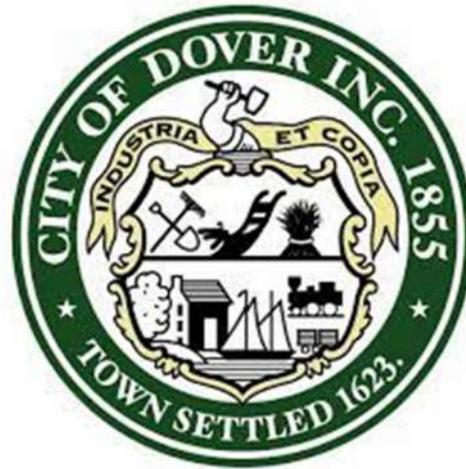


# Dover Point Road and Pointe Place Intersection Improvements



Design Public Hearing  
August 2, 2022

# Agenda

- ▶ Project Team
- ▶ Site Background
- ▶ Site Analysis/Alternatives
- ▶ Project Scope
- ▶ Next Steps
- ▶ Questions



# Project Team

- ▶ City of Dover
  - Jillian Semprini, Assistant City Engineer
  - Kenneth Mavrogeorge, City Engineer
- ▶ Green International Affiliates
  - Corinne Tobias, Project Manager
- ▶ WSP USA
  - Darren Hardy, Survey Lead



# Site Background



# Dover Point Road / Pointe Place Intersection

## Existing Conditions:

- ▶ Existing unsignalized intersection
- ▶ Owned and maintained by City
- ▶ Sheffield Drive is privately owned
- ▶ Pointe Place
  - ▶ Provides access to Point Place Development.
  - ▶ Contains single-lane roundabout for traffic control.
  - ▶ Acts as connection between Middle Road and Dover Point Road.
- ▶ Speeding
- ▶ Gateway to urbanized area

## Project Initiation:

- ▶ Intersection located in growing commercial district
- ▶ Traffic threshold with completion of the Pointe Place development
  - ▶ 2006 Traffic Study determined need for mitigation at Phase 2.
  - ▶ Updated Study from 2018, estimated 4,945 daily trips.
  - ▶ Traffic Volumes warrant traffic control.
- ▶ Increasing commercial traffic
- ▶ Long-Term solution

# Site Analysis/ Alternatives



# Alternative 1: Signalization

- ▶ Improvements Included:
  - ▶ Signal Phasing w/ Pedestrian accommodations
- ▶ Signal Warrants per MUTCD (Manual on Uniform Traffic Control Devices)
  - ▶ Warrants 1, 2 and 3 met (8 hour, 4 hour, peak hour).
  - ▶ Traffic Volumes indicate Traffic Control justified.



## Alternative 2: Roundabout

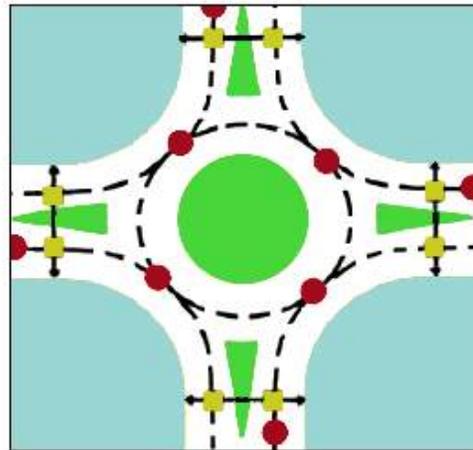
- ▶ Provides traffic control for increased volumes.
- ▶ Introduces traffic calming.
- ▶ Reduces speeds.
- ▶ Reduces Conflict points.
- ▶ Consistent with existing traffic control along Pointe Place and neighborhood character.
- ▶ Provides opportunity for enhanced pedestrian accommodations.
- ▶ Creates gateway and transition point for developed area, landscaped median.



# Traditional Intersection vs. Roundabout

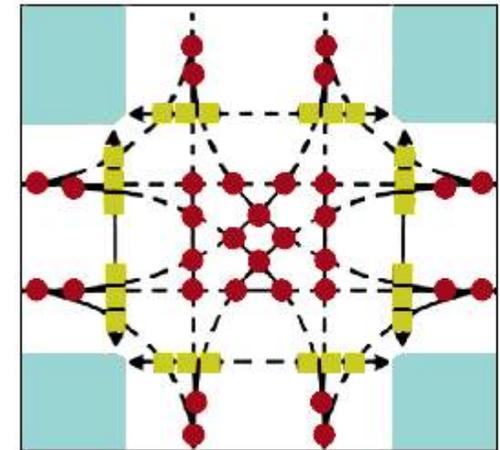
- ▶ Roundabouts have fewer conflict points compared to signals and/or stop controlled intersections
  - ▶ 75% fewer vehicle to vehicle conflict points
  - ▶ 67% fewer vehicle to pedestrian conflict points
- ▶ Fewer conflict points = Fewer opportunities for collision.
- ▶ Fewer conflict points = Better traffic flow.

## Roundabout



● 8 Vehicle conflicts  
■ 8 Pedestrian conflicts

## Intersection



● 32 Vehicle conflicts  
■ 24 Pedestrian conflicts

# Roundabout vs. Signalization

## Roundabout

Pro	Con
Fewer conflicts points	Higher construction cost
Requires less maintenance	Requires more space/ROW acquisition
Higher Capacity for Traffic	Driver uncertainty
Traffic Calming	
Shorter crossing setbacks	
Safer/faster emergency vehicle access	
Maintains efficiency at low traffic volumes.	
More aesthetically pleasing, greenspace	

## Signal

Pro	Con
Lower construction cost	Lower Traffic Capacity
Shorter construction duration	Yearly maintenance
Degree of control at intersection	More conflict points/accident prone
	Less efficient for lower traffic volumes
	Less aesthetically pleasing, more pavement.

# Project Scope



# Selected Alternative

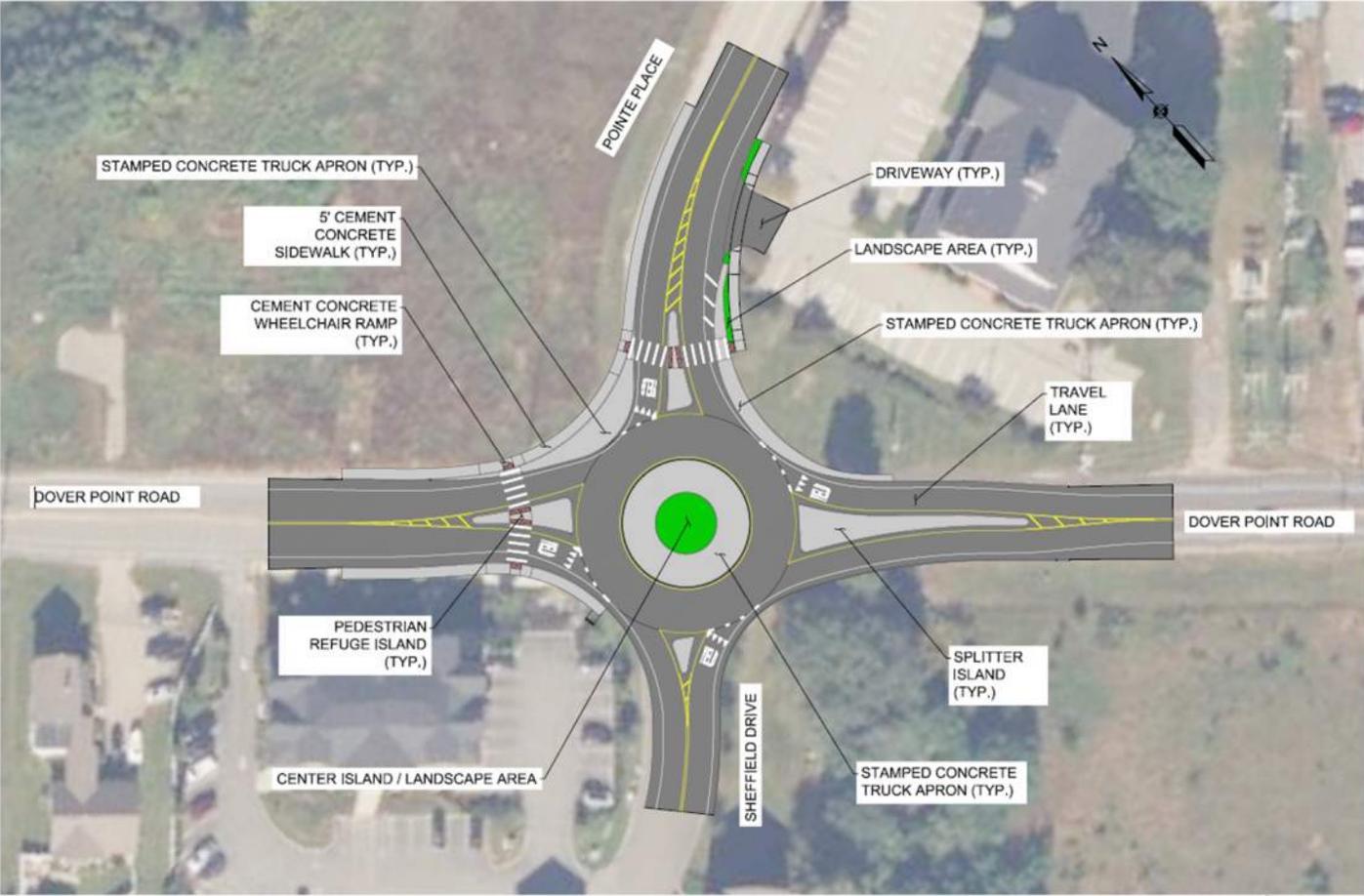
## Single-Lane Roundabout:

- ▶ One approaching/receiving lane per direction
- ▶ Approach deflection to provide traffic calming
- ▶ Pedestrian crossing/enhancements
  - ▶ Community request for pedestrian accommodations
  - ▶ Future project will provide connection through Pointe Place
- ▶ Intersection lighting
- ▶ Enhanced Landscape design

Pointe Place Roundabout



# Proposed Improvements - 50% Design



# Materials

- ▶ Stamped Concrete Truck Aprons
- ▶ Cement Concrete Wheelchair Ramps
- ▶ Cement Concrete Sidewalks w/ Granite Curb
- ▶ Landscaped Center Island



# Construction Approach

- ▶ Staged Construction.
- ▶ Dover Point Road will remain open to two-directional traffic.
- ▶ 7 Construction phases.
  - ▶ 1 corner at a time.
  - ▶ Center Island.
  - ▶ Median Islands.
  - ▶ Outside truck apron.
- ▶ Major elements completed within one construction season.

Pointe Place in Dover, NH



# Next Steps

- ROW Acquisition – Summer 2022
- Permitting – Summer 2022
- Final Design Plans (PS&E Submission) to City of Dover – Fall 2022
- Bid Documents Issued – Winter 2022
- Construction could begin as early as Spring 2023.
- Sign up for email updates:
  - <https://www.dover.nh.gov/government/city-operations/community-services/current-projects/dover-point-road-roundabout/>

Thank you,  
any questions?

