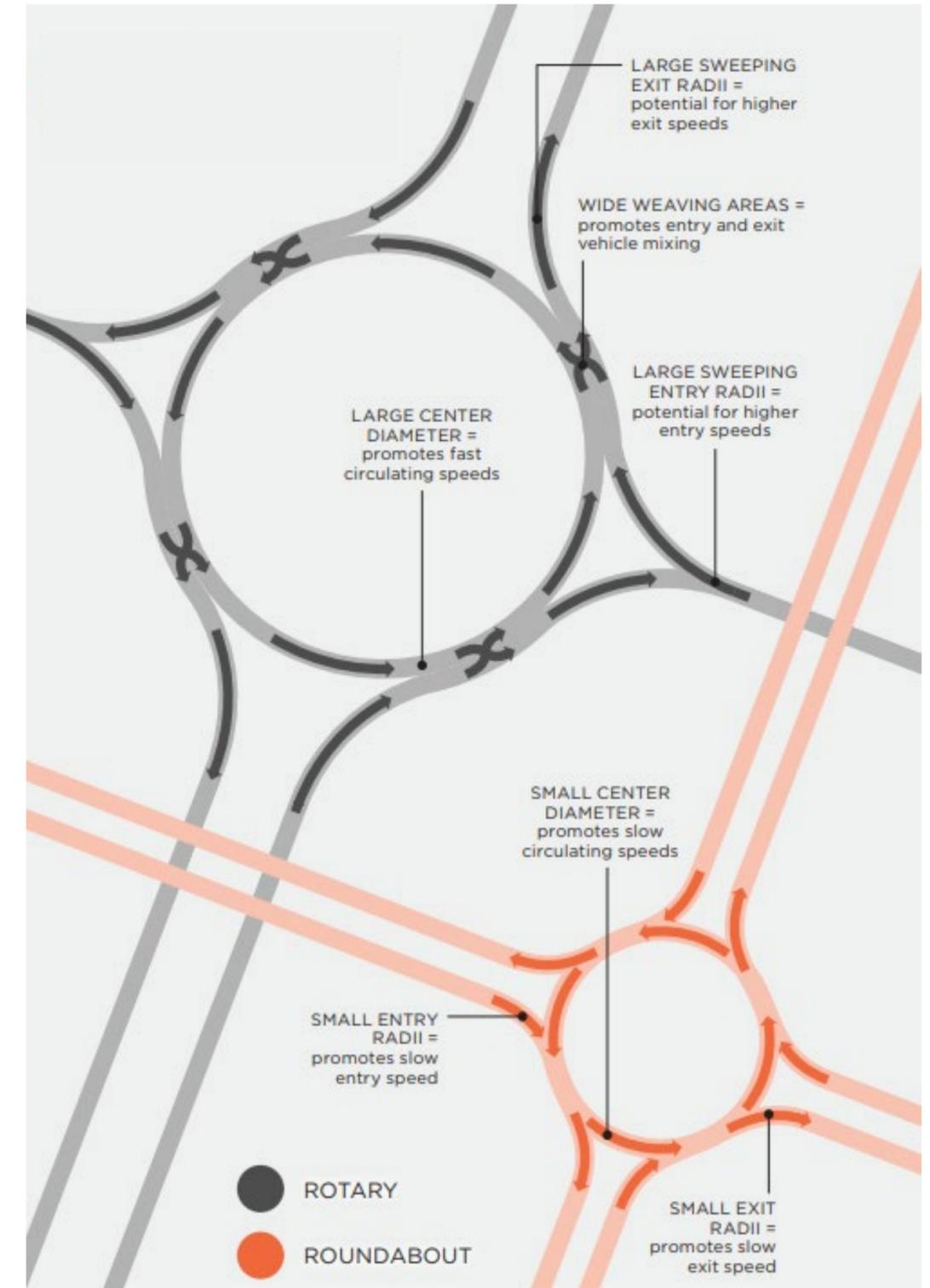
Green St. / Howard St., Melrose



# Rotary vs. Roundabout

These are both types of circular intersections

- Roundabouts are:
  - smaller
  - slower entry and circulating speeds
  - avoid lane changing inside the roundabout
- Rotaries are:
  - larger
  - faster entry and circulating speeds
  - lane changing may be required

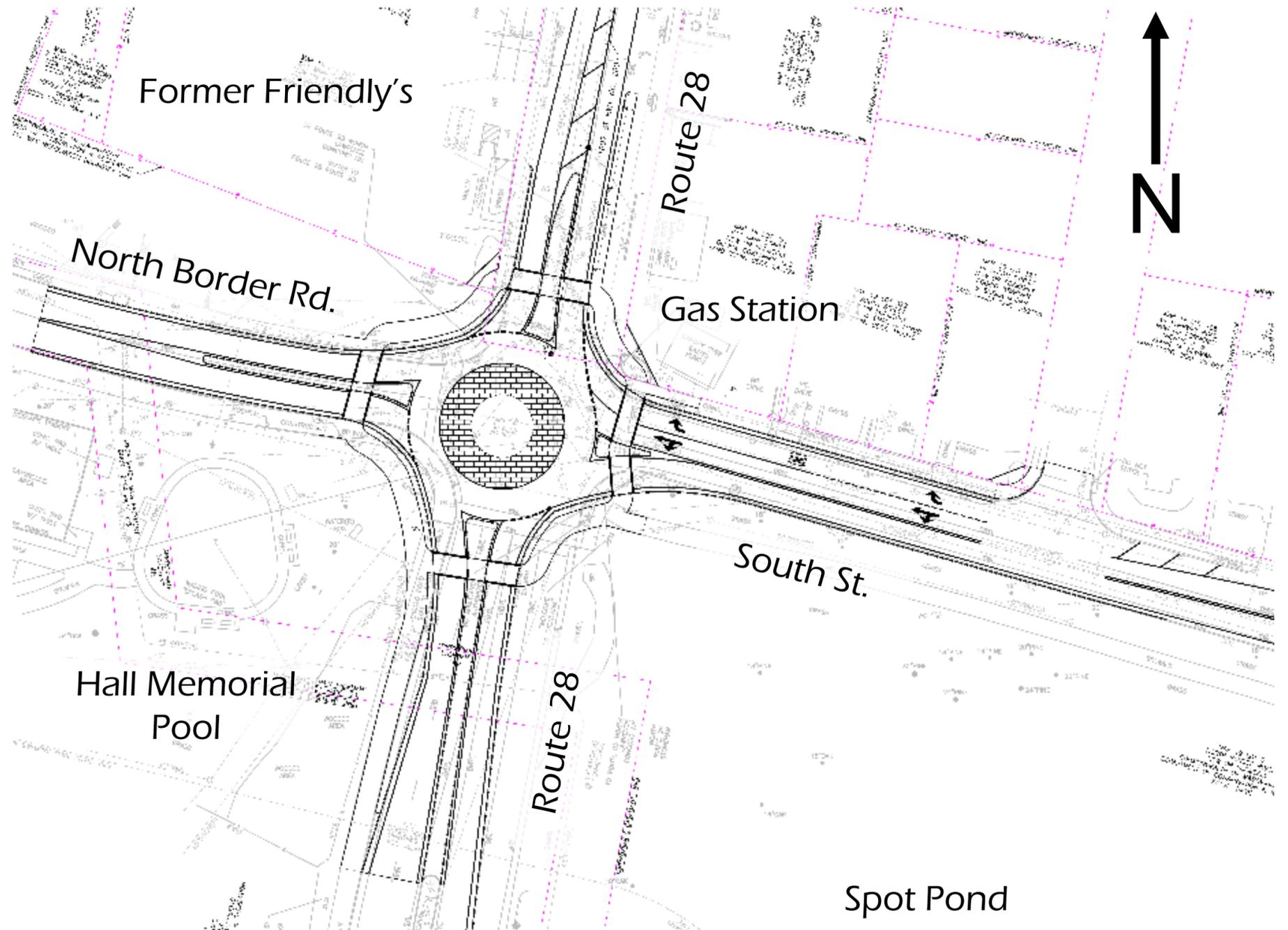


### 3. Roundabout

Route 28 would be reduced to one lane in each direction through the intersection.

South Street (westbound, entering the roundabout) would have two lanes on the approach – one for right-turns, one for through- and left-turns.

People walking and biking would use a shared use path around the outside of the roundabout.



# Roundabout – Summary

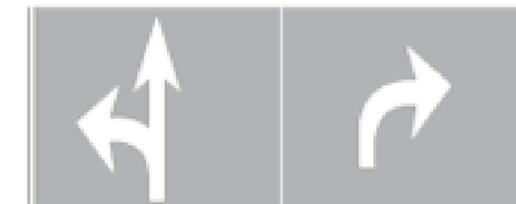
- PROS

- Countermeasure for left-turn collisions
- Roundabout serves as traffic calming (lower speeds)
- Severity of crashes is likely to be reduced
- Smaller footprint on south leg – can return pavement to parkland

- CONS

- Potential driver unfamiliarity
- Likely requires tree removal (one)

Safety Issue	
• Signal Timing	✓
• High Volume of Left Turning Vehicles/Lane Configuration	✓
• Speeding	✓
• Non-compliant pedestrian and bicycle accommodations	✓
• Signal Visibility	✓
• Other Safety Concerns	--



South St.

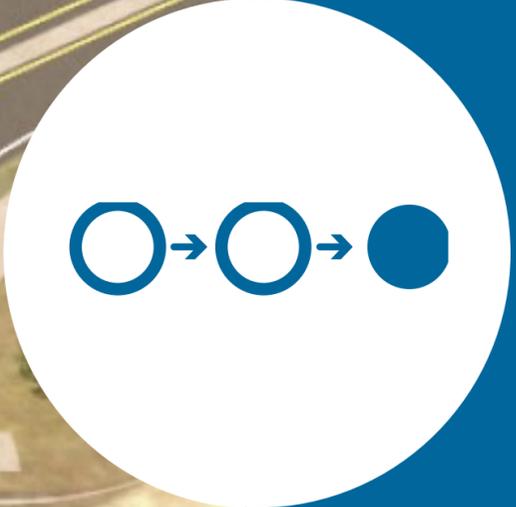


Route 28, N. Border Rd.

# Summary of Current Alternatives

- 1. Low-Impact Signal
  - Does not correct left-turn safety issues on South St. or North Border Rd.
  - Would not provide a significant upgrade for people walking or biking.
- Due to these issues remaining unaddressed, we do not recommend proceeding with this alternative.
- 2. High-Impact Signal
  - Addresses nearly all safety issues from the Road Safety Audit (will not correct speeding issues without additional interventions)
  - Smaller footprint at the southern approach (net gain of parkland)
  - Tree removal
- 3. Roundabout
  - Addresses all safety issues from the Road Safety Audit
  - Lower circulating speeds
  - Smaller footprint at the southern approach (net gain of parkland)
  - Tree removal

Safety Issue	1	2	3	Notes
• Signal Timing	✓	✓	✓	Both signalized alternatives correct this, and is no longer applicable with the roundabout.
• High Volume of Left Turning Vehicles/Lane Configuration	X	✓	✓	The low-impact signal would not correct this safety issue on South St. or North Border Rd.
• Speeding	!	!	✓	The roundabout is inherently a traffic calming feature; the signalized alternatives would need to be combined with additional interventions.
• Non-compliant pedestrian and bicycle accommodations	X	✓	✓	The low-impact signal would not have a substantial benefit for people walking or biking over the existing conditions.
• Signal Visibility	✓	✓	✓	Both signalized alternatives correct this, and is no longer applicable with the roundabout.
• Other Safety Concerns	---	---	---	None of the other safety issues identified are dependent on the type of intersection control.



**Next Steps**



Additional Public Information Meetings may be scheduled based on the feedback we receive here tonight to keep community members and stakeholders informed as we continue to develop our plans.

The project is currently proposed to be funded in the 2025 Federal Fiscal Year in the Highway Safety Improvement Program (HSIP) using 90% federal funds, with the remaining 10% from the state.



# Questions and discussion

# Contact Information

- Comments must be submitted in writing within 10 days following the hearing.
- By Mail: Carrie Lavalley, PE, Deputy Administrator and Chief Engineer  
MassDOT  
10 Park Plaza, Boston, MA 02166  
Attention: Project Management, Project File No. 610665
- By email:  
[MassDOTProjectManagement@dot.state.ma.us](mailto:MassDOTProjectManagement@dot.state.ma.us)  
Subject Line: Attention: Public Meeting Webinar Comments: Project File No. 610665
- Website address (Project Handout Form)  
<https://www.mass.gov/massdot-highway-design-public-hearings>



# Questions and discussion



- “Raise your hand” to be unmuted for verbal questions



- Submit your questions and comments using the Q&A button



- Please state your name before your question



- Please share only 1 question or comment at a time, limited to 2 minutes, to allow others to participate



- To ask a question via phone, dial \*9 and the moderator will call out the last 4-digits of your phone number and unmute your audio when it is your turn.



- Please take a few minutes to complete the survey after the meeting to let us know how your experience was with this virtual meeting.

**All questions and comments are subject to disclosure for public records.  
Please use these functions for project related business only.**

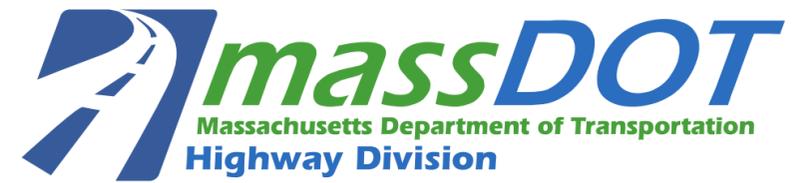
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Subject Line: Attention: Public Meeting Webinar Comments: Project File No. 610665
- Website address (Project Handout Form)  
<https://www.mass.gov/massdot-highway-design-public-hearings>

## Project Website



## Public Hearing Notice and Handout



# *Thank You*

*Route 28, North Border Road, and South Street*

Virtual | Thursday, March 24<sup>th</sup> | 6:30 PM

Project File No. 610665

Greg Frazier, Project Manager

